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Advances in Tourism, Technology and Systems

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Preface

This book—*Advances in Tourism, Technology and Systems*, Volume 1—from the SIST Series is composed of the best selected papers accepted for presentation and discussion at the 2021 International Conference on Tourism, Technology and Systems (ICOTTS 21). ICOTTS is a multidisciplinary conference with a special focus on new technologies and systems in the tourism sector and was held between November 4 and 6, 2021. ICOTTS 21 was supported by the University of Cartagena, in Cartagena de Indias, Colombia, and by International Association for Digital Transformation and Technological Innovation (IADITI).

The International Conference on Tourism, Technologies and Systems is an international forum for researchers and professionals in the tourism sector, which enables the discussion of the latest innovations, trends and concerns in several areas, in the tourism sector, associated with information technologies and systems. It is an event for professionals in the sector, in search of technology solutions, where academics, IT experts and business managers meet to discuss new ideas that help them maximize the potential of tourism business through technology.

ICOTTS 21 scientific committee is composed of a multidisciplinary group of 137 experts who assessed some 245 papers from 22 countries, received for each of the main topics proposed for the conference: (a) tourism research in providing innovative solutions to social problems; (b) information and communication technologies in hospitality and tourism industry; (c) sustainable tourism; (d) tourism trends; (e) health and wellness tourism; (f) tourism management; (g) marketing strategies in hospitality and tourism industry; (h) hospitality, tourism and foodservice environment; (i) tourism in the different scientific areas; (j) eTourism and Tourism 2.0.

The papers accepted for presentation and discussion at the conference are published by Springer and will be submitted for indexing by ISI, Scopus, Ei Compendex, Google Scholar and SpringerLink.

We thank all those who contributed to ICOTTS 21 (authors, committees, workshop organizers and sponsors). We deeply appreciate your involvement and support, which were crucial to the success of the conference.

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Chapter 1
Revenue Management Within COVID-19

Teresa Dieguez, Conceição Castro, Luis Pinto Ferreira, and Francisco J. G. Silva

Abstract Hotels want to provide the best service to its customers, making them feel unique, and adding value and self-fulfilment to their lives. These requirements demand high performance and efficiency. Revenue Management (RM), being mutually an art and a technique, can be a practice to help decision making enhancing profitability as well as Human Resources wellbeing in Hotels. Computer systems to support RM are critical and industry 4.0 can play an important role in a new industrial revolution era based on connection between virtual and real world. This study intends to contribute to empirical evidence about the existing Information Technology Communications in the Portuguese hotel units, which are directly related to the revenue. The study centred on the validated response of 120 hotels located in Portugal showed that RM support systems in general is an area in continuous growth and is increasingly being introduced in Portuguese hotels, which already adhere to their price management support systems. However, even if most of the units use Property Management System (97%), Channel Manager (91%) and Booking Engine (94%), in what concerns Revenue Management System most hotels (51%) do not use it.

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1.1 Introduction

Over the last decades, tourism has experienced sustained growth and deepening diversification, becoming one of the fastest growing economic sectors in the world [1]. At local and national levels, hospitality is one of the biggest economic drivers of the tourism industry [2]. Hotels want to provide the best service to its customers, making them feel unique, and adding value and self-fulfilment to their lives [3]. These requirements demand high management performance and tools to support decision making, among which is the Revenue Management (RM). Being mutually an art and a technique, RM is a competitive strategy in the hotel industry [4], as well as an important research topic, representing the segments of hospitality industry in general over 60% of the research studies in revenue management [5]. As processes it includes business and pricing strategies, demand modelling and forecasting, inventory, and price optimization, setting booking controls, distribution channel management, and performance analysis and evaluation [6]. Current tendencies in RM specially focus on what is to be measured among revenues and profits [7], price optimization [8, 9] and multi-channel demand management [6]. Possible correlations between forecasting factors and organizational factors may better explain RM performance [10]. Nevertheless, only few studies have taken a holistic approach, because they are mostly in the framework of western countries. Moreover, the relationship of RM performance and gaining of the competitive advantage needs yet to be carefully explored [11]. This research is in the context of Portugal which is the 19th country in Europe in terms of GDP per capita [12]. Playing the tourism sector an important role in terms of production and job offer, it is one of the most important sectors in the Portuguese economy [13]. In 2018, the total overnight stays exceeded 57 million, room revenues reached two and a half billion euros and the average occupancy rate reached 64% [14]. However, the COVID-19 pandemic has brought huge challenges to this activity and competitive advantages must be obtained to better face the competition rivalry. RM can be a technique to help decision making enhancing profitability, as well as Human Resources wellbeing in Hotels. Computer systems to support RM are critical and industry 4.0 can play an important role in a new industrial revolution era, based on connection between virtual and real world. After a literature review about Revenue Management and management trends in the hotel industry, this paper analyses the different computer systems to support Revenue Management. The study was conducted on 120 hotels located in Portugal, between April and May 2020, and it was used a quantitative research methodology. After discussion of results, conclusions are presented, as well as suggestions for future research.

1.2 Literature Review

1.2.1 Revenue Management

Revenue Management (RM) is a commercial management technique that helps to sell the right product, to the right customer, at the right time, at the right price and through the right sales channel distribution [15]. In practice, RM allows to control demand through dynamic prices and capacity management, aiming to improve the profitability of an enterprise [16]. The price variable is the strongest mechanism for the hotel sector positioning [17] and pricing the basic tool in the revenue maximization process [16, 18]. Implementing an effective Revenue Management strategy in an organization requires the adoption of several practices, namely customer knowledge, market segmentation and selection, internal evaluation, analysis of competition and forecasting. It also demands analysis and selection of distribution channels, as well as dynamic pricing, based on value and inventory management [19]. In this sense, the Revenue Manager is no longer a simple analyst who define hotel prices, but an important player who have power in the final decisions [20]. Assuming RM department a strategic function for a hotel organization, it should directly report to the business intelligence management department.

1.2.2 Management Trends in the Hotel Industry

The Uniform System of Accounts for Lodging Industry (USALI) is an accounting normalized system specifically developed for the hospitality sector [21]. It is a reference and adopted worldwide, especially in large groups and in hotel chains [22]. Its indicators allow to benchmark, include market factors and external trends, instead of considering only the history generated internally [22]. Also, automation and robotization have high expression in the hotel industry, appearing in the form of chatbots, delivery robots, robot concierges, check-in and check-out kiosks, among others. The technological footprint is by now considerable [23], but its impacts do not have the same effect in all hotels as it depends on the characteristics of the company, the relationship between labour and technology costs, the complexity of the adopted technology, the characteristics of service providers and consumers, as well as the security of the technology [23]. In fact, a new paradigm emerged on the hotel industry due Business Intelligence (BI): a continuous collection and treatment of millions of data, which serve to support decision making and strategies definition, in an agile and fast way [24]. In fact, new technological products have allowed the development of some automated Revenue Management Systems (RMS). The convergence of the need for market positioning and technological advancement tends to make RM a more analytical and scientific process [25]. Every day, millions of data are created by guests around the world: collecting and processing these data, can highlight user profiles based on their satisfaction, preferences, geographic location, and consumption habits [26]. Process management and risk analysis can be strongly supported by all these digital media, being the major disadvantages for hotels when facing their competitors, the lack of own qualified employees, financial resources, cybersecurity, and knowledge about Industry 4.0 [27].

1.2.3 Computer Systems to Support Revenue Management

The first challenge in RM is to acquire the computerized RM systems for many forecasts, as in a hotel environment these RM systems must identify the various categories of the required forecasting [28]. With internet, customers are closer, and market is globalized [29], materialized by online booking platforms such as Booking or TripAdvisor. The capture and loyalty of customers is needed, and hotels must find different and innovative strategies to obtain competitive advantages. Different support systems can be used and interconnected, namely: Customer Relationship Management (CRM), Property Management System (PMS), Revenue Management System (RMS), Central Reservation System (CRS), Chanel Management (CM) and Rate Shopper (RS). CRM appears to maximize, exploit, protect, and retain relationships with existing customers, in the long and short term. The idea is to target offers to its loyal and potential customers. Given that capturing new customers are more expensive than to retain them [30], CRM should be a concept to get the best relationship with customers and not as a product or a technology [30]. PMS is a hotel operating system used in the management of basic objectives, such as reservations, availability, and check-in and check-out, among others. It is a management software usually linked to other applications and specifically tailored to each hotel. RMS deals with business volume and profit, through maximum occupancy linked with highest rate [31]. CRS permits storing and saving hotel information, rooms, and fee inventories, managing reservations and processes. It relates to the hotel's website and mobile booking engines. In the hotel chains, it centralizes the reservations of all its properties in a single system. CM ensures the management of rooms and prices, reservations, and availability in the numerous online distribution channels. It is generally related to a PMS and avoids the risks of overbooking, as it automatically blocks hotel availability in all other online distribution channels when a room is sold [32]. RS allows hotel units to analyse the charged prices by competing hotels. In RM, the main goal of obtaining a RS is to rise the hotel's RevPar (revenue per available room) and thus maximize total revenue [33].

1.3 Methodology

For this research project, it was used a quantitative methodology and a questionnaire as a working tool. To understand if Portuguese hotels have information and communication technology (ITC) directly related to revenue, it was prepared a questionnaire, with closed and open questions: on closed questions, people chose the answers between two or more options; on open questions, people responded using their own vocabulary, making it possible to provide details and make comments, allowing investigation to be more accurate, despite having greater difficulties in statistical treatment. The questionnaire was divided into two main areas: one related with demographic data of the respondents and the other one focused on the hotel unit. The questionnaire script, only in Portuguese language, was previously validated by two professionals in the sector and two academic professionals. Built using the LimeSurvey tool, the questionnaires were distributed through a variety of online distribution channels, among which LinkedIn, Facebook, Instagram, and E-mail. A database was built with 2500 companies and collection data was carried out between April to May 2020. The collected data, after being filtered and properly analysed, were treated using Microsoft Excel®, with a descriptive analysis.

1.3.1 Descriptive Analysis

It was collected a set of 120 questionnaires, being 60% of the answers from male and 40% from female. Respondents are mainly aged between 21 and 45 years old (80%) and qualified professionals, with higher education (85%). 20% of them are from the Revenue Management department, 49% from Administration, 16% from Commercial, 8% from Reservations and Sales and 7% from Front Office. Most answers (40%) belong to the North region, followed by the metropolitan area of Lisbon, with 27% and the Center region with 16%. Hotels are the most represented with 80%, local accommodation with 10% and tourist village with 9%, among others. In the collected data, 4 stars units are the most represented (45%), followed by 5 stars (38%). 1 star and 2 stars units only represents 2% of the sample. Figure 1.1 shows the used PMS.

As can be seen in Fig. 1.1, only 3% of the respondents had no PMS. The rest of the respondents used the Host (39%), followed by the New Hotel with 24%, the Opera

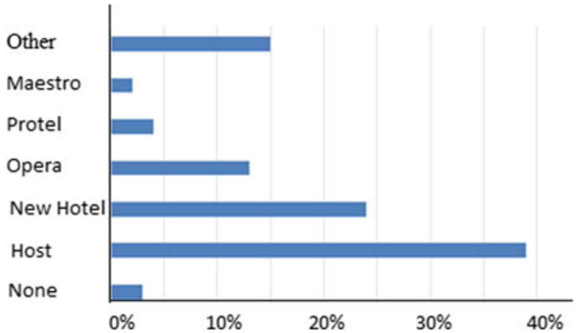


Fig. 1.1 Used PMS on the hotel interviewed units

with 13%, Protel with 4% and finally, the Maestro with only 2% of responses. It is also possible to observe that 15% of the respondents selected the option “Others”, with the PMS in use being Sihot (7%), Mews (1%), Alidata (1%), Cloudbeds (1%) and Own PMS (5%). For the revenue management system (RMS), most hotels do not use any RMS (51%), 15% use Climber and 9% BookingSuite. With only 3% difference follows Duetto, representing 6% of responses. Regarding Xotels RMS, the computer system obtained 3% of the answers, with Opera holding only 2% and the Rate Wise 1%. It was also analysed that 16% represents the “other” option, where appears IdeaS (4%), Hotusa (2%), Cloudbeds (1%), E-GDS (2%), Alidata (1%) and specially tailored applications to the hotel (6%). Figure 1.2 presents the obtained results on the survey.

The most used Book Engine system in the questioned units is the Guest Centric, represented by 26%, followed by Booking.com (24%), and D-Edge (AvailPro), with 11%. The least representative Booking Engines (BE) are E-Gds with 7% and Paraty with 3%. It is important to notice that 6% of respondents do not use any BE. “Others” options represents 22%, where the BE used is Synexis (7%), customized (4%), Sinergy (4%), Host (3%), Omnibes (2%), SiteMinder (1%) and Saber (1%). Figure 1.3 presents the obtained results on the survey.

For Channel Manager (CM), 9% of the hotel units in this study do not use any channel manager. 31% of the respondents use the AvailPro in their hotel unit and only 28% use the Site Minder. 10% use the Guest Centric and 7% E-GDS. 16% represents

Fig. 1.2 Used RMS on the hotel interviewed units

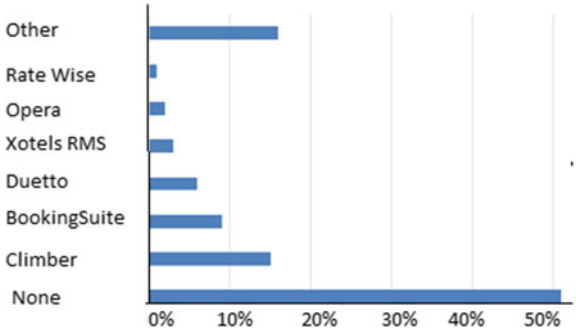
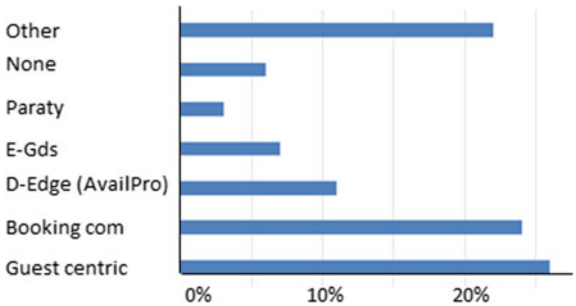


Fig. 1.3 Used book engine on the hotel interviewed units



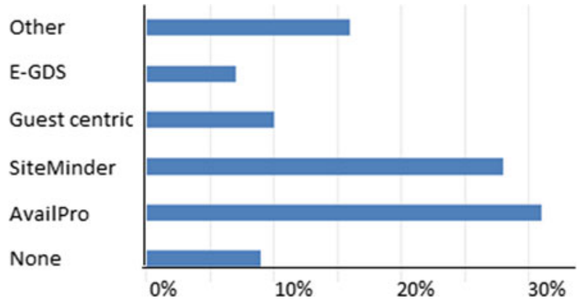


Fig. 1.4 Used channel manager on the hotel interviewed units

Table 1.1 Summary of hotel information

Region	North	40%
Type of establishment	Hotel	80%
Classification of hotel units	4 star	45%
Used property management system (PMS)	Host	39%
Used revenue management system (RMS)	None	51%
Used booking engine (BE)	Guest centric	26%
Used channel manager (CM)	AvailPro	31%

the "other" option, with the CM in use being Sinergy (4%), Synexis (4%), Omnibees (3%), Sihot (2%), SiteMinder (1%), customized (1%) and Host (1%). Figure 1.4 presents the obtained results on the survey.

In summary, Table 1.1 summarizes the main conclusions drawn from the sample.

1.3.2 Discussion of Results

The study shows that regarding the computerized support systems for RM, most of the units use the Property Management System (97%), the Channel Manager (91%) and the Booking Engine (94%). Regarding the Revenue Management System, most hotels (51%) do not use any RMS. This may mean that its implementation is more profitable only in large unit hotels, due to its high cost. In view of the above, everything seems to indicate that support for RM is essential for increasing revenue in a hotel. A hotel unit that does not use any of the systems mentioned in the study, except for the RMS, cannot obtain an evolution in revenues, since management support systems are essential. Starting by evaluating the PMS, as it is a system used to manage reservations, availability and occupancy (plus check-in/out, images, guest profiles, reports, etc.), its use is essential. Most hotel units use a PMS. 3% do not use it because they must not have enough knowledge of its importance, use and function. The Booking Engine, which is the search engine for reservations, is little known by respondents, given that only 24% of the responses has been obtained regarding booking.com. It is worth to note that an Online Travel Agency (OTA) requires one of the highest commissions for selling a room on the market. The Channel Manager, which simultaneously updates the hotel information, rates, and availability in all distribution channels, is one of the most important tools in managing online prices for various distribution channels. In this study, 9% of the sample do not use any CM, which is considered a failure in the management of these hotel units, given the advantages that this system provides. The RMS, which is a system with a higher cost compared to the others previously referred, and thus more suited for large hotel chains, was the least mentioned system. Most hotel units do not use this support system, which allows maximizing profits, reaching maximum occupancy at the highest possible rate during the year. In a pandemic period, with less tourist demand and more financial instability, customers are surely more price conscious. Under the same conditions, they will opt for the best prices. Hotels cannot lose money but cannot have a traditional approach to market. Revenue Management can, in fact, be a great competitive advantage to attract and retain the client.

1.4 Conclusion and Future Research

In recent years, there has been a widespread tendency to effectively combat the general decline in tariffs due to rivalry and competitive factors. The pandemic originated by COVID-19 brought to the hotel market an awareness of the need for revenue optimization. RM is a practice used not only to optimize the revenue from accommodation, but also the revenue from the other departments, since the main objective is to obtain the highest profitability of all services. The study presents the main implications of using Revenue Managements Techniques linked with computer systems in the Hotel Industry. More and more, the world is changing, and profit depends on a mix of variables that generates results. Taking decisions is risky and decision makers must have tools to help them manage with success their business. Industry 4.0 principles can be a fantastic partner: it can help to integrate data and simulation of complex systems [34–38], complement information, create virtual or augmented realities, among other things [39, 40], allowing decision makers to act in real time and with the properly information. During the research, some limitations arose, especially due the relatively limited sample size and theme, as RM theme is not yet very well used and known in Portugal [41]. Throughout the collection of data from the questionnaires, respondents answered only to closed questions. This resistance can be linked to lack of time or knowledge to answer or, perhaps, just the fear of sharing their own information about the company. Future research can be an empirical study, containing a larger sample, where the focus would be the use (quantity and qualitative) of computer systems to support RM in Portugal. However, given the analysis of RM support systems in general, it demonstrates that this area is in continuous growth and is increasingly being introduced in Portuguese hotels, which already adhere to their price management support systems. As public policies, it is suggested the promotions of training programs/actions at national level on these areas. It is also recommended to organize Workshops and Conferences where Good Practices would be disseminated, and the results (quantitative and qualitative) presented.

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Chapter 2
The Importance of the Maintenance Area in the Hotel Sector

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Abstract The hotel sector is a diversified and highly technical sector, where the complexity of the facilities, the specific characteristics, and requirements of the area, as well as the regulations and applicable legislation, constitute an enormous challenge. Thus, a structured maintenance plan must include periodic intervention, the proper functioning of equipment, along with a greater reliability of services and energy efficiency. All these aspects will ensure greater protection and comfort to the customers of the hotel units and will enable the effective management of resources, impacting on the overall costs represented by the maintenance area in a hotel structure. This article aims to demonstrate the key importance of the maintenance area in the hotel sector, concluding that hotel facilities' management enables processes' optimisation, providing a significant contribution for the processes' dynamics and the overall performance of the hotel, the staff and, therefore, the hospitality business.

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2.1 Introduction

The maintenance of a hotel unit is set within the context of a wide range of technical management activities that guarantee its operation [1]. In order to ensure that the hotel unit operates suitably, preventive action on the building is required, and must be extended to the entire technical installation—electrical wiring, HVAC equipment (heating, ventilation and air conditioning), cooling equipment, as well as the safety and energy systems. According to Santos et al. [2] and Ferreira et al. [3], maintenance consists of a set of activities which are required to keep physical assets in the operating condition sought, or to restore them to this condition. Organisations increasingly possess a larger quantity of equipment and infrastructures of higher technical complexity and diversity, thus requiring greater sensitivity at the organisational level [4]. Accordingly, this leads to more responsibility in the maintenance department, in addition to the development and application of new maintenance techniques [5]. A preventive maintenance plan is therefore essential in ensuring the smooth operation of equipment and the improvement of energy efficiency [6]. In the hotel maintenance sector, several actions must be considered when dealing with the performance of equipment, ranging from its safe and efficient operation to its availability for use and reliability, thus raising the levels of decision-making by hotel managers [7]. Kwon et al. [8] argue that maintenance plays an important role in an organisation's internal environment, since the quality of the service provided by building maintenance management is directly related to the comfort and satisfaction experienced by employees; this, in turn, impacts on their productivity. Several research studies relating to maintenance, which link the performance of this activity with the enhancement of sustainability, state that maintenance actions can and should be managed by considering their impact on the organisation itself, as well as the surrounding community. They also argue that maintenance is increasingly related to safety and environmental issues [9–11]. There are no right and wrong solutions in the management of maintenance; instead, one should seek strategies which can be efficient in specific situations [12]. In this sense, maintenance management consists of the planning that involves all the control, evaluation and management of maintenance functions. According to Alner and Fellows [13], the objectives of building maintenance are as follows:

- To ensure that the building and its associated services meet conditions of safety;
- To ensure that the conditions of the building are suited to the purpose intended;
- To certify that the building operates in accordance with current legislation and regulations;
- To undertake necessary maintenance work, which will preserve asset value;
- To carry out the work required to maintain the quality of the assets.

Maintenance finds itself among the occupational activities that may affect the health and safety of workers. It should, therefore, be implemented cautiously, with adequate protection provided to the staff involved [14]. Maintenance includes a wide range of activities, during which maintenance workers are exposed to workplace hazards, as well as physical, chemical, biological and psychosocial risks [15]. Planning errors can contribute to accidents, leading to negative consequences that impact on people and the environment. During the course of the entire intervention, maintenance management must ensure that the activity is adequately coordinated, programmed and executed; the equipment must also be left in proper working order and ensure conditions of safety when used [16]. Throughout this article, it will be demonstrated the importance of the maintenance area in the hotel sector. This study is organised into four sections. The first of these consists of an introduction to the work; the second section addresses the theme of maintenance in the hotel Sector; the third section presents an analysis of case studies dealing with the improvement of maintenance in the hotel sector, highlighting the objectives set by different hotel units in the implementation of their maintenance plans which, consequently, led to the development of good maintenance management practices. Finally, the last section presents the main conclusions of the study.

2.2 Literature Review—Maintenance in the Hotel Sector

On a par with transport and communication systems, hotels are considerably important to economies and societies. They constitute a highly competitive sector and are fundamental to the success of the tourism industry [17] which, in many parts of the world, represents an important share of the gross domestic product. According to Ghazi [18], the maintenance of a hotel includes preventive, corrective and emergency activities, involving a combination of technical and administrative actions, which are carried out to restore the working condition of a piece of equipment. The hotel sector is today confronted with several challenges, which ensue from economic fluctuation, scarcity of work, lack of qualified staff, more sophisticated technology and high standards of hygiene and cleaning, thus aiming to provide excellence in services to the customer [19]. In addition, if one considers all the systems which hotels include, one must acknowledge that they are dynamic, complex and expensive buildings to operate and maintain [1]. Since hotel operations occur on a permanent basis throughout the year, they demand regular maintenance. This activity only varies [20] depending on the occupancy rates over the high and low seasons. Thus, maintenance constitutes a crucial activity as equipment, machines and buildings are likely to deteriorate over time [21]. Furthermore, disinterest in the management and maintenance of buildings by the parties involved in the construction process is widely acknowledged. They seem to limit their intervention to the short term, without calculating the costs of equipment life cycles [22]. The growing need for sustainable and socially responsible infrastructures and buildings clearly requires a more effective and sustainable management system [23]. Since the concept of sustainability and social responsibility is of crucial importance in the hotel sector, maintenance is thus seen as a differentiating factor in the services provided in this field. Due to the crisis which the hotel sector is currently being subjected to, activities relating to the maintenance and rehabilitation of hotel assets are increasingly being called upon to improve and extend the functional lifespan of the buildings and equipment involved. Not only will these interventions make the hotel units sustainable in terms of business, but they will also ensure that hotels gain a competitive edge in terms of meeting the needs and expectations of a market which has become more and more demanding [24]. Thus, hotel maintenance requires planned action and an optimised management of its activities. These must be aligned with the organisation's objectives in creating value and reducing costs so as to meet the technological complexity, legal requirements, standards of comfort and quality, as well as the environmental issues it is faced with, more than ever, in the current context [12]. The hygiene of a hotel unit is a major concern today and is also high on the list of priorities. However, the fact that the hotel is clean does not mean that there is no risk of contamination, which certainly impacts negatively on the hotel industry. In order to address this issue, two technologies are now being implemented in cleaning actions: ultraviolet (UV) disinfection and ozone disinfection [25]. The growth of the hotel industry and its management are increasingly complemented by waste management. This increase in waste results in a larger environmental footprint. Each hotel guest is estimated to produce in average 1 kg of waste per day, representing millions of tons worldwide [26]. The main sources of residual waste in hotels are, for instance, plastic, cardboard, organic and food waste, as well as glass. However, there is another, more hazardous, type of waste [27]. In the last decade, the issue of pandemics has had a great economic impact on the hotel industry, as well as on the travel and tourism sectors. Due to these infectious and contagious diseases, there is obviously an increased risk of a health threat, a factor which has shaped public and consumer opinions regarding this type of industry. Another fact, which consumers are unable to perceive, relates to the conditions of hygiene and cleanliness in the invisible hotel areas. It is in these activities that the hotel sector must ensure a continuous process of improvement. To this end, there are already programmes in place that require the implementation of protocols, and in which cleaning and hygiene requirements for prevention and control are guaranteed [25].

2.3 Methods

Regarding the main focus of this work, the importance of the maintenance strategies adopted regarding the hotel sector, the methodology used in this work was based mainly in collecting previous contributes to this field and take a look at other practices performed in industrial sector. With this approach, it was intended to understand how the hotel sector is aware about the importance of the implementation of the right procedures in terms of maintenance of its assets, identifying the main guidelines and policies to be adopted by this sector, having as main goal to increase its effectiveness and profit. The availability is crucial in terms of hotel sector, thus, an assertive maintenance plan can allow for optimised procedures, whose can be the base for the success of the maintenance plans. Regarding the limitations in terms of length of these works, a brief research in the literature has been done in order to collect the most important ideas about the importance of the implementation of maintenance procedures in the hotel sector, being the results released under the form of a table. Some examples of successful works developed in the industrial sector, mainly regarding the implementation of Lean tools in general, and TPM (Total Productive Maintenance), in particular, were also added, in order to expand the knowledge about the main goal of this work.

2.4 Case Studies on the Improvement of Maintenance in the Hotel Sector

This section presents the survey carried out throughout the literature review of different studies pertaining to maintenance improvement in the hotel sector (see Table 2.1). It presents both the objectives of each of the studies mentioned, as well as the main conclusions drawn from these. One was thus able to understand the importance of the maintenance sector in the hotel industry and, consequently, the advantages and factors considered to be essential in the management of hotel maintenance.

2.5 Conclusion

The research study presented indicates that the hotel sector has recognised the importance of maintenance activity, given its importance in ensuring good maintenance management in the sector. With regard to the sensitisation and recognition of the importance of maintenance, this sector has grown exponentially in terms of requests and competitiveness. Indeed, it has become a strategic sector for organisations, providing a significant contribution to the achievement of their business objectives. It has been widely acknowledged that preventive maintenance is vital for the hotel sector: without any losses or interruptions, this activity must ensure the proper functioning and conservation of the facilities and equipment. However, the maintenance plan for hotel facilities does not include a comprehensive study of the operation of the technical facilities. This is essential if it is intended to understand and carry out an analysis of the preventive maintenance procedures, which must be undertaken to ensure the upkeep of equipment and of the different facilities involved. Nevertheless, the delineation of a maintenance policy and its implementation is not an easy task when teams begin with pre-established patterns of behaviour and current practice. The success of its implementation depends on countless factors which, in the specific case of hotels, are extremely variable, ranging from size, typology of spaces and their functionality, to technical solutions, the level of automation or existing services and their structure. In addition, its implementation is also dependent on the services which are available to support maintenance activity.

Table 2.1 Case studies on maintenance in the hotel sector and others

Case study (source)	Objective of the study	Main conclusions of the study	References
Egypt	To evaluate good maintenance management practices and their implementation	Both maintenance management and the team involved influence efficiency An important obstacle: the lack of qualified professionals	[18]
	To evaluate managers in the importance attributed to the renovation and refurbishment of hotels	Results indicate that, although managers have pointed to the importance of hotel renovation, there is little evidence of strategic planning in this process. The focus is placed more on the "lighter" aspects of image and customer satisfaction. However, there is room for a more strategic view of building maintenance management	[28]
Sanya, China	To identify the obstacles and challenges of maintenance, and define strategies	Questionnaires were conducted to address issues such as: maintenance contracts, the acquisition of parts, internal maintenance, outsourcing and difficulties. It was concluded that internal technicians carry out basic electricity and plumbing jobs. The remaining work is subcontracted. Preventive maintenance is the method adopted, which is implemented by means of a maintenance plan	[29]
Sri Lanka	To identify the activities that are important for the management of facilities in the hotel business. Which skills are required to implement maintenance management effectively?	Twenty functions of the hotels' facilities management were highlighted, such as: the project, its construction and maintenance; the organisational behaviour; managerial knowledge and documentation; sources of energy and the environment; planning; financial management; logistics; and interpersonal relationships, among others	[30]

(continued)

Table 2.1 (continued)

Case study (source)	Objective of the study	Main conclusions of the study	References
Stockholm	To identify the responsibilities of hotels in the maintenance of goods, facilities and other equipment to identify the maintenance management strategies adopted to ensure the efficient operation of hotels. To gain an awareness of the difficulties involved in their implementation	Outsourcing constitutes a maintenance strategy used to minimise operating costs. Internal maintenance is influenced by the cost of services and the availability of resources on the market. It is concluded that, in the case of maintenance, an important challenge is to improve energy efficiency	[7]
Hong Kong	To identify the connection between maintenance and the energy source used at the hotel. Analyses focusing on the empirical relation between maintenance, resources and energy efficiency in hotels. A correlation was determined between the levels of energy consumption and the maintenance resources	Hotels with greater investments in projects use less energy, which underlines the link between energy performance and the work done to improve the energy efficiency of the hotel facilities	[20]
	To evaluate maintenance performance by means of maintenance management software	Electrical repairs are predominant, followed by plumbing issues; more incidents take place in the rooms than in the common areas	[31]
	To gain an understanding of management and maintenance techniques and promote smarter action	Hotels resort to internal maintenance and tend to qualify related staff There is some dilemma regarding the use of outsourcing Using the data obtained, some strategies were defined for outsourcing or internal maintenance; the same was done in the case of procedures and practices to improve maintenance management in the hotel sector	[32]

(continued)

Table 2.1 (continued)

Case study (source)	Objective of the study	Main conclusions of the study	References
	To analyse maintenance failures and occurrence rates To establish indicators relating to maintenance performance, thus measuring effectiveness	A concept consisting of five maintenance strategies was developed to create maintenance programmes. Performance indicators were established for the engineering systems so as to measure maintenance effectiveness. These were implemented at the hotel under study to evaluate maintenance performance	[1]
India	To identify the responsibilities of hotel owners and operators regarding the maintenance of assets, such as facilities and equipment To identify management strategies for efficient hotel operation	Outsourcing is one of the most common strategies used to minimise costs. A decisive factor for this decision is downtime and the delivery of parts. Resorting to the hotel's internal maintenance is influenced by existing technical capabilities, service value and the availability of qualified human resources on the market	[33]
	Initial implementation of the two pillars of TPM (Total Productive Maintenance): Improvement and planned maintenance	It was concluded that, in order to reduce waste, it is essential to use maintenance tools and alternative energy sources. Total productive maintenance is one of the pioneering approaches in the hotel sector	[34]
Quito, Ecuador	To provide an overview of the importance of hotel maintenance	It enabled raising awareness of the fact that preventive maintenance is the best strategy. This study developed and implemented a management framework for hotel maintenance, from the perspective of strategies and operations, as well as that of stakeholders	[24]

(continued)

Table 2.1 (continued)

Case study (source)	Objective of the study	Main conclusions of the study	References
Ukraine	To identify the main aspects involved in the management of facilities in the hotel sector as an organisational function, the concepts of which are grounded on a scientific base, developing a theoretical analysis for the management of facilities as well, as a management technology, thus determining its implementation in the activities of the hotel sector	This research study indicated that the concept of hotel facility management constitutes an urgent task, as it enables one to study and scientifically prove which directions of process optimisation must be followed, and what is necessary in a competitive environment such as the hotel sector	[35]
Portugal	To implement autonomous maintenance in a company that manufactures aluminium pipes for air-conditioned systems used in the automotive industry	The strategic development and implementation of autonomous maintenance in an industrial company allowed increasing the availability of the equipment in 10% in a specific line, helping to improve the OEE in 8%. After this implementation, the procedure to extend the autonomous maintenance to other lines became easier	[5]
Portugal	To start using some TPM pillars in the automotive industry	The application of some Lean tools, such as SMED and 5S, helped to reduce the setup time in the rubber injection by 11% and reorganise the production and maintenance activities, increasing the OEE of the rubber injection sector to 90%	[36]

(continued)

Table 2.1 (continued)

Case study (source)	Objective of the study	Main conclusions of the study	References
Portugal	To develop specific Key Performance Indicators to the cheese products industry and analyse critical factors regarding the management of obsolescent devices	The work was developed in two phases. The first helped to identify which components are at a higher risk to become obsolescent, while the second phase evaluated the repercussions to mitigate its obsolescence. The values obtained can be used in a decision matrix to decide whether the approach for its mitigation should be proactive or reactive	[3]
Portugal	To decrease the breakdown time usually presented by equipment devoted to the production of components for the tire industry	Using 5S methodology and identifying some automation problems, a partial upgrade of an APEX equipment was carried out, leading to a strong decrease in the breakdown time (−62%)	[37]
Portugal	To improve some Key Performance Indicators, such as Mean Time Between Failures (MTBF), Mean Time to Repair (MTTR), Overall Equipment Efficiency (OEE) and Availability (A)	Taking a production line as main focus, the work took advantage of the application of tools as 5S, visual management and maintenance progress, as well as the development of a training programme to increase operators' skills. A slight improvement of all indicators has been achieved	[38]
Portugal	To implement TPM in a production line integrated in the automotive industry sector	The equipment breakdowns were classified through a Pareto's chart and the corresponding causes were identified. After improvements, the Non-Operating Income Index was improved by 3.5% and the operating results increased 18%	[39]

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Chapter 3
Price Elasticity of Overnight Stays: Testing Veblen's Conjecture Across Portuguese Regions

Eleonora Santos and Jacinta Moreira

Abstract This paper complements the scarce empirical literature on contingent consumption by testing Veblen's conjecture on overnight stays in Portugal. The price elasticities for overnight stays are calculated over 2013–2019 and across NUTS II regions. The results confirm the existence of conspicuous consumption in overnight stays in most Portuguese regions, especially in the Centro, Alentejo and Madeira regions in peak seasons in 2019. Also, in average terms over 2013–2019, the region of Algarve shows evidence of conspicuous consumption of overnight stays. Yet, since the peak seasons are of short duration, the conclusions about the magnitude of elasticities must be handled with caution. These results are relevant not only for tourism management but also to tourism planning at regional level. Indeed, by exploring whether the differences in overnight stays can be explained by a status-seeking behavior, the results carry important implications for spending on future travels, especially in periods of economic downturns.

3.1 Introduction

Tourism is an economic activity that is largely dependent on the discretionary choices of tourists. Thus, hotels traditionally use a low-price strategy to attract clients to new tourist destinations [1]; while a high price strategy is used when the objective is to turn a mass tourism into an exclusive destination. The price elasticity in the context of tourism has been subject to much research [2]. Understanding the factors that influence price elasticity is essential because price is an important factor in tourists' destination choices [3]. Recent events, such as the pandemic, with associated decreases in hotel prices, highlight the need to understand tourists' price sensitivity. Consumers are continually subjected to several factors that shape the elasticities of tourism demand [4]. Although prices and income are the most used variables to explain tourism demand, other factors include the competitiveness of

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rival destinations [5], seasonality [6], advertising campaigns [7] and travel distance [8]. These factors are likely to affect the impact of price on tourism demand and influence the price elasticity of different market segments.

Price elasticities have been estimated for air transport [9], visitation of National Parks [10] and hotel room demand [11]. Furthermore, several studies investigate the aggregate effect of price changes, in the framework of destination competitiveness [12]. However, there are no studies that explore price elasticities of overnight stays for the Portuguese regions. Even though according to the National Statistical Office (INE), the Portuguese tourism industry is largely dependent on EU market, thus making it a relatively inexpensive destination to travel to, evidence suggests that European tourists are susceptible to changes in prices [13]. In contrast, tourists' behavior is essentially socially driven [14]. Accordingly, to enhance their social image, some tourists wish to display status and prestige levels [15]. This desire can be accomplished by choosing conspicuous tourist destinations [16]. Also, the conspicuousness of overnight stays derives from hotels' perceived image [17]. Hence, the central questions addressed in the present research are: "are overnight stays a Veblen good? and "In what regions of Portugal?".

The present study explores whether the innate need for status influences the overnight stays across NUTs II regions in Portugal for 2013–2019. We propose an alternative way to calculate price elasticities, that focus on understanding the regional trends. Since the unit of analysis is the individual regions, the results are relevant for tourism management and planning at regional level. This approach, comparing regional average price elasticities, based on hotel occupancy and revenue has the advantage of being simple and exempt from econometric problems found in some price elasticities studies. In an economic crisis context, the results of this research are especially important concerning the implications for spending on future travels. In what follows, Sect. 3.2 reviews the literature; Sect. 3.3 describes data and methodology; Sect. 3.4 presents and discusses the results; and finally, Sect. 3.5 summarizes the conclusions and provide some policy recommendations.

3.2 Literature Review

Pricing is a basic tool in the revenue maximization process, given the characteristics of the tourism industry and the relevance of demand [18]. Price variations allow tourist accommodations to focus on different customers segments, associated with their willingness to pay, product and customer characteristics [19]. Due to certain characteristics of the hotel sector (such as seasonality, perishability, and capacity limitations), occupancy and demand management plays a key role in determining revenue [20]. The presence of competitors and substitute products, higher levels of demand variability and the levels of uncertainty of future demand also influence pricing decisions [21]. A revenue manager can adjust demand through price variations when available occupancy differs from the occupancy that might maximize revenue [22]. Many studies attempt to establish the best pricing strategy in RM contexts, related particularly to hospitality sector. A simple tool is price discrimination according to the type of guest as opposed to the type of room, mainly based on the different price elasticities of each market segment [23]. Another option is to measure individual demands to ascertain market responses to price variations, the price optimization consumer choice models [24]. Yet, the easiest way is to estimate price elasticities through a demand function. The demand function represents the demand level as a function of prices and is easily estimable and may be easily reproduced for hotels with analogous characteristics [25]. Many empirical studies focus on estimating the price elasticity of demand for tourism through a demand function. However, the results vary, in part due to differences in the mathematical models, functional forms, level of aggregation, econometric approach (time series or cross-sectional) and duration (short-run or long-run) and measurement difficulties [26]. Indeed, tourism demand suffers large fluctuations and can be both inelastic and elastic, depending on tourism destination and purpose of the travel. For example, business travelers seem to be less sensitive to price changes, because business travels have less or no alternatives when compared to leisure travels. Moreover, because tourism involves several products, it is difficult to obtain an appropriate measure of prices to calculate price elasticities.

Some authors [27] study 481 urban hotels in 22 major metropolitan markets in the U.S. for 1989–2000. Using feasible generalized least squares (FGLS) to estimate the parameters of the model, they find that demand is price-inelastic, with values of −0.14 across market segments and −0.31 to –0.11 by market segment. Other authors [28] utilized a hotel revenue management model based on dynamic pricing through an algorithm to calibrate the value of the elasticity in the Plaza hotel in Alexandria (Egypt), in 2008–2010. They find that, in general, the prices decrease as the demand for the rooms decreases and vice versa.

Another author [25] uses a linear demand model and a Minimum Norm Algorithm for the 28 U.S. hotels' price optimization. He finds an inelastic response of demand to price variations. The estimated elasticity from this analysis was between −0.06 and −0.38. Also, for Plaza Hotel in Egypt, an author [23] used a dynamic pricing approach for the hotel revenue management, based on "price multipliers" as a function of certain variables (for example hotel occupancy and time till arrival). Applying an optimization algorithm with Monte Carlo simulations, for determining the parameters of the multipliers, they attempt to maximize the revenue, considering current demand and price elasticities. The price elasticities are calculated using the hotel's historical data and a Probit function, to account for the saturation effects for extreme price levels. However, for most of the price range, they operate in the linear portion of the Probit function. The estimated value of price elasticity parameter is −0.4. Some authors [18, 22] use a Cobb–Douglas demand function and a dynamic pricing deterministic model with two differentiated booking periods. Both studies highlight that most of the hotel elasticities present in the literature are static and usually inelastic, but while one study [22] finds that the high season elasticities are mostly inelastic; another study [18] finds that the elasticities distribution across the booking horizon cannot explain the variation of prices and bookings.

3.3 Data and Methodology

This paper tests Veblen's conjecture on overnight stays across Portuguese NUTs II regions. Thus, the hypothesis is:

H1: the demand for overnight stays increases if the price of tourist accommodations increases.

Data source is the Survey on Guests Stays in tourist accommodations, carried out by the National Statistical Office (INE). This paper uses the "number of overnight stays" and the "revenue per occupied guest room" to calculate the price elasticities of demand of overnight stays, by NUTs II regions in 2013–2019. Although the literature on models analyzing changes in demand and its sensitivity is widely extended, in most cases, the variables from these models were not converted into elasticity figures. Some studies point out that the price elasticity is something difficult to measure [29]. This paper calculates the regional price elasticities of overnight stays using the formula:

$$\text{Price Elasticity of Demand} = \%\text{ change in quantity}/\%\text{ change in price} \tag{3.1}$$

where,

% change in quantity (number of overnight stays) = q1–q0/q0
% change in price (revenue per occupied guest room) = p1–p0/p0
q1, q0, p1 and p0 are quantities and prices in a certain year and in the previous year, respectively.

3.4 Results and Discussion

The calculated price elasticities of overnight stays by regions are shown in Table 3.1.

From the previous table, in 2013–2019 the average values of price elasticities vary between −1.96 (North) and 6.83 (Alentejo), with the demand being more elastic in the Algarve and Alentejo regions (with average elasticities over 2013–2019 of 3.63 and 2.81, respectively), suggesting a high share of conspicuous consumption in overnight stays in these regions. Because the Algarve region has traditionally been a favorite holiday destination for national and international tourists (especially from the United Kingdom), the region recorded the second-largest share of 5-star hotels in July 2019 (18%, according to tourism Statistics from INE), and thus the suggested conspicuous consumption is this region is not surprising. According to INE, in 2019, 88% of overnight stays in Algarve and nearly 71% in Madeira were motivated by leisure, recreation and holidays. Regarding the islands, in 2019, the average price elasticity value is 1.96 and 2.62, respectively, which is not surprising for the same reasons mentioned above, following the Centro region, with an average price elasticity of 1.27. These means conceal, however, very different values over the period. The largest standard deviations occurred in Alentejo and Centro regions (12.01 in 2015

Table 3.1 Price elasticities of demand by NUTs II regions, 2013–2019

Year	North	Centro	M. A. Lisbon	Alentejo	Algarve	Azores	Madeira
2019	−1.96	1.27	0.33	3.42	0.98	2.62	1.96
2018	2.20	2.08	1.05	2.81	1.64	3.41	1.46
2017	3.08	2.06	0.75	2.40	3.57	0.45	1.41
2016	−0.44	−0.31	1.70	−1.27	3.11	0.44	2.20
2015	1.39	2.69	1.61	4.64	3.53	2.99	3.01
2014	−0.62	−1.91	0.09	6.83	5.09	1.26	0.91
2013	0.67	−1.93	−1.10	0.99	4.89	3.10	2.71
Average							
Year	North	Centro	M. A. Lisbon	Alentejo	Algarve	Azores	Madeira
2019	7.50	11.00	2.28	6.05	3.19	4.71	2.90
2018	4.52	4.86	2.00	3.38	1.99	6.57	2.56
2017	7.60	6.01	2.67	7.47	4.48	7.99	3.18
2016	7.50	8.76	6.48	10.56	2.67	4.46	3.81
2015	9.00	6.89	3.30	12.01	2.59	6.64	4.09
2014	7.60	9.93	5.75	11.02	7.70	9.38	5.25
2013	7.81	10.68	4.79	8.53	7.29	10.07	4.80
Standard deviation							
Year	North	Centro	M. A. Lisbon	Alentejo	Algarve	Azores	Madeira
2019	0.79	1.34	0.00	2.14	1.34	1.83	1.72
2018	1.83	3.06	0.77	3.44	1.69	1.83	1.75
2017	1.03	0.15	0.13	4.95	1.59	2.35	1.87
2016	0.56	0.61	0.55	0.72	1.87	1.80	1.88
2015	1.92	2.44	0.64	5.71	2.00	3.34	2.56
2014	−0.71	−2.18	0.66	8.38	2.21	0.46	1.17
2013	−2.14	−3.06	−0.91	1.925	2.11	3.90	3.73
Median							

and 11.0 in 2019, respectively), and the smallest in Algarve and Lisbon regions (1.99 and 2.0 in 2018, respectively). For example, in 2019 (see Fig. 3.1), the highest value of price elasticity was registered in the Centro region in august (18.92) while the North registered the minimum value of price elasticity (−12.03). It is interesting to note that in august, a typical holiday season; while the price elasticity of demand for overnight stays for the Centro, Alentejo and Madeira and Algarve regions are positive; the elasticities for Lisbon, North and Azores are negative. This suggests ta conspicuous consumption of overnight stays in some of the traditional holiday destinations (Madeira and Algarve); while in the other regions, tourists appear to be averse to price increases. In the Easter, the Veblen's Conjecture appears to be confirmed, especially, in the Southern regions of the country (Lisbon, Alentejo and

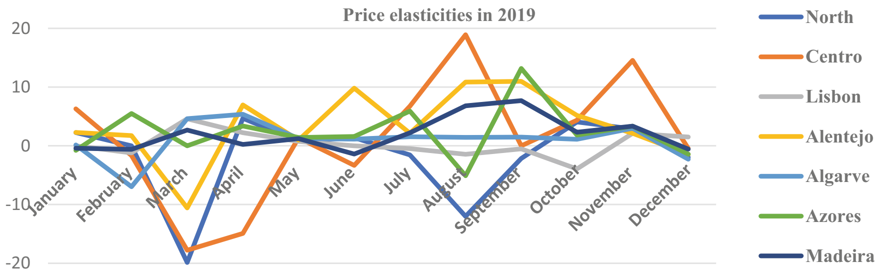

Fig. 3.1 Price elasticities of overnight stays by regions, in 2019

Algarve), but also in the islands, suggesting a trend of demand for destinations that may confer status and prestige to tourists in this season.

The second higher value for price elasticity was also recorded in the Centro region in November (14.54), while the lowest value was recorded in the Northern region in March (−19.87), followed by the Centro region (−17.78). Azores reported the third highest value of price elasticity in September (13.18), followed by Alentejo (10.99) in the same month. In 2016, the regions of North, Centro and Alentejo showed negative average values for price elasticities. However, in the years 2015, 2017 and 2018, all regions showed positive average values of price elasticity, confirming the hypothesis of conspicuous consumption of overnight stays. In 2019 only the North region contradicted this trend. Concerning medians, the values are no longer so discrepant between regions. The highest median is presented in Alentejo (8.38) in 2014; and the lowest in the Centro (−3.06) in 2013. The analysis of 2019 price elasticities by month and region reveals that, contrary to other studies, by and large, the demand for overnight stays is very elastic, except in Algarve and the Islands in January; Madeira in February and April; the North in May; Lisbon in May and July; and Madeira and Centro regions in December. Because, in 2019, the second main motive to spend the night in a tourist accommodation in Algarve and Islands is to visit family and friends, it is not surprising that the price elasticity is rigid in January and April, bearing in mind the new years and Easter festivities. The same happens for the Northern region in May, in fact, visiting family and friends represents 40% of visits' motives; while leisure, recreation and holidays represent 47% of visits. In Lisbon, these shares are even closer (44% and 38.9% respectively); while in the Centro region the shares are 53.2% for leisure, recreation, and holidays and 36.4% for visits to friends and family. Visits due to business are the third motive for overnight stays, with shares of 7.9% for Azores; 7.4% for the North; 7.3% for Madeira and 6.6% for Lisbon.

Discussion—A comparison of overnight stays by region, reveals that there are substantial variations in consumption patterns that may reflect differences in tourist preferences, income, budget, and consumption habits. Figure 3.2 shows the average regional shares for 2013–2019.

The regions of Algarve and Lisbon display the largest share in overnight stays, while Azores and Alentejo show the smallest shares. Also, Lisbon and Algarve record

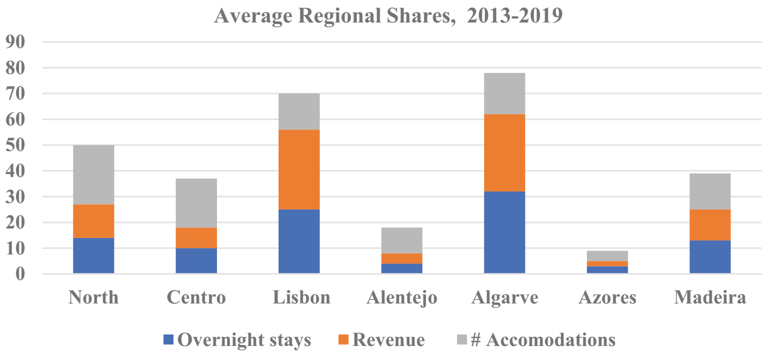

Fig. 3.2 Average regional shares, 2013–2019

the larger share of revenue per occupied guest room, while Azores and Alentejo exhibit the smallest shares. Regarding the number of tourist accommodations, the Northern and Centro regions exhibit the higher shares; while, not surprisingly, Azores and Alentejo record the smallest shares.

Price variations allow tourist accommodations to focus on different customers segments, which are aligned with their willingness to pay, product characteristics and customer characteristics [30]. Pricing in the hospitality industry is influenced by several factors, such as internal factors including costs, organization and working conditions. Cost is paramount; but its effect is limited as it determines only the price threshold, and, even so, additional price reductions are possible off-season. By contrast, due to the complexity of market mechanisms, the effects of external factors- such as the stage of the product's life cycle, price elasticity, competition, product, and service differentiation- on pricing are more pronounced. A standard reaction of the demand to the changes in prices is a growing or falling demand comparable to the falling or growing prices. Nevertheless, in tourism, there are deviations from standard elasticity. Instead of tourist flow proportionately decreasing in response to increased prices, it progresses. This happens because tourist flows tend to decrease faster than the prices tend to increase. A sharper decrease in tourism demand in comparison with an increase in prices, or a slower increase in tourism demand in comparison with a decrease in prices, indicates greater demand sensitivity (elasticity) to the increase than to the decrease in prices. The range between the highest price in full season and the lowest price off-season can be quite significant. Nevertheless, because the peak seasons are of short duration, the conclusions about the magnitude of elasticities must be handled with caution, i.e., one cannot talk about a great elasticity. However, in some cases, price elasticity of demand can be positive. It means that more expensive [the Veblen effect] or more exclusive [the snob effect] destinations attract more tourists. For Portugal, the bandwagon and snob effects in tourism have been studied by Correia and Kozak [31]. The present research results appear to corroborate H1, i.e., the existence of these effects in the Portuguese Tourism industry. Thus, the results suggest that regional authorities of Centro and Alentejo should promote 5-star luxury hotels and other hedonistic forms of tourism to attract tourists with a desire for status and prestige. According to data from INE, in Jully 2019, the 5-star hotels in these regions represented only 2% and 6% of total hotels in the region; while in Madeira, the share of 5-star hotels was 19%, the highest of all regions.

Caveats—The results contradict previous findings regarding the magnitude and sign of price elasticities of demand. This is not surprising concerning the magnitude, since this paper presents an alternative way of calculating the price elasticity of demand for overnight stays at regional level, dealing with averages from aggregate data. Moreover, this paper assumes that the change in the overnight stays is determined only by the change in price, without considering all the other determinants of the demand for the number of overnight stays.

3.5 Conclusion and Policy Recommendations

Hospitality managers frequently select distinct pricing approaches based on a combination of several factors, which include cost structures, competitors' prices, and customer value perceptions of hospitality services. Revenue management is an advanced form of peak-load pricing in which the numbers of discounted rooms that are sold for a certain date are based upon the anticipated demand for accommodations and the price elasticity within each of the various market segments. To maximize revenue, the hotel will only offer corporate rated rooms during periods of high demand, while discounted rooms will be offered during low demand periods. Thus, elasticities allow the demand segmentation across the booking horizon as well as to establish optimal prices to maximize the revenue. Most empirical studies estimate the price elasticity of demand for tourism through a demand function. These models try to predict the price elasticity of demand segments based on the average demand across the booking horizon. However, their results vary, in part due to differences in the mathematical models, functional forms, level of aggregation, econometric approach (time series or cross-sectional) and duration (short-run or long-run) and measurement difficulties.

This paper explored whether the innate need for status influences overnight stays behavior across NUTs II regions in Portugal for 2013–2019. Bearing this in mind, an alternative way to calculate price elasticities using the "number of overnight stays", and the "revenue per occupied guest room", at regional level, was proposed. This approach, comparing regional price elasticities, based on tourist accommodations occupancy and revenue have the advantage of being simple and lacking the econometric problems found in some studies. The results confirm the existence of conspicuous consumption in overnight stays in most Portuguese regions, especially in the Centro, Alentejo and Madeira regions in peak seasons in 2019. Also, in average terms over 2013–2019, the region of Algarve shows evidence of conspicuous consumption of overnight stays. Yet, since the peak seasons are of short duration, the conclusions about the magnitude of elasticities must be handled with caution. These results are relevant not only for tourism management but also to tourism planning at regional level. Thus, the results suggest that regional authorities, especially those in the Centro and Alentejo regions, should promote 5-star (luxury) hotels and other hedonistic forms of tourism to attract tourists with a desire for status and prestige. According to INE, in 2013–2019 the overnight stays in 5-star hotels represented 19% of total hotel overnight stays. In the context of economic crisis, this is particularly relevant for spending on future travels. Avenues of future research include estimating a demand function (e.g., a model log–log, with several determinants of demand, where the estimated price coefficient reflects the price elasticity of demand, holding all other determinants constant).

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Chapter 4
Cooperation Strategies for the Strengthening of Tourism Inside of the Pacific Alliance Framework as an Alternative for Economic Reactivation in Colombia and Mexico

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Abstract Ten years since its foundation, the Pacific Alliance (PA) is a highly relevant economic bloc in terms of cooperation and integration in Latin America. A central point of interest for the bloc is working together on projects and joint actions that strengthen the tourism sector in member countries. This literature survey aims to analyze bilateral cooperation strategies for strengthening tourism between Mexico and Colombia in the PA framework. This study analyzes 125 articles about the PA published in Scopus over the last 10 years, in addition to statistical data from official sources. The data were processed using the qualitative analysis software NVivo. Member countries' interest in promoting tourism stands out among the main results, as well as the existence of mechanisms designed to this end. Strengthening these cooperation channels represents an opportunity to reactivate member countries' economies by positioning tourism destinations and promoting greater cultural integration.

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4.1 Theoretical References

4.1.1 *Tourism in Latin America*

From the economic and cultural perspectives, tourism is considered temporary movement of people to a location other than their place of residence to satisfy essential needs or consume economic and cultural goods [1]. The World Tourism Organization (UNWTO) describes it as a social, cultural, and economic activity entailing the movement of people to countries or places outside their place of residence for a variety of reasons, including personal, professional, or business-related. The UNWTO also notes that tourism encompasses all activities carried out by these people, who in turn are known as "travelers" [2].

Latin America and the Caribbean have great tourism potential not only because they comprise some of the most biodiverse regions on the planet [3] but also because of their sociocultural richness. Given the biodiversity of these regions, tourism as an economic activity can contribute to local and regional sustainable development. The largest flow of tourists to Latin America is from North America and Western Europe [4]. However, structural problems pertaining to security, inequality, and corruption in the region represent challenges in its consolidation. Further, tourism may cause collateral effects on socioeconomic and environmental structures, negatively impacting fragile ecosystems in the region and attracting related economic activities that are undesirable. To prevent this situation, Latin American governments should establish a regulatory framework to promote sustainable tourism and consolidate international cooperation mechanisms. This framework should involve all stakeholders in the tourism value chain. This includes grouping together production units in different industries that supply consumer goods and services sought by visitors. The goal is to provide travelers diversified social experiences, helping them to discover, enjoy, have fun, and rest during their stay [5].

4.1.2 *Global Economic Challenges for the Pacific Alliance*

While tourism is a sector that contributes greatly to the global economy, it must be studied extensively and, in turn, be capable of adapting to changes that arise in the environment and tourists' needs. The world is constantly evolving, and businesses must adapt accordingly. However, for some, the change is more extensive and radical than ever predicted, thus resulting in uncertainty. This may produce a lasting crisis [6].

Environmental degradation is a consequence of economic development and globalization. As tourism is a major engine for national economic growth, it is considered a primary cause of environmental deterioration. Tourism activities entail inefficient and highly demanding means of appropriating natural resources, which create ecological imbalances. Data show that creating hotels, golf courses, marinas, entertainment centers, and so on has a negative impact on soil, water, air, and biodiversity [7].

Therefore, the need for sustainable tourism developed because of the changes in the economic, political, technological, and social spheres in recent decades. Sustainable tourism involves business policies in the tourism sector aimed at protecting natural resources. In turn, new tourism activities are based in nature, such that people are directly involved in natural environments and respectful of them. Thanks to the awareness that has been raised in recent years regarding the negative impact of traditional tourism, sustainable tourism can promote conservation of resources and better tourism practices, as well as preventing environmental deterioration [8]. Thus, some important challenges for tourism is tying activities to sustainable tourism, maintaining quality products and services, and developing management policies that facilitate environmental conservation while simultaneously contributing to the socioeconomic and cultural well-being of local communities.

Furthermore, in 2020, with the declaration of the COVID-19 pandemic, global economic and social activities have been paralyzed. Obviously, tourism is no stranger to this crisis because it has been severely affected by the paralysis of almost all its activities. It began with airline companies cancelling flights and gradually extended to other tourism services, such as accommodation, catering, and leisure. In the current situation, tourist demand has reduced sharply at both the national and international levels [9]. Thus, tourism is an economic activity that is most exposed and vulnerable to unexpected events arising within short periods of time that are gradually becoming more frequent. Such events have immediate, serious impacts on economic activity in general and on [10].

Therefore, it is necessary to adopt a strategic approach that ensures the continuity of the tourism sector and its prompt recovery following the COVID-19 crisis. The World Travel and Tourism Council recommends developing policies that facilitate travel, eliminate barriers, and make tax policies flexible; introducing incentives; and supporting destinations [11]. Likewise, protocols have been established to regain tourists' trust regarding safe traveling once mobility restrictions are lifted.

In Colombia, international recommendations related to the region and the prevalent images of illegal trafficking, internal and external migration, and territorial planning reflect some of the obstacles that the country faces in developing tourism. The armed conflict in Colombia hindered tourism's growth up till 2006, after which the sector significantly rebounded. Since then, the country's reputation has changed, and fears of the conflict have significantly reduced. However, the global image of the impact of drug trafficking on the country remains. In a country where the control of territories and resources is a challenge for the state, tourism represents a way to enhance peace through conservation and development principles by presenting free market, competitiveness, and privatization projects that are sustainable to improve communities' quality of life and maintain political and social stability at the same time [12].

In the case of Mexico, since the 1970s, coastal zones have attracted the attention of tourism developers. However, their widespread use and poor management of environmental policies have caused excessive pressure on ecosystems. As a result, the country faces the challenge of creating a concept of sustainability along with tourist destination competitiveness. The policies must consider the conservation of the destination while being innovative in terms of leisure and recreation services to attract tourists, thus reflecting best quality standards [13].

Safety in Mexico is another major challenge in attracting tourists to the country. According to the Citizen Council for Public Safety and Criminal Justice, 15 of the most dangerous cities in the world are found in the country, with Tijuana, Ciudad Juarez, Acapulco, and Irapuato standing out [14]. Other challenges include lack of tourism promotion and the stability of the peso against the dollar [15].

4.2 Methodology

A qualitative research study was conducted using a descriptive approach; data, characteristics, and other important aspects were analyzed and used as the basis for identifying tourism behavior in the global economy, international cooperation strategies, and tourism in Mexico and Colombia. Given that data collection is necessary to test hypotheses based on numerical measurement and statistical analysis, this study aims to identify behavioral patterns and test established theories [16].

This research involved a literature survey and interpretative analysis of 125 articles published in Scopus with the following search criteria: Pacific Alliance + Cooperation. NVivo (version 12) qualitative analysis software was used to process the data. This process identified the most relevant data in the current panorama of the PA, international tourism cooperation strategies, challenges in the face of constant changes, and the competitiveness that tourism represents for Colombia and Mexico. Along these lines, information collected from secondary sources related to extant research was included. Official data from relevant multilateral organizations such as the UNWTO, World Bank, World Economic Forum (WEF), United Nations Conference on Trade and Development, Framework Agreement of the Pacific Alliance (PA), and the World Travel and Tourism Council (WTTC) were considered. Further, data were collected from official institutions of the Colombian and Mexican governments, including the National Administrative Department of Statistics (DANE), Ministry of Commerce, Industry and Tourism (MinCIT), Bank of Mexico, National Institute of Statistics and Geography (INEGI), Secretariat of Tourism of Mexico, and Colombian Migration Office, among other governmental and non-governmental entities.

4.3 Results and Discussion

4.3.1 Migratory Flows from Pacific Alliance Countries to Colombia in 2017–2020

On June 6, 2012, the governments of Chile, Colombia, Mexico, and Peru signed the PA. This regional integration initiative arose with the aim of progressing toward the free circulation of goods, services, capital, and people. To achieve this goal, agreements were made regarding the elimination of visas for tourism and business purposes and exemption of short-stay visas between the four countries. Furthermore, joint actions have been taken to promote tourism among this trade bloc, and a platform was created to promote the academic mobility of students.

From 2017 to 2020, a total of 1,617,582 travelers entered Colombia from PA countries, of which 38.2% were Mexican, 33% were Peruvian, and 28.2% were Chilean citizens. Table 4.1 summarizes the incoming migratory flow of foreigners from PA countries to Colombia.

Table 4.1 shows sustained growth in the migratory flow of travelers from PA countries to Colombia up till 2019. Between 2017 and 2018, there was a 5.2% increase. Likewise, between 2018 and 2019, there was an 8.4% increase, which can be interpreted as a sign of the economic bloc consolidating over the years. However, the migratory flow dropped by 72.7% between 2019 and 2020. This drop was primarily a result of the COVID-19 pandemic's effect on migratory flows at a global level. The previous rates of flows are expected to return once the health crisis subsides [17].

As for the main reasons for PA countries' citizens to travel to Colombia, tourism accounted for 66.2%; business, 13%; and attending events, 5%. The table below shows the percentage ratio of the main reasons for travel by country.

The most common reason declared by visitors from PA countries to travel to Colombia is tourism (Table 4.2). Chile had the highest percentage of visitors for tourism between 2017 and 2020, with a total of 352,978 Chilean visitors entering Colombia over that time period. However, the largest number of visitors came from Peru, with a total of 361,442 visitors, followed by Mexico with a total of 350,753.

With regard to the most visited destinations by travelers coming from PA countries based on the declared host city when entering Colombia, Bogotá, Cartagena,

Table 4.1 Yearly inward migratory flows of foreigners from Pacific Alliance countries

Year	Mexico	Peru	Chile
2017	175.997	145.575	139.795
2018	186.152	156.008	143.546
2019	202.050	183.739	140.951
2020	53.045	48.551	42.173
Total	617.244	533.873	466.465

Source Colombia Migration Office (2021)

Table 4.2 Percentage ratio of the main reasons for citizens of Pacific Alliance countries to travel to Colombia by country of origin between 2017 and 2020

Reason	Mexico (%)	Peru (%)	Chile (%)
Tourism	57	69	76
Business	19	9	10
Events	6	5	3
Crew	6	6	3
Studies or training	6	3	2
Work	2	2	1
Transit	1	2	2
Resident	1	2	1
Other	2	3	2

Source Colombia Migration Office (2021)

Table 4.3 Migratory flow of visitors from Pacific Alliance countries by host city as stated by visitors when entering Colombia from 2017 to 2020

City	Mexico	Peru	Chile	Total	%
Bogotá	356,720	163,012	214,669	734,401	49.25
Cartagena	62,618	126,432	118,126	307,176	20.60
Medellín	101,427	25,233	60,828	187,488	12.57
Cali	24,693	18,712	26,434	69,839	4.68
Barranquilla	11,716	6422	6187	24,325	1.63
Santa Marta	2863	11,046	8487	22,396	1.50
Other	52,947	38,491	54,219	145,657	9.77

Source Colombia Migration Office (2021)

Medellín, Cali, Barranquilla, and Santa Marta were the most visited cities between 2017 and 2020. The Table 4.3 summarizes the primary destinations, based on the stated host city when entering the national territory.

4.3.2 Migration Flows of Colombian Citizens Bound for Pacific Alliance Countries During 2017–2020

From 2017 to 2020, a total of 2,463,087 travelers left Colombia for PA countries; 59.6% went to Mexico, 22.5% to Peru, and 17.9% to Chile. The following Table 4.4 summarizes the outbound migratory flow of Colombians to PA countries.

The Table 4.5 shows that the migratory flow of Colombians to PA countries showed sustained growth between 2017 and 2018, with a 12.3% increase in migratory flow. Similarly, between 2018 and 2019 it increased by 8.3%. In this sense, the trend was

Table 4.4 Migratory flow of Colombians to Pacific Alliance countries from 2017 to 2020

Year	Mexico	Peru	Chile
2017	396.083	161.007	123.392
2018	461.121	171.519	132.024
2019	498.699	188.125	141.601
2020	138.648	43.982	50.574
Total	1.494.551	564.633	447.591

Table 4.5 Percentage ratio of the main reasons for travel to Colombia by Pacific Alliance countries' citizens by country of origin between 2017 and 2020

Tourism (%)	80.58	64.67	54.01
Resident (%)	7.86	9.52	28.50
Work (%)	5.09	11.70	6.78
Crew (%)	0.32	6.44	5.39
Studies (%)	2.11	1.39	2.09
Events (%)	2.88	3.47	1.95
Business (%)	1.04	2.57	1.10
Other (%)	0.11	0.24	0.16

Source Colombia Migration Office (2021)

similar to that of citizens from PA countries entering Colombia. The fall in migratory flow between 2019 and 2020 was also similar, with a decrease of 71.8%, as a result of the COVID-19 pandemic.

With respect to the main reasons for Colombians to travel to PA countries, 72.1% traveled for tourism, 11.8% were residents of the destination country, and 6.9% traveled for work reasons. The table below shows the percentage of the main reasons for travel by country.

As seen in the table above, the most common reason reported by Colombian travelers visiting PA member countries is tourism. Mexico was the most visited destination by Colombian citizens between 2017 and 2020, with a total of 1,494,551 visitors entering the country over that period of time; a total of 564,633 Colombian visitors traveled to Peru; and 447,591 Colombian citizens traveled to Chile.

4.3.3 Tourism in Figures: Mexico and Colombia

After some descriptions, it is helpful to move on to figures related to tourism itself. According to the UNWTO [18], the volume of the tourism business equals and sometimes exceeds the revenue derived from items such as oil exports, food products, and automobiles. Thus, tourism is a major revenue source for many developing countries.

UNWTO has indicated a growing percentage of international tourist arrivals, with 4.3% growth in 2014, reaching more than $1.133 billion. According to the

UNWTO (2021), this is where the economic importance of tourism lies; it exceeded the expectations established for 2018, increasing by 6% in the first four months of the year with respect to what was achieved over the same period during the previous year, thus resulting in an upward trend since 2017, surpassing the UNWTO's forecast for 2018. Asia and the Pacific (+8%), Europe (+7%), Africa (+6%), the Middle East (+4%), and the Americas (+3%) had solid results in this regard [19].

Therefore, one nation's tourism can be seen as significant for global growth, translating into job creation and boosting numerous elements of many economies. In particular, the growth achieved in the Americas was estimated at 3%, with the best results being achieved in South America at +8%. This provides an insight into opportunities that this region may have. Having commented on the economic importance of tourism, it is important to note the statistical significance of the objects under study.

In Mexico's case, tourism is an important economic activity because of its large contribution to the country's gross domestic product, investment generation, direct and indirect jobs, and generation of foreign currency exchanges that support payment balances, as well as a very important engine for the country's development. According to the UNWTO, in 2017 Mexico reached sixth in the ranking of international tourist arrivals, surpassing Turkey, the United Kingdom, and Germany. This was a nine position improvement with respect to 2013 in the international tourism ranking, positioning the country among the 10 destinations with the highest number of international tourists [20].

In statistical terms, tourism is of great relevance and has performed significantly well, directly representing 8.4% of its gross domestic product and generating value above the economy's average. Over these years, it showed higher growth than many emerging economies, which compensated for negative factors that represent decline. Likewise, domestic tourism contributes to employment and development in regions that do not attract foreign visitors, accounting for 88% of consumption in the sector [21].

In terms of employment, tourism generates the most employment for young people and the second most for women. The sector's impact on employment is validated by the fact that it generates approximately nine million jobs, according to SECTUR [22], of which four million jobs are direct and five million jobs are indirect. The proportions of jobs according to economic activity are represented in Fig. 4.1.

As shown in Table 4.6, of the nine million jobs generated by tourism, restaurants, bars, and nightclubs account for 36.6% of total employment; transportation services, 16.2%; arts and crafts, 9.6%; lodging, 6.4%; recreation services, 2.3%; other goods, 3.6%; timeshares, 0.6%; second homes, 0.1%; and other services, 24.6% [23]. In the first quarter of 2019, the employed population in the country's tourism sector hit a record high since 2016, representing 8.7% of total employment.

Finally, to determine foreign exchange earnings from tourism in Mexico, there was a decrease in international travelers' balances and revenue because of the current pandemic (Table 4.6).

Despite $22,483,800 million of revenue from tourism being estimated for the year 2018, only $11,024,807.26 million of revenue was obtained in 2020, of which, as

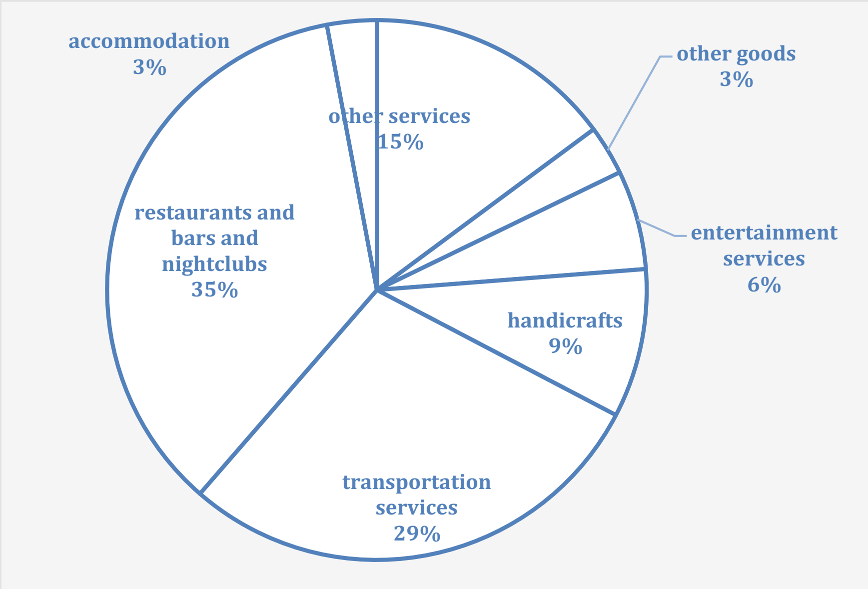

Fig. 4.1 Job percentage ratio in Mexico by economic activity. *Source* Compiled by authors with data from SECTUR (2018)

Table 4.6 International travelers in Mexico (Balances and Revenue)

Item	Jan–Mar		Relative variation (2020/2021) (%)
	2020	2021	
Revenue (thousands of dollars)	6,013,133.20	2,967,379.97	−50.65
International tourists	5,443,677.65	2,691,956.40	−50.55
International tourists	5,125,820.81	2,460,713.67	−51.99
Tourists from bordering countries	317,856.84	231,242.73	−27.25
International excursions	569,455.55	275,423.58	−51.63
Excursions from bordering countries	387,150.65	275,423.58	−28.86
Cruise excursions	182,304.90	0.00	−100

Source Prepared by authors with data from INEGI (2021)

seen in Table 4.3, more than $6 million was obtained in the first quarter of January–March. In the same quarter of 2021, a worrisome decrease in revenue of more than 50% is observed [24].

In the case of Colombia, as in other countries, some positive economic impacts of tourism are an increase in GDP and foreign exchange earnings, generation of job and business opportunities, and contribution to public revenues. The WEF [25] notes that the sector has an encouraging long-term outlook, provided that certain weaknesses related to business conditions, security, social and technological gaps, and lack of infrastructure are managed.

Beyond the statistics presented by the UNWTO regarding Colombia, the national government should establish tourism as a strategic line of business, considering it a viable, strategic, profitable option to achieve sustainable development in the country. UNWTO also describes how tourist destinations in emerging economies, such as Colombia, have had higher growth than the global average, with an annual average annual variation of 4.8% between 2005 and 2017 [26].

In terms of generating employment, according to figures from the MinCIT [27], the primary indicators in the sector experienced significant growth between 2011 and 2017 in Colombia. Notable figures include 69% growth in the arrival of international travelers, 52% in foreign exchange generation, 19% in new employment creation for citizens, and 74% in new companies entering the sector, with 281 municipalities in the country offering tourism services. Figure 4.2 presents employment distribution by economic activity.

Notably, according to a report from the Colombian Association of Travel and Tourism Agencies, the tourism sector represents 2.8% of Colombia's GDP. However, according to estimates from the WTTC, its indirect contribution is 5.8%. These

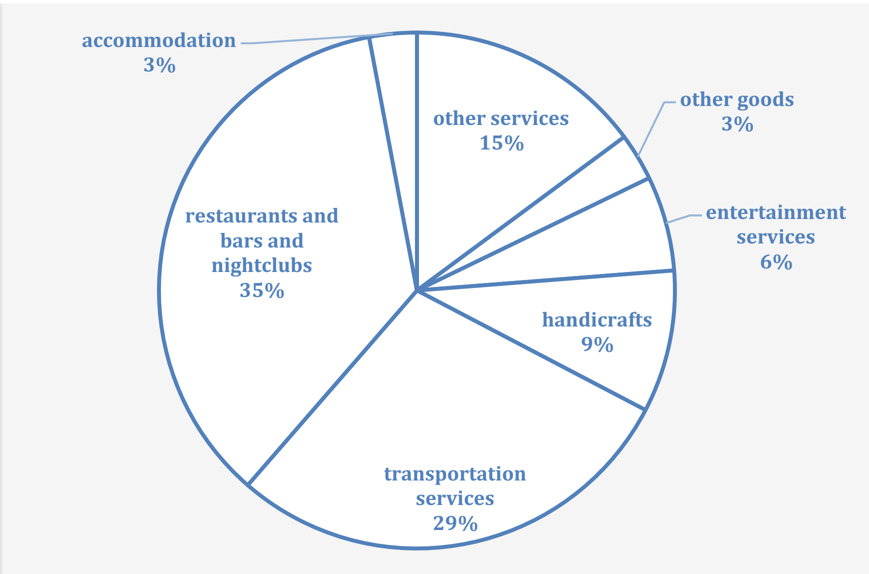

Fig. 4.2 Employment percentage ratio in Colombia by economic activity. *Source* Compiled by authors with data from DANE (2021)

figures highlight the economic importance of tourism because it promotes commercial activity in Colombian cities, impacting not only tourism service providers but also entire local economies.

However, as in the case of Mexico, the current global pandemic has affected the economy and the tourism sector. The numbers of foreign visitors and that of Colombians living abroad, as well as the transit of tourists using different forms of transportation, have decreased significantly, as shown in the table below.

4.4 Conclusions

In today's world, tourism is one of the largest economic drivers; it has the potential to boost poverty alleviation in developing countries. To achieve this, international cooperation programs are used to promote sustainable development based on sound governance that encompasses the public, private, and civil sectors.

Cooperation in tourism entails the interaction of several multilateral organizations. Specifically, in the field of sustainable tourism, various non-governmental organizations are involved in ensuring environmental protection and fair trade and promoting actions that foster social responsibility in the sector. Likewise, there are different programs, institutions, and associations within the PA that support international cooperation in promoting sustainable tourism.

Sustainable tourism in the PA can aid in reducing social inequalities in the economic bloc and contribute to improving indicators related to other Sustainable Development Goals (SDGs), such as decent work and economic growth, ending poverty, zero hunger, and gender equality. It can also decrease the negative impact of conventional tourism on other SDGs, including responsible production and consumption, underwater life, and the life of terrestrial ecosystems. Sustainable tourism strategies can be used to reevaluate the idea that tourism is an exclusive sector that is harmful to the environment and most vulnerable populations.

Currently, sustainable tourism has become a key sector for the global economy, contributing to maintaining and generating employment while attracting investment to countries. This explains the PA's strong interest in creating cooperation strategies that facilitate the mobility of people between countries, collaborating in the creation and exchange of economic goods while maintaining a sustainable, responsible, accessible system for everybody.

The relationship that exists between the member states of the PA, one of the axes of cooperation for sustainable tourism in Latin America, is notable. This is highlighted by the following joint work strategies to promote multilateral tourism.

- Construction of an integration area for the free circulation of goods, services, capital, and people.
- Elimination of visas for tourism and business between nationals and permanent foreign residents in PA member states.

- Organization of and participation in international trade fairs and specialized business promotion meetings in coordination with PA member states' national promotion agencies.
- Holding a forum on sustainable tourism to exchange experiences regarding cultural tourism.
- Establishment of joint actions for political, economic, and commercial coordination, targeting the world, especially the Asia–Pacific region.
- Joint work on projects, activities, and actions to strengthen the tourism sector in member countries.
- Establishing an exchange scholarship program to promote educational tourism.

The PA provides benefits for member countries that facilitate the free movement of people, fostering tourism with the arrival of travelers. Tourists from member countries can remain in Mexican, Colombian, Chilean, or Peruvian territory for up to 180 days in the same year, with multiple entries, provided that they do not perform remunerative activities. Among the main agreements established was eliminating tourist and business visas for nationals and foreign residents of PA member states and vacation and work programs that allow young nationals of member states to work in PA destinations to cover the expenses of their trip for recreational and cultural purposes.

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Chapter 5
Pro-environmental Behaviors at Home and During a Tourism Trip: A Generational Perspective

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Abstract Environmental sustainability is an increasing concern in the present era, particularly in the tourism field, which is known as an industry with severe environmental impacts. Thus, raising awareness concerning the importance of adopting pro-environmental behaviors is mandatory to achieve truly sustainable development of the tourism sector. This study aims to analyze the gap between pro-environmental behaviors at home and during a tourism trip among visitors from distinct generational groups. Data was gathered from a questionnaire survey applied to 763 tourists visiting the Central Region of Portugal. Older generations were found to behave in a more environmentally friendly way when compared to younger ones in both contexts. Additionally, people tend to decrease their pro-environmental behaviors when moving from a home-based setting to a tourism destination one, independently of their age group. The results might constitute an opportunity for tourism managers to stay proactive in the quest for a more sustainable approach to tourism development models and to develop effective marketing strategies according to the pro-environmental profile of each segment.

5.1 Introduction

Environmental degradation and environmental sustainability are two widely discussed topics nowadays. In the tourism field, this is also a growing trend and tourists are increasingly interested in visiting unspoiled sites [1]. Since tourism is an activity with major negative impacts on the natural environment of destinations [2],

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attracting tourists with environmental concerns and active practices toward sustainability might be a solution for reducing its harmful consequences [1]. The slowdown of tourism activity (as of other economic activities) in the recent pandemic crisis was extremely beneficial for the equilibrium of the environment, and this might represent an opportunity to implement significant changes to existing tourism development models, designing more environmentally sustainable approaches. Thus, understanding the environmental profile of the potential demand, namely by analyzing their pro-environmental background at home and during a travel experience, constitutes a crucial step in developing sustainable approaches. This kind of behaviors, independently of the context, translates into no negative impacts or even into an improvement of environmental conditions of a specific place, namely due to individual practices that promote the preservation of the environment and do not disturb the ecosystem and biosphere of the place of residence or destination [3, 4].

Some previous works already analyzed differences between pro-environmental behaviors at home and in tourism destinations (e.g., [1, 5, 6]). However, no research is known on the differences between generations concerning the consistency between visitors' pro-environmental behaviors at home and during a tourism trip.

Frequently, the literature recognizes the existence of four generational groups, namely baby-boomers (1945–1964), Generation X (1965–1979), Generation Y (1980–1994), and Generation Z (1995–2009) (e.g., [7, 8], each one with unique characteristics and distinct perceptions about the surrounding environment, influencing behavioral patterns [7]. Nevertheless, there is little evidence concerning the degree of difference between the pro-environmental behaviors across these generations [9], specifically within the tourism field. Moreover, the literature shows contradictory evidence. On one hand, young generations are seen as those with greater and increasing consciousness concerning green consumption and responsible environmental behavior, while older ones are less active [7, 10]. However, younger groups are also associated with less concern for future sustainable development [11] and with less propensity to engage in pro-environmental behaviors when compared to other generations [12]. In addition, some literature suggests that older groups are more committed to the eco-friendly cause at home and during vacation periods [1, 13]. This might be partially explained due to economic, political, and social transformations with distinct impacts among generational groups, leading them to act differently toward the environment [9].

To overcome the aforementioned research gaps, the current study examines and compares the pro-environmental behavior of four generational groups at home and during a tourism trip. More precisely, this study intends to examine: (i) the differences between generational groups regarding the visitors' pro-environmental behaviors at home; (ii) the differences between generational groups regarding the visitors' pro-environmental behaviors during a tourism trip, and (iii) the gap between pro-environmental behaviors at home and during a tourism trip of generational groups.

5.2 Literature Review

5.2.1 Extending Daily Pro-environmental Practices to a Vacation Context

In a context where sustainable approaches are gaining increasing attention from both tourism destinations and tourism demand, understanding visitors' environmentally friendly practices at home and during tourism trips is crucial in defining innovative marketing and management strategies. In this context, the literature shows contradictory positions. On one hand, previous research demonstrates that segments with a higher moral obligation to behave responsibly or to purchase environmentally friendly products show a greater capacity to transfer these practices to a destination context [1]. The study of Jopp et al. [14] suggests that people with higher levels of environmental practices and consciousness at home are also more willing to extend this to a tourism context, namely by engaging in green purchasing practices during the travel planning phase (e.g., eco-friendly accommodation). Dolnicar's [15] study also reveal a strong association between environmentally friendly practices at home and in a vacation context, suggesting that those engaging in pro-environmental daily behaviors are more likely to transfer the same practices to a destination setting, particularly water-saving, switching off energy sources in unoccupied rooms, recycling practices, or use of sustainable transportation facilities. Similarly, Dolnicar and Grün [5], although reporting that most visitors change their environmental awareness during a vacation context, find that the "environmentally friendly" segment is extremely committed in extending its sustainable daily behaviors while on vacation. More recently, Holmes et al. [16] found that the everyday commitment to sustainability was also translated into the travel context, particularly among visitors within the sustainable tourist segment. Further evidence that environmentally friendly practices might be similar regardless of the context is brought by Xu et al. [2], who indicate a positive association between domestic and tourism pro-environmental behaviors, meaning that people who often engage in daily green behaviors (e.g., buying eco-labeled products, walking instead of driving, picking up others' garbage, and persuading others to protect the environment) are likely to adopt the same practices when traveling to a tourism destination.

Conversely, several studies also proved the existence of a high variability between people's pro-environmental behaviors at home and while on vacation [1, 5, 6]. Particularly, it can be observed that visitors tend to show less environmental responsibility on vacation than at home [6], suggesting that several determinants might explain these behavioral patterns. Similarly, Dolnicar and Leisch's [1] study indicates differences between pro-environmental behaviors at home and on vacation of five segments of Australian citizens. Additionally, the results of Dolnicar and Leisch [1] show that participants claim to feel a higher sense of obligation to behave in an environmentally friendly manner at home and a lack of motivation to adopt the same practices at the destination. This may be related to the lack of identification with the destination or uncontrollable factors, such as the surrounding environment that does not provide the most appropriate facilities to enable visitors to engage in the same practices as they do at home [15]. Moreover, people with less moral obligation to act responsibly toward the environment of the destination when on vacation argue that this behavioral variation is associated with the need for a time without responsibilities, in this case, environmental ones [5, 17]. On the other hand, this may also be related to a lesser sensitiveness or consciousness concerning the environmental impacts of tourism activity, or even the lack of knowledge about green tourism alternatives [17].

5.2.2 Environmentally Friendly Behaviors Across Different Generations

There is common acceptance that younger generations, particularly those individuals belonging to Generation Z, have a positive attitude and consciousness concerning the preservation of the environment [12]. However, the literature, which does not include studies in the field of tourism, is not unanimous and only a few studies have established a comparison between the four generational groups (e.g., [7]). For instance, the study of Gómez-Román et al. [12] indicates that millennials are less likely to be eco-friendly and show significant differences concerning pro-environmental behaviors (e.g., reducing energy consumption) than older groups, such as Generation X. Similarly, the study by Handy et al. [9] identified significant differences in home-based practices related to purchase of eco-friendly products and water/energy saving between Generations X and Z, with the older one revealing higher engagement in pro-environmental behaviors. Moreover, individuals from Generation Z showed higher frequency of avoiding the use of cars, although this might be related to not having a driving license or a private car. In their turn, Deliana and Rum [7] concluded that baby-boomers and Generation X have less environmental behaviors when compared to Generations Y and Z, claiming that these differences might be related to personal characteristics such as knowledge about green practices and involvement in practices related to search information about effective environmental behaviors which, in turn, influence their concerns and behavioral adaptation. This is representative of the heterogeneity and inconsistency of pro-environmental behaviors among generational groups.

Within a destination context, Puhakka [18] reported that younger and middle-aged tourists visiting natural environments are globally more environmentally responsible, caring about environmental practices and opting for eco-friendly services that may contribute to reducing personal negative impacts, such as accommodation or transportation. In contrast, in Dolnicar and Leisch [1], the most responsible segment was found to be the oldest one, similarly to what was reported in Barr et al. [13], where the elderly were also the most environmentally committed group at home.

5.3 Methods

5.3.1 Data Collection

Data was collected through the application of a questionnaire survey to visitors to the Central Region of Portugal during the period of June 2019 to February 2020. The questionnaires were randomly applied through a cluster sampling approach. A total of 763 questionnaires were collected, with 738 being validated, corresponding to an acceptance rate of 96.72%. The reason behind the choice of the Central Region of Portugal was its increasing importance within the Portuguese tourism panorama, but mainly due to the fact that sustainability is a priority to the region's tourism strategy [19].

The questionnaire combined questions to assess two major kinds of behaviors—visitors' everyday pro-environmental practices in their place of residence and pro-environmental behaviors during their visit to the Central Region of Portugal. The first was assessed based on fourteen items adapted from previous works (e.g., [1, 4, 15, 20]), measured through a seven-point frequency scale ranging from 1—"never" to 7—"very often". The second type of behavior—environmentally friendly behaviors in a vacation context—was assessed using fourteen items grouped into four categories: waste management, preservation/conservation practices, sustainable transportation practices, and air quality awareness, adapted from the literature (e.g., [3, 4, 6, 18]). A seven-point frequency scale (1—"never" to 7—"very often") was also used to measure this kind of behavior. Participants were also requested to provide details about sociodemographic characteristics.

5.3.2 Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive analyses were carried out to characterize the sample and the pro-environmental behaviors of the respondents. Chi-square tests were conducted to compare the various generational groups regarding the sociodemographic characteristics. Differences in pro-environmental behaviors (at home and during the visit to Central Region of Portugal) among the generational groups were examined through one-way analyses of variance (ANOVA) and the Tukey's HSD post-hoc test. The Kruskal-Wallis non-parametric test was used when the ANOVA assumptions were not met. Paired sample t-tests were also performed to analyze the differences in pro-environmental behaviors of each group between the two settings (at home and during the visit).

5.4 Findings and Discussion

5.4.1 Sample Profile

Visitors were grouped according to their birth dates. Thus, four generational groups, namely baby-boomers, Generation X, Generation Y, and Generation Z are identified (Table 5.1). Among respondents, there is a predominance of females, non-married and highly educated individuals, employed people, and residents in Portugal. Still, differences are found in aspects concerning marital status, job situation, and market by origin among generations. The older ones are predominantly married and employed or already retired, while respondents from younger generations are mostly unmarried and employed or still studying. Moreover, baby-boomers are mostly international visitors, while all the remaining generations are predominantly from the domestic market.

5.4.2 Differences Concerning Pro-environmental Behaviors at Home Among Generational Groups

Table 5.2 shows that participants have a high frequency of practices related to eco-friendly purchasing and consumption, as well as energy saving. This is in line with Lee and Moscardo's [21] research, which reveals that the most usual practices concern recycling, energy and water-saving, and use of eco-friendly goods. Present to a minor extent is sustainable transportation practices, although in this context a preference for walking and/or riding a bicycle should be highlighted. Some supporting evidence is found in Dolnicar and Grün's [5] research where sustainable mobility practices were not one of the top listed pro-environmental activities, and in Bronfman et al.'s [20] study, where actions such as car-sharing were also moderately adopted by citizens in daily routines. The lower level of involvement of respondents was in actions directly concerning air quality. A parallel is found with Oltra and Sala's [22] research, where only a small proportion of population of four Spanish cities reported searching for information about air quality or consulting the air quality index of their place of residence.

Then, significant differences are observed among generational groups. Baby-boomers are the segment with highest levels of pro-environmental reported habits, except for transportation. They are more likely to purchase and buy eco-friendly products and to save energy, as well as to be interested in air quality information. Similarities are found with the study of Barr et al. [13], where older people were found to have the most environmentally friendly behaviors at home. Nevertheless, contradictory results are found in Mehmetoglu's [10] study which points to less willingness of older citizens to engage in home-based pro-environmental behaviors. The fact that baby-boomers were more likely than the other groups to search for information about air quality may be related to the fact that older people are more prone to suffer from

Table 5.1 Sociodemographic profile of participants in the survey by generational groups

	Total sample (N = 738)		Baby-boomers 8.8% (N = 63) %	Generation X 20.8% (N = 150) %	Generation Y 39.9% (N = 287) %	Generation Z 30.6% (N = 220) %	Chi-square test	
	N	%					X2	p-value
Gender							7.496	0.058
Female	402	56.5	45.2	56.4	54.1	62.8		
Male	310	43.5	54.8	43.6	45.9	37.2		
Marital status							150.742	**0.000**
Married	305	43.5	**81.0**	**63.7**	48.7	11.7		
Other	396	56.5	19.0	36.3	51.3	**88.3**		
Education level							6.120	0.106
High school and below	68	9.8	18.6	7.6	9.4	9.3		
Bachelor and above	626	90.2	81.4	92.4	90.6	90.7		
Job situation							379.434	**0.000**
Employed	486	68.7	44.3	**90.6**	**85.7**	39.0		
Unemployed/retired	72	10.2	**55.7**	8.7	5.0	5.0		
Student	149	21.1	0.0	0.7	9.3	**56.0**		
Market by origin							18.561	**0.000**
Domestic	398	55.4	30.2	**60.0**	58.4	55.5		
International	321	44.6	**69.8**	40.0	41.6	44.5		

Note: When there are statistically significant differences, the highest value(s) are marked in bold

Table 5.2 Environmentally friendly behaviors at home

	Total sample (N = 738)	Baby-boomers 8.8% (N = 63)	Generation X 20.8% (N = 150)	Generation Y 39.9% (N = 287)	Generation Z 30.6% (N = 220)	ANOVA		Kruskal-Wallis test	
	Mean	Mean	Mean	Mean	Mean	F	p-value	X^2	p-value
Eco-friendly purchase and consumption									
Less consumption of non-reusable packaging products	5.01	**5.37**^{2}	5.24^{1,2}	4.86^{1}	4.95^{1,2}	3.432	**0.017**		
Reuse of packages	5.61	6.00	5.68	5.57	5.49	2.369	0.069		
Purchase of environmentally friendly products	4.98	**5.48**^{2}	5.09^{1,2}	4.80^{1}	4.99^{1,2}	3.898	**0.009**		
Recycle	5.81	**6.37**	5.94	5.83	5.52			11.136	**0.011**
Home composting	2.99	**3.76**^{2}	3.05^{1,2}	2.69^{1}	3.13^{1,2}	4.350	**0.005**		
Energy saving									
Reduce energy consumption	5.41	5.70	**5.85**	5.28	5.20			20.882	**0.000**
Use of renewable energy sources at home	2.56	2.66	2.73	2.38	2.65	1.248	0.291		
Switch off sources of energy and other electronic devices in unoccupied rooms	5.95	6.32	5.85	5.84	6.05			5.202	0.158
Sustainable transportation									

(continued)

Table 5.2 (continued)

	Total sample (N = 738)	Baby-boomers 8.8% (N = 63)	Generation X 20.8% (N = 150)	Generation Y 39.9% (N = 287)	Generation Z 30.6% (N = 220)	ANOVA		Kruskal-Wallis test	
	Mean	Mean	Mean	Mean	Mean	F	p-value	X^2	p-value
Car sharing	4.16	4.02	3.95	3.96	**4.59**			13.341	**0.004**
Use of public transportation	4.22	4.52	3.69	3.91	**4.90**			32.097	**0.000**
Walk and/or ride a bicycle	4.59	4.71	4.25	4.52	4.90			7.586	0.055
Air quality awareness									
Search for information regarding air quality	3.66	**4.74**^{2}	3.93^{1}	3.50^{1}	3.40^{1}	9.813	**0.000**		
Search for information on mitigation actions to preserve air quality	3.92	**4.87**^{2}	4.22^{1}	3.67^{1}	3.80^{1}	8.532	**0.000**		
Raise the awareness of friends and relatives regarding the importance of air quality preservation	4.25	**5.24**^{3}	4.59^{2}	3.92^{1}	4.15^{1,2}	10.305	**0.000**		

Note: When there are statistically significant differences, the highest value(s) are marked in bold. If the means have different superscripts there are statistically significant differences between them (significance level of 5%)

health problems [23]. In turn, Generation Z reports higher frequency regarding the use of sustainable transportation solutions, with significant differences in relation to the remaining groups. These results found some support in Prillwitz and Barr's [24] study, where young people were found to adopt more green mobility behaviors (e.g., use of public transportation and walking). No major differences were reported in relation to energy-saving practices, except for reducing energy consumption, where, as mentioned, baby-boomers and Generation X report a higher frequency.

5.4.3 Differences Concerning Pro-environmental Behaviors During a Tourism Trip Among Generational Groups

The results suggest that visitors did not frequently engage in environmentally friendly practices during their travel experience (Table 5.3). This is especially true in actions related to air quality and sustainable transportation. This reveals the difficulties, constraints, or even lack of motivation of visitors to extend their everyday practices to a destination context or simply to shift to a more environmentally friendly profile during their vacation time. These findings corroborate the studies of Miller et al. [6] and Dolnicar and Grün [5], which found that visitors show lower levels of moral obligation and responsibility concerning pro-environmental behaviors at a destination when compared to the home setting.

Statistically significant differences exist among the generational groups concerning these pro-environmental behaviors during the tourism trip (Table 5.3). As in the domestic behaviors, baby-boomers are those who tend to adopt more environmentally friendly practices at the destination, specifically waste management, followed by the Generation X segment. This is consistent with some earlier literature (e.g., [1, 13]), which reported that older visitors tend to engage in more environmentally friendly practices related to environmental preservation and waste management, while the youngest ones were revealed to behave in an environmentally unfriendly way, namely by littering and damaging the natural environment [25]. On the other hand, similarly to what occurred in home settings, sustainable transportation practices are more visible among visitors from Generation Z, which was also noticed earlier by Prillwitz and Barr [24], who identified more sustainable mobility trends between this group of visitors.

5.4.4 Gaps Between Pro-environmental Behaviors at Home and During a Tourism Trip by Generational Groups

The comparison between the same pro-environmental behaviors at home and away (Table 5.4) corroborates the findings of earlier studies carried out for a lower number of generational groups (e.g., [1, 5, 6]), which revealed that people reduce these

Table 5.3 Environmentally friendly behaviors during the tourism trip

	Total sample ($N = 738$) Mean	Baby-boomers 8.8 ($N = 63$) Mean	Generation X 20.8 ($N = 150$) Mean	Generation Y 39.9 ($N = 287$) Mean	Generation Z 30.6 ($N = 220$) Mean	ANOVA F p-value		Kruskal-Wallis test $\times 2$ p-value	
Waste/energy management									
Recycled	**4.77**	**5.29**	**4.89**	**4.75**	**4.59**	**2.074**	**0.102**		
Reduced energy use	**4.88**	**5.27**^{2}	**5.07**^{1,2}	**4.64**^{1}	**4.94**^{1,2}	**3.390**	**0.018**		
Gathered litter	**3.73**	**4.41**^{2}	**4.03**^{1,2}	**3.56**^{1}	**3.57**^{1}	**3.865**	**0.009**		
Preservation practices									
Avoided tourist attractions to lessen negative impacts	**2.83**	**2.92**	**2.97**	**2.53**	**3.10**			**12.086**	**0.007**
Helped in the destination's conservation	**5.08**	**5.20**	**5.19**	**4.92**	**5.19**	**1.373**	**0.250**		
Raised awareness in my group towards preservation	**3.90**	**4.39**^{2}	**4.03**^{1,2}	**3.66**^{1}	**4.00**^{1,2}	**2.662**	**0.047**		
Sustainable transportation									
Used public transportation	**3.80**	**3.98**	**3.71**	**3.44**	**4.28**			**13.273**	**0.004**
Used environmentally friendly transportation	**2.49**	**2.88**	**2.46**	**2.29**	**2.66**			**5.515**	**0.138**

(continued)

Table 5.3 (continued)

	Total sample ($N = 738$) Mean	Baby-boomers 8.8 ($N = 63$) Mean	Generation X 20.8 ($N = 150$) Mean	Generation Y 39.9 ($N = 287$) Mean	Generation Z 30.6 ($N = 220$) Mean	ANOVA F	*p*-value	Kruskal-Wallis test $\times 2$	*p*-value
Walked or rode a bicycle	**4.58**	**3.90**	**4.69**	**4.38**	**4.95**			**12.585**	**0.006**
Air quality awareness									
Performed activities with less impacts on air quality	**4.93**	**5.11**	**5.01**	**4.70**	**5.12**	**2.512**	**0.058**		
Searched for information regarding air quality	**2.20**	**2.60**	**2.53**	**2.03**	**2.07**			**12.944**	**0.005**
Consulted the Air Quality Index for Portugal	**1.85**	**1.95**	**2.15**	**1.82**	**1.66**			**7.993**	**0.046**
Searched for data related to atmospheric pollutants	**1.74**	**1.87**	**1.95**	**1.74**	**1.56**			**4.976**	**0.174**
Searched for air quality forecasting systems	**1.87**	**1.97**	**2.09**	**1.83**	**1.74**	**1.796**	**0.147**		

Note: When there are statistically significant differences, the highest value(s) are marked in bold. If the means have different superscripts there are statistically significant differences between them (significance level of 5%)

Table 5.4 Gap between environmentally friendly behaviors at home and during a tourism trip

Sustainable domestic practices	Mean home	Mean destination	Paired sample test	
			t-test	p-value
Recycle				
Total	**5.80**	4.80	12.802	**0.000**
Baby boomers	**6.37**	5.29	3.733	**0.000**
Generation X	**5.93**	4.89	6.543	**0.000**
Generation Y	**5.84**	4.76	8.777	**0.000**
Generation Z	**5.52**	4.59	6.386	**0.000**
Reduce energy consumption				
Total	**5.41**	4.87	7.377	**0.000**
Baby boomers	5.70	5.26	1.651	0.104
Generation X	**5.85**	5.07	5.489	**0.000**
Generation Y	**5.28**	4.64	5.258	**0.000**
Generation Z	5.20	4.94	1.917	0.057
Use of public transportation				
Total	**4.22**	3.84	3.953	**0.000**
Baby boomers	4.43	3.97	1.246	0.218
Generation X	3.69	3.75	−0.253	0.800
Generation Y	**3.89**	3.44	3.216	**0.001**
Generation Z	**4.90**	4.28	3.361	**0.001**
Walk and/or ride a bicycle				
Total	4.60	4.58	0.211	0.833
Baby boomers	**4.71**	3.90	2.646	**0.010**
Generation X	4.25	4.68	−1.940	0.054
Generation Y	4.52	4.39	0.899	0.369
Generation Z	4.90	4.95	−0.377	0.737
Search for information regarding air quality				
Total	**3.67**	2.21	20.166	**0.000**
Baby boomers	**4.81**	2.54	8.375	**0.000**
Generation X	**3.93**	2.53	8.235	**0.000**
Generation Y	**3.50**	2.03	13.470	**0.000**
Generation Z	**3.40**	2.07	10.268	**0.000**

Note: When there are statistically significant differences, the highest value(s) are marked in bold practices when moving away from home to a destination context. The results show significant differences in four of the five behaviors for the total sample. In respect to behavioral changes in each of the groups in analysis, the results show a similar pattern, meaning that all the generations drop their environmentally friendly behaviors during their stay at the destination.

5.5 Conclusion

This study provides relevant insights concerning the adoption of pro-environmental behaviors at home and during a tourism trip, particularly by examining these practices among four generational groups. Additionally, this study also provides important contributions regarding the degree to which people of each group changed their behavior while moving from one context to another.

Important theoretical and practical contributions are provided. Regarding theoretical contributions, first, the present study offers further understanding about the pro-environmental behaviors conducted in a home setting and during a tourism trip. It is concluded that people usually engage more in eco-friendly purchase and consumption along with energy-saving practices at home, while during the trip, participants claimed to engage more in actions related to waste and energy management along with preservation practices. Furthermore, this study also contributes to the literature analyzing the gap that is usually observed when people move from home to a destination context, revealing a general trend of all the generational groups analyzed of reducing these behaviors during tourism trips. It also specifically shows that older generational groups (baby-boomers and Generation X) tend to be environmentally friendly in both settings, although they limit their environmental behavior on vacation. This contradicts the general perspective that younger people are more environmentally oriented. Managerial insights are also provided. By showing that older segments tend to behave in a more environmentally sustainable way at home and away, the present study suggests that more efforts should be developed to target younger groups and involve them in practices to preserve the environment, as a way to call their attention to the need of guaranteeing a balanced environment for future generations.

Despite the contributions of this study, it also has some limitations that can be overcome in future research. One concerns the limited number of practices for which pro-environmental behaviors at home and at the destination were compared. Future studies should consider and extend the of list pro-environmental behaviors used. Secondly, this study did not provide an analysis of potential factors influencing the behavioral trend of each segment. Therefore, further research in this field should be carried out.

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Chapter 6
Corporate Performance and Employment in High-Growth Hotels

Eleonora Santos and Jacinta Moreira

Abstract The importance of tourism, the criticality of the hospitality industry to employment and economic growth and the relationship between High-Growth Hotels (HGHs) and regional development provide the rationale for this study. This paper analyzes the financial sustainability of HGHs in 2016–2019 and their contribution to employment by NUTs II regions of the Iberian Peninsula. Overall results indicate better performances among HGHs located in the Southwest regions of the Iberian Peninsula, in the capital cities and in the Northeast of Spain. Also, the correlation between the regional incidence of HGHs and the average number of employees appear to confirm the results of previous studies that gazelles are major employers.

6.1 Introduction

The hospitality industry can be described as diversified, ranging from small and medium firms to large multinational corporations (MNCs), both in the restaurant and the hotel sector. Because it comprises several distinct service producing industries, which are frequently major contributors to the gross domestic product (GDP) worldwide [1–3], it is one of the driving forces of the global economy [4]. Yet, the recent pandemic and the temporary closure of hotels and restaurants is expected to have affected on a great scale the hospitality industry across the world with negative consequences to other sectors [5], due to tourism's indirect effects. Specifically, negative consequences may include unemployment, job insecurity, loss of income, decline in GDP, and a feeling of uncertainty and pessimism. On the other hand, the literature on industrial organization shows that a handful of firms, experience very rapid growth or very rapid decline, while most firms do not grow. As a result, it has been suggested that the dynamics of industries is driven not by the stagnant majority, but by a minority of discrepants [6]. In this context, high-growth firms (HGFs) potentially contribute to economic growth and job creation [7]. Moreover, the hotel industry

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is crucial for the development of other tourism destination related services and represents a high share of tourist expenditures. Thus, evaluating the financial performance of HGFs operating in hospitality industry is of relevance to ascertain their role in the economy and suggest regional policy measures. Nevertheless, regional characteristics should be accounted for the adoption of the best regional policy. Currently, the hospitality industry is increasingly focusing on achieving better performance and competitiveness [8]. However, from a methodological point of view, there is a widespread propensity to neglect the balance-sheet analysis in tourism studies. As a result, such studies fall short on understanding management trends. Exceptions are studies that perform correlation analysis using accounting results. For example, the use of the Return on assets is frequent [9] or the Return on equity [10] and the Return on sales [11]. Other authors use the net interest margin and earnings per share [9]; leverage, liquidity, operational efficiency [10]; net operating income, profit and return on assets before tax [12]. However, as far as the authors are aware, there are no studies using balance-sheet ratios to assess the financial performance of hotels in the Iberian Peninsula at regional level. This paper aims at filling this gap by focusing over understanding the financial performance of HGHs across regions of the Iberian Peninsula, in 2016–2019. The analyzed period does not include the effects of the pandemic since the last year available is 2019. However, the results may point to directions on the financial sustainability of gazelles in the pre-pandemic period and their contribution to employment. The remainder of the paper is structured as follows. Section 6.2 presents the literature; Sect. 6.3 describes the data and methodology; the results are analyzed and discussed in Sect. 6.4; and Sect. 6.5 provides the concluding remarks.

6.2 Literature Review

The literature on the various determinants of profitability of hotels include studies on price [13]; the socio-economic status of guests [14, 15]; the quality of the service [16], the existence of competitors [17]; culinary innovation [18]; internal behaviors and dominant values in the organizational structure [19]; the accommodation capacity and the risk of underutilization of the rooms [20]. An example of recent studies focusing on hotels' financial performance is a study [8] that analyzes the impact of service innovations on firm performance in the hospitality industry in Croatia during 2012–2014. Using the Community Innovation Survey, it explores whether firms that introduce service innovations outperform their rivals. The results suggest that service innovations are important for firm performance and competitiveness. Another study [21] evaluates the differences in the financial indicators across the categories of hotels in the Visegrad Group countries (two- to five-star hotels). Hotel category data (stars) were collected from Booking.com and financial outcomes were obtained directly from the financial statements of the analyzed hotels. Using non-parametric tests (Kruskal–Wallis test, Wilcoxon test), results show significant differences in financial ratios such as profit margin, EBITDA margin and solvency. Hotels of a higher category showed better financial performance.

Other study [22] analyzes whether environmental management influenced the performance of Spanish hotels during the 2008 crisis. Using panel data, the authors compare how sales, workers and assets management affected the financial performance of hotels with and without environmental certification in the period prior to the financial crisis (2002–2007) and during it (2008–2013). Results show no evidence that the financial performance of certified hotels was higher than non-certified hotels in either the period prior to the crisis or during it. A study [23] quantified the impact of online customer reputation on financial profitability in UK hotels. Latent Semantic Analysis and Proxies of financial performance are constructed using financial data from Financial Analysis Made Easy database. OLS results show that the themes repeated in positive, but not in negative reviews, are found to significantly associate with hotel financial performance. Another work [24] evaluates the relative effects of economic growth, industrial expansion, and firm-specific and contextual factors on corporate hotel performance in Sri Lanka. Using a sample of 29 listed hotels for 2012 to 2018 and employing a panel regression, the findings suggest that the macroeconomic factors alone can account for a small part of the variance in return on assets and return on equity, and yet these macroeconomic factors are the key drivers of the overall financial performance. Moreover, the selected macroeconomic factors, together with firm- specific and contextual factors, appear to have a profound impact on hotel performance. Growth in the number of tourist arrivals and growth in inflation are found to have a positive and significant impact on corporate hotel performance, while the interest rate has a significantly negative effect. The authors conclude that the profitability of Sri Lankan hotels is driven by managerial efficiency, location factors, geographical diversification, and connection to a wider business network.

Other study [25] explores the impact of seasonality on hotel firms' financial performance and whether this impact depends on tourism destinations and the variations of the tourism demand (domestic/international). Financial performance is measured by the Return on Assets (ROA). Dynamic panel models at both the national and regional levels are applied to a sample, including the accounting data of all Norwegian hotels in 2008–2017. The findings suggest that the impact of seasonality on financial performance depends on market segments and varies across tourism destinations. They also find that marketing strategies, pricing, and revenue management techniques can alleviate the negative impact of seasonality.

A study [26], using data from 31 provinces in China from 2003 to 2018, study the impact of international tourism on hotel sales revenue (HSR). Results of dynamic panel regression reveal a positive relationship between international tourist arrivals (ITAs) and hotel performance in mainland China. The impact of ITA on HSR is found to be inverse U-shaped. Moreover, ITA has a stronger impact on HSR during periods of economic expansion. Another study [27] analyzes the economic and financial performance of Italian hotels across regions after the international economic crisis. Using financial statements of 5473 hotels in 2009, they find that the crisis affected profitability. They conclude that Italian hotels have a low capitalization and are unable to cope with the large structural investments that require significant debts.

6.3 Methodology and Data Sources

Firm's annual accounts, especially income statements and balance sheets, are the most relevant data to analyze firm's financial performance and to evaluate business strengths and weaknesses [28]. Basically, analysts convert data from these statements into financial metrics—ratios, that support the decision making, trying to answer to questions, such as: How effectively has the firm performed, relative to its own past performance and/ or relative to its competitors? How is the firm liable to perform in the future? What is the value of the company? Accounting information regarding profitability, liquidity, indebtedness, and growth is critical to measuring economic and financial sustainability [29]. Studies show that firms with relatively lower earnings, negative profits, larger declines in operating income, high indebtedness, and few probabilities to growth are more likely to experience bankruptcy.

According to Steurer et al. [30], business economic sustainability is classified through its business financial performance, competitiveness, and the economic impact generated by the firm and its stakeholders. This research involves an analysis of financial ratios of 44 hotels (NACE Rev. 2 code 55), identified as HGFs in the Iberian Peninsula, in 2016–2019. For this purpose, we follow the definition of HGFs, the so-called gazelles [7, 31], that is given by the OECD, as firms with annualized average growth (in number of employees or turnover) of over 20% per year during three years in a row, and with a minimum of 10 employees at the beginning of the growth period' [32]. The measure utilized in this paper is the employment growth, because this paper focuses on employment contribution of the HGFs.

Profitability ratio analysis is a good approach to measure firm's performance, because it means the firm's ability to generate earnings. Firms' profitability is essential both for shareholders and creditors because profits allow for dividends and funds for covering debts. Examples include return on assets (ROA), return on equity (ROE), cash return on assets, return on debt, return on retained earnings, return on revenue, risk-adjusted return, return on invested capital, and return on capital employed. This paper employs the first two measures which are the most used: ROA and ROE (e.g. [33, 34]).

The ROA is one of the best-known ratios of profitability. It measures the firm's economic profitability, and it can be used as an indicator of a firm's efficiency in using its investments to generate profits. The formula is:

$$\text{Return on Assets(ROA)} = \text{Net income/Total Assets} \tag{6.1}$$

ROA should be positive and the highest as possible since it means that with less investment (total assets) the firm is more able to have profits. Although, if too high may mean that the firm needs to do new investments in fixed assets to continue to growth and follow the market needs.

The ROE measures the firm's ability to generate profits using shareholders' investments. It is also known as shareholders return. The calculation formula is as follows:

$$\text{Return on Equity(ROE)} = \text{Net income/Total Equity} \tag{6.2}$$

This ratio shows how much profit is generated by monetary unit of shareholders' equity. In other words, it measures how efficient is the money from shareholders being used for the generation of earnings. In view of this, ROE, as well as ROA, should be positive, and a high value is desirable because that would mean efficiency in the use of investors' funds.

Liquidity ratios measure firms' ability to pay off current debt obligations without raising external capital. Example of liquidity ratios are current ratio, quick ratio, and operating cash flow ratio. This paper uses the liquidity ratio calculated as:

$$\text{Liquidity} = \text{Current Fixed Assets} - \text{Stocks/Current Liabilities} \tag{6.3}$$

This ratio measures a firm's ability to pay off its current liabilities (payable within one year) with its current assets. It evaluates the coverage of short-term debts in an emergency. The higher the ratio, the better the firm's liquidity position. Although, if too high may mean that a firm is not doing efficient investments.

The analysis of financial ratios is complemented by the levels of assets, cash-flow, gross value- added and profits to assist the assessment of financial performance of HGHs. Financial statements for the Iberian Hotels come from ORBIS database from Bureau van Dijk. The data are analyzed in Stata 17.0. From the 44 hotels (NACE Rev. 2 code 55), identified as gazelles in 2016–2019, 21 are in Portugal and 23 in Spain.

6.4 Results and Discussion

6.4.1 Results

Table 6.1 shows the regional distribution of these hotels with high-growth performances (HGH) and their average number of employees.

According to Table 6.1, not surprisingly the HGHs are in the capital (Lisbon) and in the North of Portugal, where Porto, the second biggest city, is located. The reason can be partly due to the higher population density in these two regions (see Table 6.2). The highest average number of employees is recorded in Lisbon (22), followed by Alentejo (16). Madeira and Alentejo possess just one HGH each but the HGH in Madeira is smaller, with just 7 employees on average. Figure 6.1 shows the Iberian Peninsula by NUTs II regions.

In Spain, the regions of Catalonia and Valencia show the highest share of HGH (6 and 4, respectively), with averages of 21 and 24 employees. However, these regions rank in 5th and 6th positions regarding population density. A better explanation is the number of international tourists' arrivals by regions. Due to its capital city Barcelona, in 2019, Catalonia has been the most visited region by international tourists in Spain

Table 6.1 Regional distribution of HGFs and Employment

Country	Region	#HGHs	Average #employees
Portugal	North	8	11
	Lisbon	9	22
	Alentejo	1	16
	Azores	2	7
	Madeira	1	7
		21	**63**
Spain	Andalusia	1	7
	Catalonia	6	21
	Basque Country	2	10
	Valencian Community	4	24
	Galicia	3	17
	Balearic Islands	2	18
	Canary Islands	1	35
	La Rioja	1	13
	Madrid	1	166
	Navarra	1	8
	Murcia	1	26
		23	**345**

Source Authors' calculations using Stata 17.0

Table 6.2 Number of tourists arrivals (€ mil.) in 2019, by NUTS II regions

Portugal		Spain	
North	3.10	Andalusia	3.18
Lisbon	5.99	Catalonia	4.89
Alentejo	0.55	Basque Country	n.a
Azores	0.38	Valencian Community	2.35
Madeira	1.16	Galicia	n.a
		Balearic Islands	1.77
		Canary Islands	4.78
		La Rioja	n.a
		Madrid	2.41
		Navarra	n.a
		Murcia	n.a

Source Statista.com and INE.es

Fig. 6.1 Iberian Peninsula by NUTs II regions

(see Table 6.2) recording the arrival of 4.89 million visitors from abroad, followed by the Canary Islands, Andalusia, Madrid, and Valencia.

Table 6.3 shows the mean values of the ratios and indicators.

Analyzing Table 6.3 the following facts emerge: 1. HGHs in Lisbon show the best financial performance measured by ROA (3), total assets (3441), cash-flows (352), GVA (901), and profits (677); 2. HGHs in Azores show the best liquidity ratio (8); 3. HGHs in Madeira display the best financial profitability (ROE = 251); 4. the Northern region does not stand-out in any of the indicators, the best achievement of HGHs located in the region is the second position in terms of assets (1261). To sum-up, in Portugal, HGHs in the capital and in the Islands exhibit the best financial performance. HGHs in the Northern region were comparatively worse, regarding their financial performance, in 2016–2019.

Table 6.3 Mean values of main accounting information per Portuguese region

Region	ROA	ROE	Liquidity	Total assets	Cash-flow	GVA	Profits
North	0	22	2	1261	85	267	14
Lisbon	3	−34	1	3441	352	901	677
Alentejo	0	38	4	1196	336	641	23
Azores	0	25	8	842	76	173	60
Madeira	2	251	4	191	−10	128	634

Note Total assets and profits are in €
Source Own analysis using Stata 17.0

Table 6.4 Mean values of main accounting information per Spanish region

Region	ROA	ROE	Liquidity	Total assets	Cash-flow	GVA	Profits
Andalusia	0	16	2	1717	170	480	−422
Catalonia	0	53	1	3007	255	1103	205
Basque Country	0	58	2	427	81	447	52
Valencian Community	0	68	3	4926	76	644	−60
Galicia	0	45	0	904	73	516	48
Balearic Islands	0	−34	1	1521	−183	416	19
Canary Islands	0	26	2	3272	128	1285	242
La Rioja	0	−81	0	4674	−234	221	40
Madrid	0	28	1	21,628	3126	8962	599
Navarra	0	9	1	1952	169	443	−6
Murcia	0	−74	2	1190	−120	423	−89

Note Total assets and profits are in €
Source Own analysis using Stata 17.0

Concerning HGHs in Spain, Table 6.4 shows that the capital Madrid and Valencia exhibit the higher level of assets (21,628), cash-flows (3126), GVA (8962) and profits (599), and financial profitability (ROE = 68) and liquidity (3), respectively. The Basque Country ranks in second position regarding ROE (58). Catalonia shows the second highest level of cash-flows (255) and ranks in the third position concerning GVA (1103) and profits (205), after the Canary Islands (1285 and 242, respectively). The relatively worst financial performances can be found among HGHs in La Rioja, concerning ROE (−81), liquidity (0), cash-flow (−234), and GVA (221); Andalusia regarding profits (−422); and the Basque Country regarding assets (427).

Looking at Fig. 6.1, the results suggest better financial performances in the southwest regions of the Iberian Peninsula, in the capital cities and in the Northeast of Spain.

Figures 6.2 and 6.3 show the evolution of average number of employees for each region of Portugal and Spain, in 2016–2019. Both countries show an increase in the

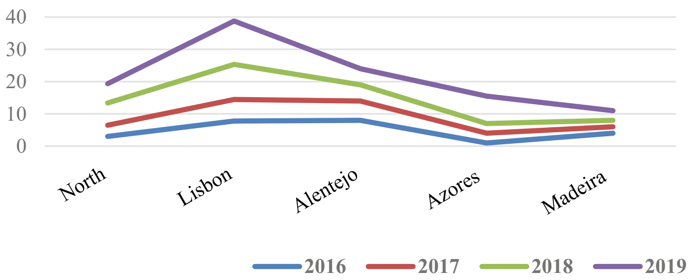

Fig. 6.2 Average #employees in HGHs, across Portuguese regions

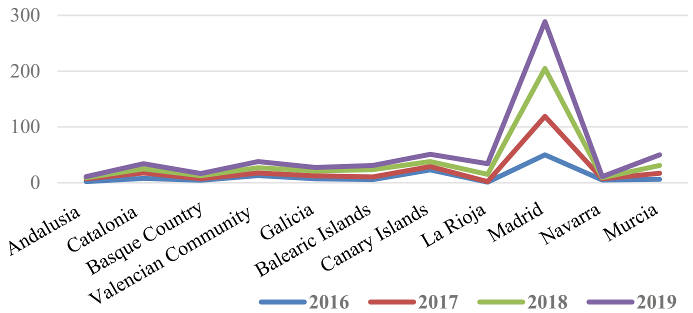

Fig. 6.3 Average #employees in HGHs, across Spanish regions

average number of employees in the analyzed period. However, the higher increases occurred in Lisbon (31) and in Madrid (239). The HGHs located in the North and Alentejo; and, also, in Murcia and La Rioja ranked in 2nd and 3rd position regarding job creation, with increases of 16 in the first two and 44 and 33 in the last two.

Regarding the contribution of HGHs to employment, these results show that better financial performances are associated with increases in employment in HGHs in the Iberian Peninsula.

6.4.2 *Discussion*

Overall results indicate better performances among gazelles located in the most populated region in Portugal and in the regions with highest levels of international tourist arrivals in Spain. Correlations between the regional incidence of HGHs and average number of employees appear to corroborate studies that find gazelles are major employers. However, the importance of gazelles in the economy and, their role in creating jobs is not exempt of criticism. For example, some studies such as [35] suggest that the concept of 'gazelle' suffers from the problem of focusing on employment rather than on productivity. The authors advocate that management should focus primarily on creating value and productivity rather than creating employment opportunities. Other studies [36] advocate that employment is the most important feature of High-Growth Firms and define 'sleeping gazelles' as firms that show high growth rates in profits over a three-year period, but without any corresponding increase in employment. In a particular conjuncture of high unemployment due to Covid-19 pandemic, this paper highlights the role of HGHs in creating employment and analyzes the regions of Iberian Peninsula where this kind of companies show better financial performances, as this is a requisite for supporting jobs.

6.5 Conclusions and Policy Implications

Literature using balance-sheet ratios to assess the financial performance of hotels in the Iberian Peninsula at regional level is non-existent. This paper attempted to fill the gap by focusing over understanding the financial performance of HGHs in the hospitality industry across regions of the Iberian Peninsula, in 2016–2019. The employment generated by the HGHs in Lisbon, North and Alentejo; and in Madrid, La Rioja and Murcia is important to social sustainability of populations in these regions. In addition, these Hotels exhibit the best financial performance and thus the best economic sustainability. Thus, it is expected that their beneficial role in creating jobs and exerting higher socio-economic impacts on the territory, soon will continue due to their financial health. However, because the incidence of HGHs and employment occur in the most populated region in Portugal and the regions of Spain that attract more international tourist arrivals, a major concern is that the role of HGHs in the Iberian Peninsula might contribute to further deepen the regional asymmetries. Thus, regional authorities should carry on their policies to attract tourists to more economic depressed regions in the Iberian Peninsula to mitigate such asymmetries, a recent adopted solution that has proved to be effective is the promotion of nature- based tourism. Indeed, the supply of trails and mountain biking centers, walking routes, trail running and geocaching, accompanying animation and several promotion and communication activities, have become important in territories with relevant heritage or in national and/or international competition circuits such as Ultra trail and Sky Road Aldeias do Xisto [37].

Adequate policies oriented to increase the number of visitors of these regions through the diversification of local nature-based tourism supply, integrating other types of endogenous resources into the services, developing a strategy of product diversification, may lead to an increase in employment and social and economic sustainability as well as a reduction of regional asymmetries.

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Chapter 7
Tourist Behaviour in the COVID-19 Pandemic Context

Conceição Castro and Teresa Dieguez

Abstract The tourism industry is being severely affected by the coronavirus (COVID-19) pandemic. This paper aims to analyse how the COVID-19 pandemic affects the behaviour of Portuguese tourists towards travels and how the likelihood of their intention to deeply change behaviour is different according to their sociodemographic characteristics, the pattern of past trips, and the level that it has affected their life and work. With the results of a survey, factor analysis was made and with the scores of the extracted factors, logistic models were estimated. The results suggest that the Portuguese tourists are mainly concerned about health and safety in travel and the likelihood of having a major concern is greater for women and for those most affected by the pandemic, varying also with age. The chance of reducing more their travel plans is also higher for individuals who have been deeply affected by the pandemic. This research highlights the potential changes in tourists behaviour due to the pandemic and recommends some policies and practices for the sector.

7.1 Introduction

The desire to travel and discover new destinations is something characteristic of human nature. The COVID-19 pandemic has severely affected almost all industries and particularly the tourism industry. In the second quarter of 2020 residents in Portugal made 2.0 million trips, corresponding to a 64.9% decrease in comparison with the same period of the previous year [1]. 99.4% of the trips were domestic trips, a decrease by 59.1%. Tourist trips abroad were practically null (0.6% of the

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total), totalling 12,400 (−98.5%). In June 2020, the Portuguese Ministry of Foreign Affairs, advised against travelling to destinations outside Europe, especially to other destinations without easy and frequent connections to Portugal, and in particular travelling to exotic destinations and/or unorganised trips, suggesting that preference should be given to holidays on national territory.

Associated risks related to the pandemic and social distance, compel people to change their behaviours and in this context, the present study aims to analyse the impact of the COVID-19 pandemic on the behaviour of Portuguese tourists regarding their travelling plans and concerns with it. It also seeks to understand if changes in their behaviour can be explained by their socio-demographic characteristics, their patterns of travelling and the degree to how COVID-19 pandemic' affected their life and work.

7.2 Literature Review

All through the course of history, disease outbreaks have devastated humanity, sometimes changing the course of history and, occasionally, ticking the end of entire civilizations. Those incidences highly impact human behaviour on consumer and health risk mitigation [2]. In addition, harsh macroeconomic repercussions normally go behind in areas affected by a pandemic causing economic recession, uncertainty and unemployment [3]. Individual-level motivations and developed government policies seem to correlate pandemics with behavioural change [4]. When situations are new, unclear and uncertain, there are a lot of errors from the decision-making side and individuals take safer actions [5].

Nowadays all over the world, citizens are asked to respect social distance and the future is unsure. People are frightened and isolate themselves, something not good as they are social beings [6]. Feelings of unconstructiveness, solitude, negativity, depression, and sensitivity may develop [3]. However, more positive types of behaviour are developed, namely new skills, better care of where people live, more use of the Internet and corresponding access to social media, often preferred over physical interaction [7].

There are studies related to behavioural responses to pandemics in various countries [8] but conclusions are not similar. They may incorporate prevention and defensive behaviours, as well as emotional distress and propensity or confidence in the effectiveness of the anticipatory measures [8]. The way how community responds seems to depend on detailed cultural differentiation, as well as national health care structure, national strategy and identical previous experiences [9]. Not least important to note is that personal psychological and emotional traits also will be determinant on the reaction to pandemics [10]. In fact, all the restrictions caused by the social distancing had an impact on jobs and unemployment has increased, being many leisure activities cancelled. People frightened with social contact end travelling and maybe will be more afraid when the barriers are over [11]. The use of e-learning will raise and as public events and activities will be reduced, people will be more likely to reduce the number of public activities and events, certainly be more inclined to carry out activities at home [12]. The way of travelling and choosing it will change [11] and people will not desire to take public transports and keep in contact with strangers [13]. When future is uncertain and decisions are required, the literature identifies behaviour as a frequent risk diminution strategy [14], being in tourism the most identified one's satisfaction, psychological, time risks and financial [15]. Individuals' risk-taking tendencies and tourist personality continuum, known as risk-averse or risk-taking personality types are explained by personality traits [14]. Travellers' reaction to risky situations are explained by circumstantial issues and types of seeming risk [14].

Risk and security are two main factors that damage the functionality of destinations [16]. Consumer behaviour travel risks are associated to health [17], natural disasters [18], crime [19], war and political instability [20] or terrorism at tourism destination [21]. There are a lot of tourist characteristics namely gender [22], age [23] and travel experience [19], among others, that can explain the perceived risks. Women seem to report higher levels of risk about health and safety [24] and higher risk perception [25] as a distress than do men. However, there is no consensus about it and many researchers found no difference for gender [26, 27]. In what concerns education, literature directly relates high perception of risk with it, being expected individuals with higher levels of education stay more alert [28]. Men with lower educational levels or sometimes with high educational achievement, believe they are impenetrable, and women are vulnerable due to their specific contexts [29]. Ferreira et al. [28] found that the probability of tourists having a high-risk perception of terrorism is influenced by the level of income and also with whom they are travelling. For the authors, a high-risk perception decreases if tourists travel alone or with a companion instead of travelling with children. In what concerns context variables, Rountree & Land [30] found generally insignificant interactions. For technological understanding, as well as cultural and other contextual levels, differences in risk perception exist [31].

7.3 Methodology

7.3.1 Objectives, Data Collection, Statistical Approaches and Model

This study aims to analyse: (i) the impact of the COVID-19 pandemic on the behaviour of Portuguese tourists regarding their travelling plans and concerns with it; and (ii) if changes in their behaviour can be explained by their socio-demographic characteristics, their patterns of travelling and degree of how COVID-19 pandemic' affected their life and work. To achieve these objectives, a quantitative approach was adopted. A questionnaire was prepared to collect data on the general impacts of the COVID-19 pandemic, and on tourist' consumer behavior for the next 12 months in the pandemic context (16 items), based on the study of [4]. These questions were in a 5-point Likert-type scale of agreement from 1—"Strongly disagree" to 5—"Strongly agree". The questionnaire also included questions to define the socio-demographic characteristics of the respondents (gender, age, and education, occupation and region), and the characteristics of past travel behaviour (number of trips, length and travel companion). The study was carried out in Portugal, disseminated online via social networks during June 2020 and sampling was simple random probabilistic, and 334 completed questionnaires were collected. Besides univariate descriptive analyses made to describe several features of data, other statistical approaches will be used to attain the objectives. With the 16 items on behaviours of tourist consumer, an exploratory factor analysis was prosecuted to reduce the number of the variables in interpretable constructs. Based on the obtained factors, binary variables were defined and logistic regression models were estimated to relate the probability of tourist consumers greatly change behaviours in the next 12 months regarding several socio-demographic characteristics, their travel patterns and the degree to which their life and work were affected by the COVID-19.

7.4 Results and Discussion

7.4.1 Sample Characteristics

Considering gender, respondents were mainly female (68.6%). In what concerns age, the range belonging to 36–55 years old represents 44%, being followed by the 18–35 years old group, with 40.4%. Regarding educational level, 50% of the respondents have a degree, 18.6% have a Masters and 6% Ph.D. Secondary educational level is represented by 19.8%. Respondents live mainly in the North of Portugal, representing 75.4% of the sample, followed by the metropolitan area of Lisbon, with 13.8%. Algarve is the less represented region on the sample, with 0.3%. More than 50% (50.6%) are employee, students represent 29.6%, self-employed 12.9%, retired 4.2% and unemployed 4.2%. In what concerns the past travel patterns of respondents, they travel mainly with family (83.8%), followed by friends (38%). Only 6.0% travel alone. Last year, respondents made mainly 1 to 2 trips, which represent 47%, 3 to 4 trips represent 29.3% and 5 or more, 10.8%. Only 12.9% didn't travel last year. The average length of the trips is between 3 and 7 days (69.2%), followed by 1 to 2 trips (17.4%).

7.4.2 Impact of the COVID-19 Pandemic

When respondents were asked whether the COVID-19 pandemic strongly affected their work and life, 35% of them strongly agreed with it, 32% agree, 21% neither disagree nor agree, 9% disagree and 2% strongly disagree. However, when they asked if travelling in Portugal will be safer than abroad, 29% of the respondents strongly agree with it, 32% agree, 25% neither disagree nor agree, 9% disagree and 5% strongly disagree. Individuals were asked to give their opinion on the degree of agreement to several statements related to travel concerns, attitudes and preferences over the next 12 months. Respondents agree that in their future travels they will be more concerned with hygiene and safety (H&S) in daily needs, in lodgings, transportation, in tourist and public recreation places (all of them higher than 80%). They also intended to avoid travelling to areas affected by COVID-19 and to big cities, as well as search for nearby tourist and less crowded places. About 71.5% agree or strongly agree that will reduce travel plans, even if only 61.9% intended to reduce their length travel. Nevertheless, less than half of the respondents agree or strongly agree that on the 12 next months will prefer outdoor activities and ecotourism, 4 or 5 star hotels and prefer dining separately while travelling in a group.

Factor Analysis

A factor analysis was conducted to evaluate the impacts of pandemic COVID-19 on their travel behaviour. The sampling adequacy was assessed by the Keyser-Meyer-Olkin (KMO = 0.981) and Bartlett's test of sphericity ($\chi^2_{(45)} = 2733{,}017$, with a $\rho = 0.000$) which denotes adequacy to prosecute the EFA. No outliers were observed. Factors were selected applying principal component analysis with varimax rotation and only constructs with eigen values greater than one were retained, factor loadings higher than 0.50 for each item, and communalities higher than 0.5. Some variables related to their plans and concerns for the next 12 months were removed since communalities were under 0.5. The reliability of the constructs was analysed using the Composite Reliability (CR), Chronbach's Alpha (α) and Average Variance Extracted (AVE) indicators. The values of Chronbach's alpha and Composite Reliability are above the recommended value of 0.7. The Average Variance Extracted (AVE) allow to analyse the discriminant validity and the values are above 0.5, denoting an acceptable level. The Goodness of Fit Index of 0.907 and the Root Mean Square Residuals of 0.05 denote that the model fits the data reasonably well. The EFA resulted in a two-factor solution that explains 74.48% of the total variance (Table 7.1). The first factor describes 61.41% of the total variance and the six variables included are directly related to hygiene and safety concerns, so it was labelled Concerns about Hygiene and Safety (HS). The second factor is composed of four variables related to travel planning (to reduce travel plans, to reduce the length of travel, to avoid travelling to crowded big cities and to avoid joining tour groups) and was labelled Changes in Travel Planning (CTP).

Logit Regression Analysis

In the next step, the scores for each factor were calculated by averaging the variables included and from them, the correspondent binary variables were defined—HSbin and CTPbin—to flag when individuals have a high concern with H&S and a higher intention to reduce travel plans, respectively. HSbin takes the value one if the concern for H&S is above the mean value (3.995509) and zero otherwise. CTPbin takes the

Table 7.1 Principal component analysis of behaviour concerning travel planning and concerns (Rotated component matrix), and reliability

	Communalities	Loadings		Cronbach's alpha	AVE	CR
		Factor 1	Factor 2			
Concerns about Hygiene & Safety				0.819	0.723	0.902
Concern mors about the H&S of the lodgings	0.866	0.893				
Concern more about the H&S of the daily needs	0.839	0.884				
Concern more about the H&S of the public recreation places	0.840	0.879				
Concern more about the H&S of the tourist places	0.826	0.868				
Concern more about the H&S of the means of transportation	0.322	0.357				
Concern more about the health of the members in the tour group	0.539	0.706				
Changes in travel plans				0.944	0.568	0.773
Reduce the length of travel and tourism	0.775		0.859			
Reduce travel plans	0.706		0.794			
Avoid travelling to crowded big cities	0.686		0.792			
Reduce joining tour groups	0.501		0.526			
Percentage of variance explained		61.41%	13.07%			
Cumulative percentage		61.41%	74.43%			

Note H&S—Hygiene and Safety; *Source* Own elaboration value one if the intention of reduction travel planning is above the mean (4.463673) and zero otherwise. With these binary variables, logistic regression models were developed to relate the probability of having a concern above the average with H&S (model 1) or the probability of reducing more travel plans than the average (model 2) with several socio-demographic characteristics of the respondents, the characteristics of the trips and the degree they were affected by COVID-19 pandemic.

The logit models are expressed by:

$$\ln\left(\frac{\mu_i}{1-\mu_i}\right) = \beta_0 + \beta_1 \mathrm{Gender}_i + \beta_2 \mathrm{Age}_i + \beta_3 \mathrm{EDU}_i + \beta_4 \mathrm{TC}_i + \beta_5 \mathrm{NT}_i + \beta_6 \mathrm{LT}_i + \beta_6 \mathrm{COVID19}_i \quad \forall i \tag{7.1}$$

where $\mu_i = P(\mathrm{HSbin}_i = 1) = P(\mathrm{HS}_i \geq \mathrm{mean})$ is the probability of a respondent i having a high concern with H&S and $\frac{\mu_i}{1-\mu_i}$ is the odds ratio in favour of having high concern with HS, that is, the ratio of the probability of a respondent having high concern with H&S to the probability that the concern is low (Model 1). The model will also be estimated for CTCbin and $\mu_i = P(\mathrm{CTPbin}_i = 1) = P(\mathrm{CTP}_i \geq \mathrm{mean})$ is the probability of a respondent i having a high change (reduction) in CTP and $\frac{\mu_i}{1-\mu_i}$ is the odds ratio in favour of having a high reduction in travel planning (Model 2). EDU is the level of education, TC is the travel companion, NT is the number of travels that have made last year, LT is the usual length of travel and COVID-19 is the degree of how the COVID-19 pandemic has affected their life and work.

First, linear models were run to carry out the multicollinearity analysis. All Variance Inflation Factors (VIF) are under 2 and diagnostics did not reveal very low tolerance values, so all the variables were included in the models. Influential cases were also diagnosed and 10 observations were removed in model 1, and 3 in model 2. The coefficients of the logit models estimated, the odds ratios, the standard errors and *p*-values of the Wald test are shown in Table 7.2.

Concerns with Hygiene and Safety

In model 1, the Omnibus tests of model coefficients ($\chi^2_{(19)} = 78.313$, with a $\rho < 0.001$) and Hosmer and Lemeshow test ($\chi^2_{(8)} = 12.782$, with a $\rho = 0.122$) suggest a good fit for the model. The model explained 29.9% of the variance ($R^2_{\mathrm{Nagelkerke}}$). The model correctly classifies the outcome for 70.9% of the cases which is much higher than the proportional percentage of correct classifications by chance (54.7%), demonstrating the usefulness of the model for classifying new observations. This model has a reasonable specificity (50.5%) and good sensitivity (81.8%), and an acceptable discriminating capacity (ROC curve: AUC (Area Under the Curve) = 0.779; $\rho < 0.001$).

The level of education, travel companion and number of trips that have made last year are not significant in predicting the likelihood of having a high concern with hygiene and safety. Gender has a significant overall effect ($\chi^2_{\mathrm{Wald}} = 5.372$; $\rho = 0.02$) and females are 1.989 times more likely to have a high concern for hygiene and safety

Table 7.2 Results of the logit models estimations

	Model 1					Model 2				
	Dependent variable: HSbin					Dependent variable: CTPbin				
	B	S.E	Wald	Sig	Odds ratio ε^{β}	*B*	S.E	Wald	Sig	Odds ratio ε^{β}
Intercept	2.254	1.648	1.871	0.171	9.527	3.445	1.489	5.351	0.021	31.358
Gender	0.688	0.297	5.372	0.020	1.989	0.213	0.272	0.613	0.434	1.238
Female										
Male (RC)					1					1
Age			31.549	0.000				0.505	0.777	
18–35	−1.198	0.406	8.717	0.003	0.302	−0.271	0.394	0.472	0.492	0.763
36–55	0.768	0.413	3.456	0.063	2.155	−0.139	0.387	0.129	0.719	0.870
More than 55 (RC)					1					
Level of education (EDU)	0.097	0.326	0.089	0.766	1.102	−0.134	0.307	0.190	0.663	0.875
Non higher education										
Higher education (RC)					1					1
Travel companion (TC)			8.709	0.121				10.865	0.054	
With family	0.410	1.395	0.087	0.769	1.507	−0.649	1.252	0.269	0.604	0.522
With friends	1.015	1.440	0.497	0.481	2.761	−1.678	1.287	1.701	0.192	0.187
Alone	−1.358	1.596	0.724	0.395	0.257	−2.042	1.475	1.917	0.166	0.130
With family, friends	0.465	1.404	0.110	0.740	1.592	−0.940	1.255	0.561	0.454	0.391
With friends, alone	−0.947	1.787	0.281	0.596	0.388	−2.280	1.639	1.935	0.164	0.102
With family, alone (RC)					1					1
Number of trips (NT)			3.787	0.285				0.969	0.809	

(continued)

Table 7.2 (continued)

	Model 1					Model 2				
	Dependent variable: HSbin					Dependent variable: CTPbin				
	B	S.E	Wald	Sig	Odds ratio ε^{β}	*B*	S.E	Wald	Sig	Odds ratio ε^{β}
0	−0.848	0.668	1.609	0.205	0.428	0.030	0.597	0.003	0.960	1.031
1–2	−1.023	0.534	3.667	0.055	0.359	−0.308	0.450	0.470	0.493	0.735
3–4	−0.986	0.555	3.155	0.076	0.373	−0.113	0.474	0.057	0.811	0.893
5 or more (RC)					1					
Length of stay (LT)			9.012	0.029				5.463	0.141	
0	0.649	0.982	0.437	0.509	1.914	−1.146	0.851	1.813	0.178	0.318
1–2	0.078	0.634	0.015	0.902	1.081	−0.161	0.588	0.075	0.784	0.851
3–7	−0.810	0.544	2.216	0.137	0.445	−0.804	0.514	2.443	0.118	0.448
8 or more (RC)					1					1
COVID-19 pandemic has greatly affected my work and life (COVID-19)			22.215	0.000				27.324	0.000	
Strongly disagree	−1.454	0.837	3.018	0.082	0.234	−1.955	0.791	6.105	0.013	0.142
Disagree	−1.863	0.514	13.114	0.000	0.155	−1.965	0.479	16.808	0.000	0.140
Neither agree or disagree	−1.484	0.380	15.295	0.000	0.227	−1.526	0.362	17.804	0.000	0.218
Agree	−0.619	0.354	3.063	0.080	0.538	−1.297	0.336	14.901	0.000	0.273
Strongly agree					1					1
Number of observations	320					331				

Note RC—Reference Category; *Source* Own elaboration than men. This result is in accordance to some researchers [24, 25] and in contrast with other studies that conclude that while including both male and female subjects, does not mention that any check has been made specifically for gender differences [26, 27]. Age has a significant overall effect at 0.001% level, and among the different age strata, respondents between 18 and 35 years of age are significantly less likely (69.8%) to be highly concerned with H&S compared with respondents over 55, which is in accordance to [9, 10, 32]. On the contrary, the odds of a respondent between 36 and 55 years old to have a high concern with H&S, compared to respondents over 55 is 2.2:1. The length of the stay is significant at a 5% level, nevertheless the likelihood of having different concerns with people who overnight eight or more days is not significant. A possible response to that is that people who spent fewer days did it because of other reasons than risk perception, namely finance or employee, among others [33].

The way how pandemic COVID-19 has affected work and life has a significant overall effect ($\chi^2_{\text{Wald}} = 22.215$; $\rho = 0.000$) and those that strongly disagree or disagree that their life and work were affected are significantly less likely to be concerned with hygiene and safety than those who strongly agree that were affected (76.6% and 84.5%, respectively). Either those who neither agree nor disagree or that agree that their life and work were affected by pandemic are significantly less likely to have a high concern with hygiene and safety than those who were strongly affected (77.3% and 46.2%, respectively). So, those whose life and work were more affected by the pandemic are much more likely to be very concerned with hygiene and safety.

Changes in Travel Planning

In model 2, the test of model coefficients ($\chi^2_{(19)} = 49.242$, with a $\rho < 0.001$) suggests the overall goodness of fit of the model. Apart from this, the model correctly predicts 66.8% of the outcome in the sample (higher than the percentage of correct classifications by chance, 54.29%), the Nagelkerke R^2 is 19%. The discriminating capacity is 63.3% (area under the ROC curve), with a $\rho < 0.001$. The Wald test shows that the travel companion and the degree that the COVID-19 pandemic affected life and work are significant predictors of the changes in travel planning at a 10% and 1% significance level, respectively. Travel companion has a significant overall influence on the probability of reducing more the travel plans, nevertheless, the probabilities for each category are not statistically different from the reference category. The degree to which the COVID-19 pandemic has affected people's lives and work has a negative relationship with the likelihood of greatly reducing travel plans when compared to those who have been deeply affected by the pandemic. Those who strongly disagree or disagree that the pandemic has affected their lives are much less likely to reduce their travel plans (about 86% in both cases) than those who strongly agree that they have been affected.

7.5 Conclusions

Risk perception due COVID-19 pandemic changed tourism and behaviours associated with it. Despite the state of deconfinement at the time of the implementation of the questionnaire and in a context of greater confidence in controlling the pandemic situation, the majority of Portuguese tourist respondents intended to generally reduce their travel plans, and the length of travel. The results of the logistic regressions suggest that the likelihood of respondents having high concerns with hygiene and safety in future travels is higher for women, for tourists between 36 and 55 years old compared with the oldest, and for those who have seen their lives and work more affected by COVID-19. However, this likelihood of further concern is not significantly justified by the level of education, and past pattern of trips. Furthermore, the probability to greatly change their pattern of trips is not statistically significant determined by gender, age, level of education, and past travels. Nevertheless, that probability is much higher for those who have been deeply affected by the pandemic and statistically significant.

The main limitation of this study is related to its sample size. For future research it would be important to increase the sample size and to compare with the behaviour and confidence of tourists from other countries. It also would be interesting to analyse whether nationality and culture influences this behaviour.

Adopt strategies to reduce fear, restore confidence and increase tourists' safety is fundamental. The challenge for the recovery of tourist activity lies in the ability to earn the trust of tourists, demonstrating that it is possible to continue to travel and take vacations or business trips in safety. For tourism policymakers and providers, insights are needed to be able to guide their actions and take strict security-related measures to recover the lost market. They should be able to demonstrate to the market that they can guarantee social detachment and decrease potential contamination risks among tourists. Building public confidence seems to be crucial to moderate people's "travel fear" in a post-pandemic period. Communication and transparency from policymakers are needed, as it helps tourists' perceived efficacy in COVID-19 prevention. From the tourism providers' side, measures must be presented to easily be learned and adopted by tourists. Another recommended strategy is linked with the public's resilience in post-COVID-19 travelling. Possible guidelines may pass through problem-focused or emotion-focused interventions, providing more real-time information to plan and take actions in preventing COVID-19 in the tourism industry. This is particularly important as COVID-19 may remain active for longer than previous pandemics.

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Chapter 8
Digital Nomadism an Opportunity for Low-Density Territories: Trás-os-Montes Lands Case

Ana Garcez, Ricardo Correia, and Aida Carvalho

Abstract Digital nomadism is a relatively recent tourism segment associated with the generalization of information and communication technologies (ICTs), having increased notoriety and relevance with the COVID-19 pandemic. This public is characterized by professionals who exclusively work online, while having an independent lifestyle, balancing work and leisure. This research aims to understand if the Trás-os-Montes Lands (a small region in the northeast of Portugal) hold the necessary conditions to position itself as an attractive destination for digital nomads. To this end, a macro analysis of the characteristics of this territory and the tourist accommodation in the region was carried out. In view of the results obtained it was found that although Trás-os-Montes Lands have touristic potential ability to meet the particular needs of the digital nomads segment, it is necessary an action plan to enhance the attractiveness of the destination for this audience.

8.1 Introduction

Information and communication technologies (ICTs) have been continuously shaping people's daily lives and behavior [1]. The widespread use of the internet and digital media has ultimately generated new habits, changed work patterns, and provided new opportunities and lifestyles. The COVID-19 pandemic has also

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inevitably generated a considerable increase in the use of digital technologies. Thus, people and organizations all over the world had to adjust to a digital-based way of working [2]. In tourism, in particular, technologies have played a rather significant role, as they have enabled workers to increase their work efficiency and productivity while enjoying the tourist destination [3–5].

Digital nomads are mostly independent workers who leverage digital technology and Wi-Fi connection to combine work, leisure, and ongoing travel interests. Thus, these individuals work remotely for other companies or as freelancers or entrepreneurs [3, 6, 7]. Although digital nomadism emerged before the COVID-19 pandemic, this lifestyle eventually gained visibility with the changes generated by the health crisis.

However, this new market segment is a specific niche with many particularities. All this has generated new opportunities in several industries, mainly in tourism and particularly in the hotel sector, since this market promotes the reduction of seasonality and allows new forms of business. The digital nomad tends to follow a lifestyle that allows them to travel continuously, working from anywhere in the world, being attracted mostly to places that can meet their daily work needs. In other words, this audience is essentially looking for destinations that are scenic, welcoming, accessible, and comfortable, to the same extent that they value them for their infrastructural capacity to facilitate productivity, support work routines, and offer a wide range of food and accommodation options [8].

In this line of thought, and taking into account the characteristics of these nomads, low-density destinations seem particularly suited to their needs, since they allow a greater genuineness and involvement with the place, to the same extent that their lower accommodation capacity, compared to large urban centers, offers a more welcoming environment. Therefore, the aim of this research is to understand if the Lands of Trás-os-Montes, a small low-density destination located in the northeast of Portugal, meets the appropriate conditions to position itself as an attractive destination for digital nomads.

The article is divided into five sections. After this introduction, Sect. 8.2 presents a literature review where aspects related to digital nomads and their specificities are addressed. Subsequently, the methodology followed is presented, and in Sect. 8.4 the analysis of the Trás-os-Montes Lands case is assigned, which includes a territorial characterization and the presentation of the components related to its touristic offer. The results are then discussed and the main conclusions are drawn. Finally, the limitations of the study are presented, as well as future lines of research.

8.2 Literature Review

The technological changes and developments experienced in recent decades, especially those related to the development of the internet and Web 2.0, have significantly altered people's lives and routines, from the simplest to the most complex tasks. The increase in cybercafés, co-working places, laptops, mobile smartphones, wireless internet, hotspots, social networks, social media platforms, and photo and information sharing sites have made people ubiquitous. In other words, these technological advances have allowed communication without space–time barriers, enabling anyone anytime and anywhere to have the ability to transmit information, enabling them to carry out their professional activity [9, 10]. Thus, technology has changed not only the way people relate to each other but has also generated significant changes in work relationships [11].

The emergence of the 'gig' economy has significantly transformed the way industries are organized regarding the terms and conditions under which work takes place [12]. The gig economy can be defined as casual work negotiated and intermediated in the digital marketplace and is characterized by a variety of non-standard working arrangements [13].

In this context, and according to Trimoldi [14], full-time positions began to be replaced by autonomous jobs, and although this aspect is associated with greater uncertainty and insecurity, it is also true that it ends up generating multiple opportunities. The issue of independent work, enabled by information and communication technologies, has given rise to a growing population of workers who do not need to be tied to a fixed location, carrying out their professional activity in coffee shops, co-working spaces, airport lounges, or any other place that has internet [15]. This set of travelers is known as digital nomads, and are defined as location-independent teleworkers. Thus, these individuals, in addition to having the possibility of working anywhere in the world, also have the opportunity to live anywhere as "perpetual travelers" [15]. In this context, Schlagwein [16] states that due to the constant mobility of this group of people, it becomes difficult to measure its magnitude, being in the range of 200,000 to 500,000.

The term "digital nomad" was introduced by Makimoto and Manners in 1997 to describe a new lifestyle where work and leisure would be related [17]. In this sense, the concept of digital nomad describes a category of nomadic professionals who carry out their work remotely anywhere in the world, using digital technologies. Thus, "digital nomadism" refers to the lifestyle developed by these professionals [18]. In this line of thought, digital nomadism has been approached from different perspectives, as a form of creative tourism [19] as a type of leisure activity, [3], as a new form of location-independent work [20, 21], and as a new economic activity and a cultural phenomenon [1].

According to Liegl [22], the digital nomad is a worker equipped with digital technologies that enable him/her to work anytime and from anywhere. Müller [23], on the other hand, defines this concept as a new generation of location-independent freelancers, i.e., young autonomous online entrepreneurs. In other words, they are people who are not dependent on a job in a conventional office, having the freedom to freely decide when and where they want to work, needing only their laptop and a good Internet connection. On the other hand, Wang et al. [1], describe the digital nomad as a teleworker who lives a life of travel and continuous interspersed work.

Digital nomads can be seen as an intersection between travel, leisure, and work. In this sense, and although the duration of travel varies according to preferences, lifestyle, visa regime, etc., semi-permanent or continuous international travel is the core component of so-called mobile workers [3, 6, 20].

According to Reichenberger [3], leisure can be defined as a component of digital nomadism, to the extent that aspects such as fun and self-control end up being transferred to the nomads' work environment. Accordingly, Putra and Agirachman [19] characterize digital nomadism as a tourist activity where novelty is the main motivation. However, although these individuals continuously visit new destinations and create new experiences, they cannot be considered tourists, since, they are always looking for resources that allow them to perform paid work [15].

Digital nomads tend to search for places according to their work expectations, although this is not the main reason for their frequent travel. Emotional and organizational support as well as knowledge exchange, facilitate achievement, thus digital nomads tend to cluster in communities with similar ideals and lifestyles [24, 25]. In fact, and according to Orel's [20] study, the balance between leisure, work, and an ideal environment to perform their professional tasks seems to be one of the main motivations for digital nomads.

Horton [26], states that the escape from the conventional office atmosphere and the adventurism linked to travel is the main motivation associated with the lifestyle of the digital nomad. Therefore, these individuals will only be able to achieve the holistic state they seek if there is an interdependent relationship between professional, spatial, and personal freedom. In other words, the combination of work (professional freedom), leisure (personal freedom), and location independence (spatial freedom) contributes to learning, skill acquisition, and self-development, and simultaneously through constant movement they also stimulate creativity [3].

According to the exposed being a digital nomad brings several benefits, among which are, independent location, unlimited creativity, flexible working hours, a pleasant climate to carry out professional tasks, and co-working space support. Although these individuals do not depend on specialized work areas and rooms they do require high internet coverage and quality [27]. According to a study conducted by WYSE Travel Confederation in the year 2018, it is predicted that by 2035, the number of digital nomads will reach over 1 billion people [28].

In general, several authors characterize digital nomads as young adults who are literate and often employed in technology areas (web design, programming, or online marketing). They have the ability to work remotely using only a laptop computer, essentially seeking long-term stays [6, 29].

The weather, nature, culture, safety, and low cost of living in a destination, as well as a good public transport system and simplicity of obtaining visas, are key components in the selection of a destination. Therefore, tourist accommodations that intend to receive digital nomads should adapt their rooms/apartments to the particular needs of this segment [30].

Thompson [8], mentions that this group of people usually select places that are scenic, cozy and comfortable, accessible and welcoming. They are drawn to places that can meet their daily work needs, and offer them a wide range of food and accommodation options.

8.3 Methodology

This research aims to understand whether the Lands of Trás-os-Montes meet the appropriate conditions to position itself as an attractive destination for digital nomads. It was adopted a qualitative methodology approach of descriptive and exploratory nature, to support the study based on a theoretical approach grounded through secondary data collected in various documents and institutional websites directed to the tourism activity.

Information on the territory was collected, from the access and mobility to tourism supply components. On the other hand, and in a specific way, the national tourism register was used to assess whether the tourist resorts of this region have the capacity, means, and resources to host this specific segment. The data was collected between 9 and 12 April 2021.

8.4 Case Study Presentation and Discussion

8.4.1 Trás-os-Montes Lands

Trás-os-Montes Lands is a level III statistical region located in the Northeast of Portugal that aggregates nine municipalities that are coordinated by the Intermunicipal Community of Trás-os-Montes Lands (CIM-TTM). In accordance with the data of Pordata [31], referring to the year 2019, the CIM-TTM presents an aging index (elderly per 100 young people) of 303.3%, which is much higher than the national average (161.3%).

The mobility conditions of a destination are one of the most important components for its development, due to its relevance in commercial activities, tourism, and ensuring the quality of daily life of the resident population. Currently, the main means of communication and access to the CIM-TTM are divided between road links (IP2, A4/IP4, IC5, A52), airports (Francisco Sá Carneiro Airport in Porto and Bragança aerodrome), railways (through the Northern line), and sea (through the ports of Leixões and Viana do Castelo) [32]. The public passenger transport offer is ensured by road services, namely the express, interurban and urban services available in the main cities of the region: Bragança and Mirandela [33].

It should be noted that the nearest railway infrastructures to the region are located in Spain (Zamora, Puebla de Sanábria, and A Gudiña) [34]. In fact, Trás-os-Montes Lands are on the borderline with Spain, being even closer to the Spanish capital (3 h 30 min) than to the Portuguese capital (4 h 30 min), as can be seen in Fig. 8.1.

The health equipment network is an indispensable component for both residents and visitors, since it meets their primary needs and assumes a fundamental role in tourism decision making. In this sense, and according to data taken from Pordata [35], it was verified that the Lands of Trás-os-Montes has four hospitals with emergency services, three of which are public and one private, and nine health centers.

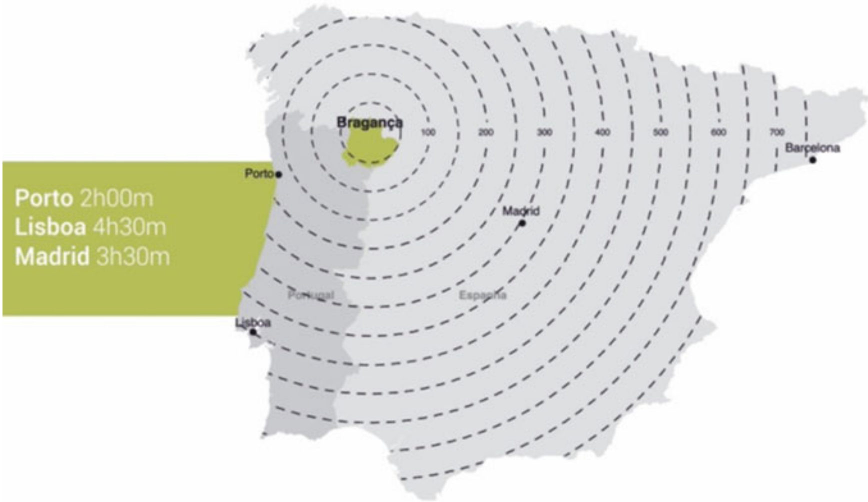

Fig. 8.1 Geographic location of Trás-os-Montes lands

8.4.2 Touristic Offer

The region of Trás-os-Montes Lands presents in its territory a vast cultural, historical, natural, and gastronomic heritage [32]. The demonstrations of identity and genuine culture of this territory are portrayed by the various festivals and pilgrimages. The regional handicrafts, which include basketry, cutlery, cooperage, woolen rugs and bedspreads, wooden or brass masks, bagpipes, reflect the territory's identity and authenticity. Among the built and historical heritage, the museums, the monuments, and the six castles that constituted the ancient defensive structure of the border stand out [36].

The natural heritage with its preserved landscapes is also a differentiating aspect In the Trás-os-Montes Lands. The Montesinho Natural Park, the Douro International Natural Park, and the Vale do Tua Regional Natural Park combine for their high environmental quality and scenic beauty. Besides this, this region also includes the largest Transfrontier Biosphere Reserve (Iberian Meseta Reserve), the Terras de Cavaleiros Geopark, classified by Unesco, and the Azibo Reservoir Protected Landscape. Thus, to all this biodiversity, we can add various proposals for agro-tourism and rural tourism, with adventure tourism activities, hiking, cycling, donkey and boat trips, walking trails, and birdwatching [36].

The great richness and variety of gastronomic products, in addition to being one of the main identity traits of the region, is one of the factors that has most boosted tourism in recent years. There are in the region 23 endogenous products classified by the European Union with protected designation of origin (PDO) and protected geographical indication (PGI). The quality and authenticity of these products range from meat, wine, dried fruit, smoked meat, cheese, honey, and olive oil [32, 37].

In addition to heritage, accessibility, and forms of mobility at the destination, the accommodation component is essential to meet tourist needs. Since the lifestyle of the digital nomad demands certain particularities, as verified throughout the literature review, it was decided to carry out a macro analysis of the region's tourist resorts.

In this sense, and according to the National Tourism Register (RNT), consulted on 11 April 2021, it was found that the Lands of Trás-os-Montes has a total of 190 tourist resorts. However and since seven camping and caravanning parks were excluded, the sample under study focuses on only 183 resorts, as can be seen from Table 8.1.

The analysis of the RNT allowed recognize that of the 183 existing lodges only three have a total capacity higher than 100, concentrating these together 24% of the accommodation capacity. The majority of the lodgings in the Trás-os-Montes Lands (76%) are small with an average capacity of 16. On the other hand, it was found that out of 183, only 41 of the tourism enterprises have meeting rooms, which represents only 22% of the total sample. Table 8.2 provides a vision of the ancillary services, in addition to the meeting rooms, with the capacity to generate value for the consumer.

The results obtained show that there are only 41 properties with meeting rooms in the territory. On the other hand, it was found that only 20 of these properties have

Table 8.1 Analysis of touristic resorts in Trás-os-Montes lands

Variables	Value
Number of tourist resorts (excluding campsites)	183
Number of tourist resorts with meeting room (excluding camping)	41
Total capacity of tourist resorts (excluding camping)	3784
Total capacity of the tourist resorts with a capacity over 100 ($n = 3$)	896
% of total capacity of the tourist resorts with a capacity over 100	24%
Total capacity of the tourist resorts with a capacity less than 100 ($n = 180$)	2888
% of total capacity of the tourist resorts with a capacity less than 100	76%
Average capacity of tourist resorts with capacity over 100	298.6
Average capacity of tourist resorts with capacity below 100	16.04
Total average capacity	20.6

Table 8.2 Analysis of the Trás-os-Montes lands tourist resorts facilities

Variables	Value
Number of tourist resorts with meeting room (excluding camping)	41
% of tourist resorts with meeting room (excluding camping)	22%
Meeting rooms total capacity	2935
Tourism resorts with outdoor swimming pool	20
Tourist resorts with indoor swimming pool	1
Tourist resorts with gymnasium	4
Tourism resort with tennis courts	3

Table 8.3 Trás-os-Montes lands strengths and weaknesses

Strengths	Weaknesses
• Beautiful scenery, nature, and biodiversity; • Historical and Cultural Heritage; • Gastronomy; • Diversified and certified endogenous products; • Proximity to Spain; • Low average cost of living	• Intra-destination mobility constraints; • Lack of touristic resources in the touristic resorts; • Low capacity of accommodation and meeting rooms; • Aging population

an outdoor pool and only one has an indoor pool. Gymnasium and tennis court are also not frequent investments in this territory, since only four spaces are dedicated to fitness and three to tennis.

8.4.3 Considerations and Reflections

In view of the results obtained, it was verified that the Lands of Trás-os-Montes pre-sent a great potential in terms of resources (natural, cultural, and gastronomic) capable of satisfying the new tourist segment, as can be seen from Table 8.3.

This territory offers the tranquility and the peacefulness that the big urban centers cannot transmit.

All this allows the stress and agitation relief associated with the nomadic lifestyle. The scenic beauty, nature, and biodiversity that can be found in this territory, together with a range of activities that vary from hiking, bird watching, cycling, hiking trails, and boat trips, are just some of the possibilities that the region offers to occupy the free time and disconnect from technological devices. From another perspective, the culture, traditions, and genuine and authentic heritage, translated into unique ancestral festivals are an ideal connection point to engage with the local history and community. The rich gastronomy and internationally renowned products of excellence add to the region's strengths.

It should also be noted that the demand for non-crowded places, as is the case of the Trás-os-Montes Lands, have been assumed as the preferred choice and a trend in the tourism sector during and after the COVID-19 pandemic since these places allow to satisfy the need to visit and meet new cultures, gastronomies, and traditions at a slower pace. Experiences associated with nature tourism, adventure, outdoor activity, and destinations that inspire confidence and safety, will be top-of-mind according to several authors and studies developed by touristic entities [38–41].

Besides all this, according to a study developed by the Adventure Travel Trade Association, in March 2021, Portugal is a country with a low average cost of living, to spend long and medium seasons. Trás-os-Montes Lands, which are in the inland part of Portugal, become one of the cheapest options in the country, compared to the capital (Lisbon) and the large urban centers.

On the other hand, there were some gaps in terms of mobility at the destination. Although Trás-os-Montes Lands is located on the border with Spain and a few hours from the major Portuguese centers, with various accessibilities, there is a lack of intraregional travel connection, which makes the mobility difficult for visitors who do not have their own vehicle. Finally, and in relation to the tourist resorts, it was observed that although there is potential to receive this public, there are few establishments that have the necessary equipment for the nomadic lifestyle. Only 22% of the total number of establishments has meeting rooms and of this total, only a small percentage have leisure facilities (swimming pool, gymnasium, tennis court), which allow them to have a "bleisure" experience, i.e., an offer that allows them to work and have moments of leisure and entertainment.

8.5 Conclusion

The growing popularity of digital nomadism demonstrates the great impact that ICT has been having on society, the work environment, and tourism, insofar as it has generated new habits, new ways of performing professional activity, and new types of travelers. In the face of all this, new needs and a more holistic lifestyle have emerged, where it is possible to combine work and leisure [42]. With the new digital nomad segment, new needs arise. Although this public is defined by its ability to work remotely, using only their laptop, leisure, rest and entertainment should always be associated so that a balance can be generated. Thus, it is important that not only tourist accommodations have the necessary facilities to receive this audience, but also the tourist destinations themselves must be prepared to accommodate this segment.

In this way, and in the light of the research carried out, it was concluded that although the Lands of Trás-os-Montes, by their own characteristics, possess resources and tourist potential capable of meeting the needs of the digital nomad it is still necessary to consolidate and polish its offer in order to be able to deliver a quality product. An action plan should be developed that takes into account the characteristics of this new public, from the mobility in the destination to the leisure and entertainment component. The creation of experiences and the involvement with the community, the adoption of co-working spaces in the lodgings should be considered. The creation of nomadic packages that facilitate the lifestyle of the digital nomad could also be the starting point for the Trás-os-Montes Lands to be able to attract this segment and get the best out of it.

The main limitation of this research is related to the few academic studies devoted to this theme, mainly on the supply side, due to the fact that it is a recent subject. The analysis is subjective and should also be considered a limitation of the study. The study would benefit from complementary information, for example, the number of digital nomads housed in Trás-os-Montes. Thus, as future lines of research, it is suggested to conduct interviews with the responsible entities for territorial development and for tourist accommodations, in order to obtain a greater understanding of the theme. On the other hand, it is also proposed to investigate the demand side, through interviews with several digital nomads as a way to better understand their needs and what they value most in a destination.

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Chapter 9
Sustainability in Rural Tourism: The Strategic Perspective of Owners

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Abstract There is a multiplicity of reasons and purposes behind the growing demand for rural tourism experiences. The personalised encounter between place, people/culture, and guests. As expected, the rural accommodation and the village context can also play a central role in the quality of the tourism experience in these areas. Experience in the tourism context is co-created and experienced by several agents, i.e., in the involvement of all stakeholders, these being: tourists, local population, and service providers in the sector. Rural tourism emerges as an excellent alternative for several tourists, whose preferences are essentially based on the sustainability of tourist spaces as the differentiating factor when planning their trips. This study aims to understand the knowledge, valuation, and sustainability strategies adopted by the owners of Rural Tourism (RT) units in the "Quadrilátero do Minho". For these purposes, semi-structured interviews were carried out with the owners/managers of nine units of RT in the "Quadrilátero do Minho". Results show that the owners of the RT units in the "Quadrilátero do Minho" reveal a limited view on the concept of sustainability, essentially associating it to the economic and/or environmental aspect, neglecting the sociocultural dimension. With regard to the adopted sustainability policies, the most frequently mentioned were solar panels, recycling, led lights, organic production, combustion boxes, washing management, and help in local production. Owners agreed that they believe in the benefits of this

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type of policy transfer to the unit, important because tourism is a key sector in the sustainable development of rural environments.

9.1 Introduction

Tourism in rural areas (RT) is referred to as an escape from the stress of everyday life by tourists, the escape from a massified and popularised environment and where it is possible to find emotions completely opposite to those they usually experience [1]. RT is also seen as a way of culturally strengthening a territory, the preservation and development of the community, and a contribution to the increase of civic awareness in environmental and sociocultural treatment [2]. Another important factor of RT is the continuance of the link to the land and property on the part of the people who have requalified the buildings for the practice of rural tourism and who have, consequently begun to reside in rural areas, something unlikely in the case of the non-existence of the RT.

Thus, due to the opportunities it offers for the valorisation of the endogenous potential of the territories and the recovery of local socioeconomic activities [3], tourism appears to be a determining factor for the rural environment [4]. However, despite being a source of great economic benefits, its unplanned growth has also contributed significantly to environmental degradation and negative sociocultural impacts [5]. These undesirable side effects have led to growing concerns regarding the conservation and preservation of natural resources, well-being, and long-term economic viability, and the pursuit of new ways of planning, management, and development [6, 7]. Consequently, the idea of sustainability emerges, based on the reconciliation of strategies between the environment and the economy.

In this sense, the central objective of this research focuses on the attempt to understand the level of sensitivity of the owners/managers of RT units regarding sustainable development. It also seeks to assess the degree of importance attributed to the conception of formal or informal partnerships with other local stakeholders in order to respect the pillars of sustainability (environmental, economic, and sociocultural). To this end, semi-structured interviews were conducted with the owners/managers of RT units in the "Quadrilátero do Minho" (North-western Portugal) in April 2020. This research is organised as follows: the presentation of the theoretical concepts associated with sustainability in RT; the research methodology adopted; the presentation and discussion of the results; conclusions of the study, limitations, and future proposals.

9.2 Sustainability in RT

Tourism makes a considerable contribution to the economies of many communities around the world due to its ability to generate income and employment. However, despite being a source of great economic benefits, its unplanned growth has also contributed significantly to environmental degradation and negative sociocultural impacts. These undesirable side effects have led to growing concerns about the conservation and preservation of natural resources and their well-being and long-term economic viability. They have also led to the pursuit of new ways of planning, management, and development.

With a long history dating back to the late 1980s, the term "sustainable development" is defined by the United Nations Environment Programme as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. According to the World Tourism Organisation (WTO), in collaboration with the United Nations Environment Programme, the term sustainability is referred to as a condition of tourism based on the principles of sustainable development, taking into account its current and future economic, social, and environmental impacts. Blancas et al. [8] divide sustainability into three different dimensions: social, economic, and environmental. The social component presents the social benefits of tourism activities, such as public services. The economic part deals with profit obtained from tourist activity, ensuring that the quality of tourism is not only maintained but also improved in the long term in a diverse and high-quality way. Services, infrastructure, and employment opportunities should also be taken into consideration in this planning. The third perspective refers to environmental aspects and focuses on managing destinations in a way that protects their natural resources. Also, Brătucu et al. [9] state that sustainable development consists of three main areas of evolution, including: (i) economy, (ii) sociocultural, and (iii) environment and has two levels: (1) planning and management to achieve the main goals; and (2) particular actions and critical evaluations of the goals. With these three dimensions in mind, long-term profits can be achieved through loyalty, which directly enhances the economic dimension of sustainable development and indirectly reinforces social elements by increasing the well-being of residents.

Thus, loyalty is also a factor to be taken into account when improving the environmental aspects of destinations because natural and cultural resources in rural areas need to be preserved to maintain authenticity and, thus, continue attracting tourists [10]. To develop strategies based on destination loyalty, managers must understand how this loyalty indicator works, including which factors contribute most to a loyal tourist destination [11], in order to enable the long-term sustainability of the destination [12]. This need is even more pronounced in an activity as limited as rural tourism. Consumer satisfaction research is extensive; however, loyalty has been the factor that attracts a greater focus of attention. This action is due to the fact that many companies understand that a loyal customer base can significantly increase profits. McKercher et al. [13] state that tourists who want variety in their travels tend to want different levels of experience on each trip, although on a single trip they may find a variety of experiences. In applying these findings to rural tourism, tourists can be described as loyal to particular geographical areas, yet they choose different settings for each trip. RT faces the challenge of an increasingly competitive tourism market. Therefore, the sector reveals interest in maintaining visitors' loyalty for a sustainable development that ensures the long-term success of the tourism destination and the organisations that operate with them. According to Eusébio et al. [4], satisfaction and loyalty are vital to maintain the destination's competitive advantage, which in turn results in economic stability and employment for local communities. Pike et al. [14] state that tourists' loyalty to the destination and their repeated visit is a more productive method than advertising to attract new customers. Loyalty has been corroborated as a competitive advantage by Reichheld and Sasser [15] in a study that is often cited, where the benefits of customer retention are identified. Companies with loyal customers usually generate positive word-of-mouth publicity from customers, which means free publicity. In quantitative terms, the authors estimate that companies can increase their profits by 25 to 85%, depending on their sector of activity, simply by retaining 5% of their consumers. A successful marketing strategy should focus, not only on how to gain new customers, but also on developing the loyalty of those who have been won over. These benefits constitute a competitive advantage in the treatment of rural tourist destinations, maximising profit by increasing the value of existing customers. This profit can generate socioeconomic problems for the regions involved. Destination loyalty should be encompassed in sustainable development, especially in the particularities of RT. The literature identifies cases of success and failure regarding the development of sustainable RT, and it is considered potentially viable with the various challenges, peculiar to rural areas [16]. The biggest challenge for rural destinations is to increase the number of repeated visits by tourists. It is essential to get feedback regarding their interest in returning or the probability of recommending the destination. Repeat visits can also facilitate good marketing planning or help destinations use their resources more effectively. RT development programmes, including product planning and development, need to be able to work in conjunction with the entities that coordinate marketing strategies and initiatives at the destination level, involving destination image, quality, and satisfaction, focused on market orientation. In addition, these programmes need to address concerns about maintaining the local authenticity of the rural physical environment, given the impact these have on revisit loyalty and recommendation behaviours. Programmes should also bear in mind that loyalty is a competitive advantage that helps rural destinations make a greater profit based on the value that loyal customers deliver over time. This profit has sustainable socioeconomic impacts on destinations because a low level of investment is required to generate loyalty, compared to investments in advertising to acquire new consumers [10].

Mass tourism generates an excessive exploitation of: natural resources, urban densification, and unsustainable pollution. This means that it falls short of sustainability standards. In this sense, mass tourism is not considered to be in line with the present and future needs of mankind, generating new tourism alternatives, such as rural tourism, which have in their genesis a sustainable orientation, becoming essential for environmental sustainability [17]. A fundamental part of the idea of sustainability is based on reconciling strategies between the environment and the economy. The concept is based on the interconnection among tourism development, community participation, and environmental respect [18]. There is an expectation that tourism will play an important role in the adoption of environmentally sustainable principles and practices—education and awareness raising are recognised as being the main objectives of tourism experiences. In this regard, tourism, based on natural and rural authenticity, is perceived to have a particularly important role to play. Studies have shown that direct experiences in contact with nature can promote emotional affinity with it, which, in turn, leads to nature protective behaviour [19].

According to Buckley [20], sustainability requires modifications to human society in order to reduce its impacts. Impacts depend on: (i) the size and distribution of the global population; (ii) social organisation, including the economy, government, and civil society; and (iii) consumption, pollution and/or protection of nature as a result of such social organisation. Buckley [20] further reiterates that sustainability in the tourism phenomenon also presents three problems: (i) the absence of an exact definition, which encompasses the conditions intrinsic to sustainability, (ii) the lack of proportionality in the assessment of impacts, and (iii) the weakness in the analysis and monitoring of political-social mechanisms. Tourism activity constantly encompasses sustainable principles, although its practices and, consecutively, the resulting effects fall short of what would be expected. As previously mentioned, sustainable development is based on three basic pillars, being them, economic, sociocultural, and environmental sustainability [9], this same sustainability is only possible through a balance among the three dimensions. A good balance among the three areas, determines the long-term sustainability of the tourism industry. Sustainability is an important variable to be integrated into business strategies in parties related to the tourism industry [21]. Also, in the tourism industry, Yasarata et al. [22] state that industry advocates the use of the jargon of sustainability and community to strengthen power bases and legitimise current practices that are unsustainable.

The local community plays an important role in the process of sustainable development in tourism. Residents' support for tourism development contributes to the health of the tourism industry and the success of community development. Therefore, it is in the best interest of local residents, the tourism industry, and tourists themselves that residents have positive experiences and an overall positive outlook on tourism development [23]. Taking into account the participation and opinions of local communities in tourism, planning and development is a vital element of tourism sustainability. Tourism activity is crucial for the promotion of sustained and integrated local development of rural regions, which involves the articulation among different entrepreneurs, and between them and local actors.

9.3 Methodology

In this study we use qualitative data collected through semi-structured interviews of owners/managers of nine RT units in the "Quadrilátero do Minho". We look at data that allow us to analyse their perspectives, stories, and experiences on a given social phenomenon. The interviews were carried out between 2 and 30 April 2020. Due to the global Covid-19 pandemic and social confinement, it was necessary to resort to an alternative to face-to-face interviews, initially planned in this research, and opt to conduct interviews via Skype, email, and telephone.

The territory, known as “Quadrilátero do Minho”, is composed of the municipalities of Barcelos, Braga, Guimarães, and Vila Nova de Famalicão in the northwest of Portugal and constitutes a competitive and innovative urban network aimed at strengthening and enhancing a joint territory that is strongly industrialised and known for its exports. The semi-structured interview protocol features the main theme of the study, i.e., RT, but also four other categories under analysis, namely: the diversification of offer, coopetition, sustainability, and multidimensional experience. It is also important to highlight the creation of a topic where introductory questions are of a more general nature, including a sociodemographic description. In the present study, only data from the introductory part and from the section on sustainability were analysed. Toward this end, the following objectives were established: to trace the profile of the owners of the RT units under study; to understand the level of sensitivity of the owners/managers of the RT units questioned with regard to sustainable development; and, finally, to measure the degree of importance attributed to the design of formal or informal partnerships with local farmers to respect the pillars of sustainability (environmental, economic, and sociocultural).

9.4 Results and Discussion

Through the analysis of the interview data, we found that the owners are mostly female (55%) and typically aged a little over 54 years. Regarding their academic training, only one interviewee has a degree in an area directly related to tourism and the management of tourism units. This is owner A with a degree in Hotel Management. Regarding the operation of the RT unit as the only source of income, we found that only three of the nine owners stated that their current income is derived exclusively from tourism. These results are in line with those of other studies on the profile of RT promoters. For example, regarding age, there are several studies [24] that show that the promoters of rural units are mostly older than 44. When asked about tourism as the only source of income, the findings show that the owners have as their principal profession, other activities, i.e., outside the management of their RT unit, thereby dedicate little time to its management.

Owners reveal a dichotomous view of sustainability, especially sustainability related to RT units, and associate sustainability mainly with environmental and economic aspects. As mentioned above in the theoretical framework, there is an expectation that tourism contributes to the adoption of sustainable environmental practices, and, in this sense, rural tourism has a particularly important role to play [25].

With regard to the concept of sustainability itself, we found very unique views. For example, for owner A, sustainability “*is doing as much as possible with as few resources as possible*”. A more technical statement, correlated with the concepts of effectiveness and efficiency, may be linked to the three known aspects of sustainability: environmental, economic, and sociocultural [9]. In turn, owner I applies the most widely used definition of the concept of sustainable development, affirming that "*it is the ability of us to be able to meet our needs without compromising the ability of our successors to meet their needs*". Then, in a more environmental perspective, there is, for example, owner G, who states that "*for me sustainability is linked to the environment, to environmental awareness*", and owner C, who responds to this question stating that "*it is something sustainable for the environment*". There are also owners who assume the concept of sustainability, or sustainable development, in its economic aspect, as is the case of owner E, who understands that "*economically, as long as it pays the bills, for me it is sustainable*". Immediately associating the concept to its economic aspect, owner D also shares an identical opinion when he responds "*…this is already a more economic part*", and, in this way, reinforces the economic aspect of sustainability. Embracing two of the three aspects of sustainability, owner B mixes economic and environmental sustainability, "*economic sustainability (…) is to be able to maintain a business, sustain it (…) in terms of environmental sustainability (…)*", hereby assuming knowledge linked to two of the pillars of sustainability, as does owner F, who concludes with "*…it depends on the areas (…) economic or environmental sustainability*", thus demonstrating his knowledge of two of the three aspects of sustainability. In none of the nine responses was it possible to obtain the three known strands of sustainability; sociocultural sustainability was always excluded from their answers.

It is now important to understand which sustainability policies the owners of RT units adopt in their units. Starting with owner A, he mentions as policies of his unit, "*solar panels for electricity and water heating (…) a spring (…) led lights (…) our farm is organic (…) the restaurant is 100% organic*". Also in a similar line of thought is the response from owner C, again associating some ecological and biological policies as a sustainability factor of his RT unit. He states that "*we end up having some organic production (…) the vegetable garden, the chicken production; there are many things that are done organically*". Owner I also mentions that "*the use of solar panels for heating water for the 11 bathrooms (…) implies the need for a lot of firewood from the farm hills in fireplaces (…) and a big vegetable garden that serves the whole farm*". Owner B assumes a more curious and different answer to those already presented, when he asserts that "*I try to buy everything that is national, as well as local, at the level of sweets, honey, cheeses*", thus promoting a greater benefit for the country, and especially in supporting local producers. This is very important to the practice of RT. The other owners highlight more generic measures, such as "*recycling and saving electricity on lights*", or "*combustion boxes in the vegetable garden (…) and a fantastic ecopoint system*".

With regard to the potential benefits of adopting sustainable development practices for their units, the only owner who is somewhat wary of the potential benefits is owner D. He says that "*…directly it might not have great benefits*". All of the others agree that it is positive and that it brings benefits. Owner I emphasizes that "*the concept of RT fits perfectly with this practice*" and lists some examples of why this statement is true, such as "*firstly, because it is usually far from major urban centres (…) then because it is easier not to pollute the water, separate the waste(…) caring about the community and the environment*". Owner D has a different view. He assumes the more attractive and favourable marketing side because he understands that "*because* *people are more attentive and (these types of measures) attracts (…) draws more people in*".

An idea that is shared by almost all owners is the importance that these kinds of measures have for the guests of RT. Owner E believes that "*this kind of guest (…) very much appreciates these kinds of policies*". This idea is also shared by owner G, when he states that "*RT guests have very different characteristics from those that hotel guests usually have (…); this type of guest values these details more*". In turn, owner F mentions that "*the culture of the rural, of nature and those who normally like nature promote these ecological issues and have more sensitivity*". Owner H's answer is that "*that customer loyalty and the attraction of new customers may be related to a sustainable practice of our unit*". Some of the owners even share experiences of sustainable practices of the guests themselves in their units, as owner B tells us "*there are many tourists who are the first to say, 'look don't change our towels because they are clean'; they are the first to put aside the bottles to recycle or to ask where the recycling bins are located*". The opinions of the owners show the great impact that these types of measures can have, whether for the reduction of expenses, or for marketing purposes, or, even, through the innate interest of this type of tourist in the sustainability policies adopted.

9.5 Final Considerations and Next Steps

RT is a composite of agricultural products, ecological products, cultural resources, and environmental charms, which includes several functions, namely: economic, social, educational, environmental, recreational, and therapeutic activities. Although it cannot be seen as being the "gunpowder" for a rural renaissance, as it is still a controversial entity, RT policy can be considered as a way to revitalise rural societies around the world [26]. In fact, for a large number of rural regions, tourism, if not the only or most important development tool, can be an important complementary activity, increasing the diversification and sustainability of rural economies [27]. The role of rural tourism in the sustainable development of rural areas, by increasing the quality of life of residents and the conservation of natural, social, and cultural resources, has been highlighted in several studies [28]. However, despite the positive impacts arising from rural tourism, there are also some aspects that can be considered negative or potentially harmful. Therefore, adequate planning of rural tourism will avoid/minimise risks to the environment, culture, and local economy. Thus, it is important to understand the opinion of the owners of RT units on the sustainability of their units and their contribution to a more harmonious development of the territory where they are located.

Through the results obtained, we concluded that owners of the units in rural areas are typically female (55%) aged about 54 years. Academic degree is not marked, i.e., in this specific case, as only one owner has a degree in an area directly related to tourism. Owners were found to have another activity (outside the management of their RT unit) have as their main professional activity. RT units are mostly projects created from scratch for the tourist purposes of restoration or modification actions, carried out to preserve the original character of the buildings. Regarding sustainability, owners of RT units in the "Quadrilátero do Minho" always associate the concept to the economic and/or environmental aspect, thus neglecting the sociocultural aspect of sustainability [9]. As for the sustainability policies adopted, the most mentioned were, solar panels, recycling, led lights, biological mode productions, combustion boxes, washing management, and help in local production. All owners agreed that this type of policy represent benefits to the unit; this becomes important, due to tourism being a key sector in the sustainable development of rural environments [29].

The present research presents some limitations, such as the low adherence of the owners of RT units to the conduction of interviews. The intention of this study was to be able to interview owners of the four municipalities of the "Quadrilátero do Minho". This was achieved, however, participation could be greater, since it was only possible to interview just over half of the owners. Another limitation was related to the global Covid-19 pandemic that, unexpectedly, changed the collection of interview data from the initially established form, i.e., face-to-face interviews at each unit, to interviews via Skype, phone, and/or email. As suggestions for future research, it would be important to extend the rural tourism sample, including also, the units classified as Tourism of Habitation (TH) and Village Tourism (TA) that were left out of this research. It would also be interesting to extend interviews and, eventually broaden their scope and depth, not only to the owners of the units, but also to organisations and public entities with responsibilities in the tourism area.

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Chapter 10
Deconstructing the Emotional and Cognitive Response to Cultural Heritage: A Virtual Reality Experiment

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Abstract This investigation identifies, the cognitive impact and the emotional response that the image of destination produced in subjects immersed in virtual reality, by deconstructing the traditional image model in all its forms, the study focuses on tourist destinations characterized by Spanish historical, cultural, and architectural heritage. The cognitive and affective responses are analyzed using a measurement scale obtained from a questionnaire and the application of structural equations. The results show that the cognitive and emotional response caused by cultural heritage through virtual reality in individuals is positive.

10.1 Introduction

The tourism industry worldwide has experienced a major hiatus as a result of the COVID-19 pandemic [1]. However, the vision of tourists plays an important role in tourism development [2, 3] tourists can have unique tourist experiences with a destination's multimedia through content as images, text, videos, audios [4] With the recent explosion of virtual tours [5], virtual platforms are becoming increasingly important as entertainment tools. Together with this, consumption of multimedia content is increasing globally and systematically generates new research questions in the tourism marketing and destination management fields [6].

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The tourist destination image (hereinafter TDI) means a strategic effort for all tourism actors and has been researched intensively during the last decades. However, regarding its measurement, it is problematic when travelers value the quality subjectively [7]. The TDI is a multidimensional construct consisting of cognitive and affective dimensions [8–14] that has been developed under the prism of different definitions and formation models and therefore allowing more than one interpretation [15]. The findings suggest greater conceptual work is required [16] the same can be said regarding TDI measurement methodologies and scales which shows to the researcher, perhaps because of the destination diversity, a wide set of methods and tools [15]. In this sense, research on the TDI framework that uses simultaneously virtual reality and multivariate analysis to investigate urban or rural cultural destinations, in which heritage is present, is scarce.

10.1.1 Literature Review and Hypotheses Setting

Positive images of the destination after visits can satisfy important factors [17]. Tourism is a multifaceted field and in order to understand its complexity [18] the tourist expectation has a positive and significant effect on destination attractiveness [19] the TDI construct, definition, and formation have been widely [20] researched for more than 50 years [21] regarding the formation model, also there is a large amount of scientific literature that has identified and measured antecedents, factors, constructions and consequences from various approaches, places, scales, constructions, structures, and statistical techniques, mainly with the modeling of structural equations [15].

The literature is extensive, and it is still going; however, the TDI is consensually defined as mental impressions and perceptions that tourists have of a place [22] as well as an emotional response. The image represents a simplification of many associations and pieces of information and emotion connected to the site [23–25] they are the product of the mind trying to information and emotion about a place, places which are far from being similar. For this reason, the conceptualization and investigation of the destination image need the development of reliable and valid measurement scales fitting the touristic destination. It is in many cases measured using multi-attribute scales, both, Likert-type or semantic differential interval scales. Next, the orthodox TDI model is usually accepted by the scientific community [15].

According to Fig. 10.1, the destination image is of paramount importance for tourist destination management since it motivates the interest of tourists, their satisfaction, loyalty, or intention to behave, there are obvious differences in tourists' perception in terms of overall perception, tourism resources, environment perception, recreational status and tourism attraction management [27] it is an ever-changing construct that can be classified according to the conscious control that a person has over a place, is a mental representation of knowledge, feeling and impression about a destination that consists of three components: cognitive image, affective image, and general image of the destination [28–34].

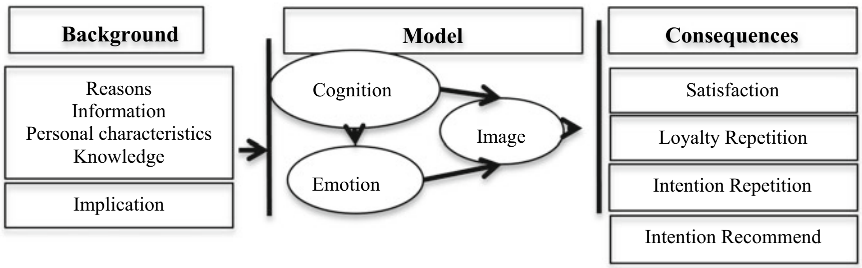

Fig. 10.1 TDI model. Fuente: [26]

The image becomes part of the economy of self-representations online [35] previous studies indicate that there is a hierarchical influence of the cognitive component on the image straight on and through the affective component as well as an effect of the affective component on the image [36]. That is, cognition is hierarchical above effect; therefore, from these results found in previous investigations, we can establish the first hypothesis:

H1: The virtual cognitive image positively influences the emotional virtual image.

Before an image can influence behavior, it is essential to understand how an image affects the viewer since a person's beliefs influence the attitude [37] toward the site. In this regard, previous causal links indicate that cognitive and emotional skills serve to attribute values and feelings to images [38]. Therefore, a key factor to consider is the emotional content as an expression of affective states. The emotional content of an image is linked to experience [39] in situ and previous expectations, whereas cognitive assessment is related to visual effects. The perception of landscape elements is crucial to understand the role of visual elements. The cognitive image is a combination of information resources as well as capabilities and previous experiences, and the affective image is based on expectations, cognitive evaluations, and experience in situ [40]. Accordingly, cognition and emotion are positively related to the image of a destination [32]. In other words, environments and places produce cognitive and emotional responses on the traveler [41]. Thus, the TDI is generated by tourists based on their cognitive and affective responses [42]. Based on this research, hypotheses two and three are presented below:

H2: The virtual cognitive image positively influences the virtual TDI.

H3: The virtual emotional image positively influences the virtual TDI.

However, the deconstruction proposal in this article consists of analyzing the traditional image model in all its possible forms, Next, the three possible models are described evaluated in the deconstruction.

Model No. 1 When the virtual cognitive image is hierarchical to the virtual affective image and to the virtual image of destiny.

Model No. 2 When the virtual affective image is hierarchical to the virtual cognitive image and to the virtual image of destiny.

Model No. 3 when the virtual cognitive image and the virtual affective image influence the image of the virtual destination in parallel.

According to model number 3, the following hypothesis is also raised.

H4: The virtual affective image positively influences the virtual cognitive image.

The objective of this investigation is to measure the impact of cultural and architectural heritage emulated by virtual reality. Data obtained is used to carry out an analysis using the partial least squares regression algorithm PLS, applying structural equation models; thus evaluating, the effects of the cultural and architectural heritage.

Since an important part of the tourism product can be culture, cultural tourism plays a fundamental role both in the attractiveness of destinations and their image [43]. Thus, the contribution of cognitive and affective images to the image of a destination can be related to its local heritage. Traditions and historical architectural, cultural heritage can increase the cognitive and emotional image of the place and, consequently, its ability to attract visitors [44]. Therefore, it can be said that the cognitive and emotional components of the image of a destination can be studied through the historical, architectural, and cultural heritage of cities [26]. Cultural heritage enlivens local and national identities and creates relationships between neighbors and communities around the world [45]. In the follow-up to all this theory, this research general hypothesis affirms that the emotional and cognitive impact that architectural and cultural heritage has on the minds of tourists generates a positive image of the destination.

10.2 Materials and Methods

10.2.1 Participants

The current investigation uses experimentation whit virtual reality in a sample of 25 people residing in Ecuador randomly selected between the ages of 21 and 60 years. Before the experiment, each participant has given written consent to sign, and they are informed that participation is optional and that they reserve the right to withdraw at any time [46]. It is important to mention that tourists did not previously know any of the evaluated destinations heritage.

10.2.2 Materials and Procedure

The data collection procedure is performed in a physiology laboratory equipped with; virtual reality (VR) goggles; headphones, and an iPhone six smartphone. The phone is inserted into virtual reality device to project videos of tourist sites containing architectural heritage. Subsequently, a questionnaire is applied to each participant with a scale adapted from [47] to measure tourist destinations (Fig. 10.2 and Table

Fig. 10.2 VR glasses

10.1). The structural model is composed of three latent variables: Cognition or cognitive image, emotion or affective image and image of the destination. Likewise, the latent variable image of the destination is the result of a cognition compound plus one of emotion. For this reason, to comply with this premise the observable variables of the image construct: I1, I2, I3, I4, I5 and I6 are composed considering that it is a reflective model and that its indicators are very interchangeable and correlated as follows: Variable I1=E1+E7+E10+E11+E14; Variable I2=C1+C3+E2; Variable I3=C6+E5+E8; Variable I4=E5+C2+E15; Variable I5=E3+E4+E6+E12+E9; Variable I6=C4+C5+E13+E16; Image=I1+I2+I3+I4+I5+I6.

10.2.3 The Virtual Reality Multimedia Stimulus

The images perceived by visitors are fast, efficient, and convenient [48], we live in a multisensory world, our experiences are constructed by the stimulation of all our senses. Nevertheless, digital interactions are mainly based on audio-visual elements, while other sensory stimuli have been less explored. Virtual reality (VR) is a sensory-enabling technology that facilitates the integration of sensory inputs to enhance multisensory digital experiences [49–51]. Technology may be important in customer satisfaction and must be explored and used to create a superior experience [52] visual stimulation provided by virtual reality can be quantitatively studied to identify the impact of architectural and cultural heritage [53–55].

This paper has sought to open a debate as a means of significantly assessing several important developments in communication of modern tourism [6] each person studied is immersed through virtual reality goggles to a sequence of videos of tourist destinations that emulate sites with the historical architecture of Spain. Thus, with the help of subsequent modeling of structural equations, the cognitive and emotional impact caused by the Spanish historical and cultural architectural heritage is measured using virtual reality. The Spanish virtual destinations that were assessed in this experiment are detailed in the following Table 10.2 with the respective projection times in the VR devices.

It is interesting to investigate the behavior of the tourist through stimuli that emulate a possible visit to a destination endowed with cultural heritage and thus evaluate the conceptions in the human mind [56]. For this, it is possible to use

Table 10.1 Measurement scale for tourist destinations

No	Code	Observable variables	Factor
1	I1	Attractive landscape with exotic atmosphere and picturesque architectural style within an area of special beauty and charm.	Image
2	I2	Presence of emblematic elements of patrimonial and historical wealth I have had the feeling of personal or intellectual enrichment.	Image
3	I3	Diversity of tourist attractions and formative monuments; admiration for past architecture and conservation over time.	Image
4	I4	Clean, quality infrastructure and family atmosphere	Image
5	I5	Good weather with tranquility to disconnect, refresh, renew energies, enrichment and peace.	Image
6	I6	Monuments of tourist interest with adequate information to connect in the company of more tourists.	Image
7	C1	It is a place with heritage wealth	Cognition
8	C2	It is a quality place in infrastructure	Cognition
9	C3	It is a place with historical wealth	Cognition
10	C4	The information received has helped me to enjoy the stay more	Cognition
11	C5	It is a place with a tour	Cognition
12	C6	It is a place with good tourist and training attractions	Cognition
13	E1	I have had a feeling of artistic or architectural style.	Emotion
14	E2	I have had the feeling of personal or intellectual enrichment	Emotion
15	E3	I have had the feeling of peace	Emotion
16	E4	I have had the feeling of disconnecting, of being in a different and refreshing place	Emotion
17	E5	I have had the feeling of living something authentic	Emotion
18	E6	I have had the feeling of renewing energy, wanting to live, inner strength	Emotion
19	E7	I have had the feeling of disconnecting this in a different and picturesque place	Emotion
20	E8	I have had a feeling of admiration for past architecture and conservation over time	Emotion
21	E9	I have had the feeling of filling up, of enriching myself	Emotion
22	E10	I have had the feeling of being within a region a special beauty area	Emotion
23	E11	I have been delighted, charming place	Emotion
24	E12	I have had the feeling of quiet	Emotion
25	E13	I have felt emotionally connected to the place	Emotion
26	E14	It is a place with an exotic atmosphere, unique, peculiar	Emotion
27	E15	It is a place with a family atmosphere	Emotion
28	E16	I have had the feeling of being accompanied	Emotion

Source Adapted from [47]

Table 10.2 Virtual destinations evaluated in the experiment

No	Accumulated time		Destination
	Start	End	
1	00:00	00:37	Plaza de la Santa Cruz, Spain
2	00:37	01:39	Plaza Mayor of Madrid, Spain
3	01:39	02:00	Arco de Cuchilleros, Spain
4	02:00	02:30	Doors of the market of San Miguel, Spain
5	02:30	03:01	Street Mayor and church del Sacramento, Spain
6	03:01	03:33	Plaza de la Villa, Spain
7	03:33	04:02	Viaduct of Segovia, Spain
8	04:02	04:33	Temple of the Employer Madrileña, Spain
9	04:33	04:59	Plaza de la Armería, Spain
10	04:59	05:23	Solar of the Plaza de la Armería, Spain
11	05:23	05:54	Royal Palace of Madrid, Spain
12	05:54	06:19	Center of the Plaza de East, Spain
13	06:19	06:50	Monastery of the Incarnation, Spain
14	06:50	07:21	Plaza de Ramales, Spain
15	07:21	07:48	Plazuela de Santiago, Spain
16	07:48	08:15	Castle of the Adrada, Spain
17	08:15	09:15	León, Spain, Spain
18	09:15	10:15	Casa Botín, Spain
19	10:15	11:11	Basilica of San Isidro, Spain
20	11:11	12:08	Cathedral of León, Spain
21	12:08	13:06	Plaza de la Paja, Spain

the navigability advantages in a virtual travel experience. It is known from previous studies that virtual reality significantly influences the emotional and cognitive dimensions of the experience [57, 58] which facilitates the investigation of the concept. Due to technological advances, distance has lost its traditional role as a cognitive filter between the subject and the site, resulting in tourist cultural spaces becoming filled with images and icons. Tourist destinations are becoming compelled to overcome new challenges offered by virtual reality media.

10.2.4 Use of Virtual Reality to Investigate Heritage

The starting point of the presented research is the theory of destination marketing, in which the concept of destination branding is the key element that elements of nature and historical heritage are strongly present [59] a traveler has a mental image of a destination that could have unique characteristics, but there is also a common and public mental image of a destination [60]. For this reason, the application of virtual reality constitutes a significant leap forward in the investigation of the destination image and the impact of heritage. According to Park and Njite [61], also cited by Gholitabar et al. [62], by linking tourism with virtual reality [63], heritage has a crucial socio-psychological dimension connected with national identity through experience attributes. There is a psychological mechanism influencing behavior; its effects are significant due to the modality and navigability in the emotional and cognitive dimensions of virtual travel experience.

It is possible to group image data, using hybrid techniques of artificial intelligence and evolutionary arithmetic algorithms. However, only with a broader understanding of relationships between virtual reality and the image of the destination, tourism opportunities will be better utilized. Virtual reality offers a variety of promising applications [64–68] in areas ranging from administration to entertainment. It allows people to have virtual experiences similar to reality and perform various tasks by achieving predetermined objectives using simulated scenes [69, 70]. The findings on the use of virtual reality allow improving the motor, functional, and cognitive performance of a person [71, 72]. Using virtual reality can be exciting, fun, and increase motivation [73].

When the product is a destination, the creation of images is critical since the tourist cannot test the product before acquiring it. Virtual reality allows eliminating this restriction. Furthermore, virtual reality offers the ability to create alternative experiences that can be useful for heritage preservation [74] its use will continue to increase potentially, both in applications and importance; Researchers and professionals have an excellent opportunity to exploit virtual reality in this field [75].

10.2.5 Structural Equation Modeling. PLS Procedure, Confirmatory Path Analysis, and Data Adequacy

A confirmatory factor was carried through the algorithm the partial least squares regression PLS since it works well with small samples, the processing data software is SMART-PLS [76]. The modeling of structural equations with partial least squares PLS-SEM is a method of multivariate analysis of the second generation that currently has a significant acceptance in the scientific community, mainly in the areas of social sciences and economics. Being a robust and flexible alternative, it allows working with estimates of simultaneous equations through multiple regressions. It aims to increase the explanatory capacity of the empirical verification of the theory, the development of computer programs has also contributed to its use. It is accurate to applied PLS when data are gathered from small samples. In this case, the exhibition was conducted on 25 people. In the configuration, a full bootstrapping was used with 5000 subsamples applied, in the bootstrap confidence interval method with correction of bias and acceleration [BCA]. The type of two-tailed test, the significance level of

0.05, the schism of route weights [route], 5000 maximum interactions, and the stop criterion $(10^{-X}) = 7$.

The software used is Smart-PLS and the latent variables evaluated are cognition, emotion, and image.

10.3 Results

Below is the analysis of the target image model, evaluated in all its forms. On all models, the results of the discriminant or divergent validity analysis confirmed that the constructions determined in the models measure their concept and not the rest of the constructions, in other words, all models confirm discriminant or divergent validity. Below are the complete results of bootstrapping analysis (Figs. 10.3, 10.4, 10.5 and Tables 10.3, 10.4, 10.5).

Reliability and convergent validity are also confirmed in all models, the variance between the same constructs shows that they correlate more significantly with their same indicators than the others. The convergent reliability and validity analysis shows that the average extracted variance is >0.5, on all models which indicates that the constructions explain more than half of its variation than the other composing indicators (Tables 10.6, 10.7 and 10.8).

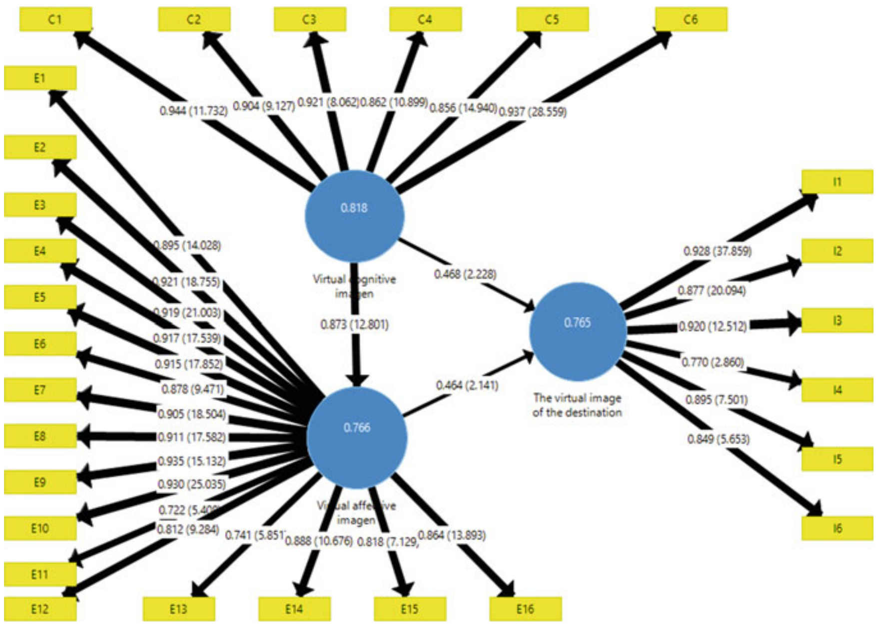

Fig. 10.3 Results structural model No. 1 when the virtual cognitive image is hierarchical to the virtual affective image and to the virtual image of destiny

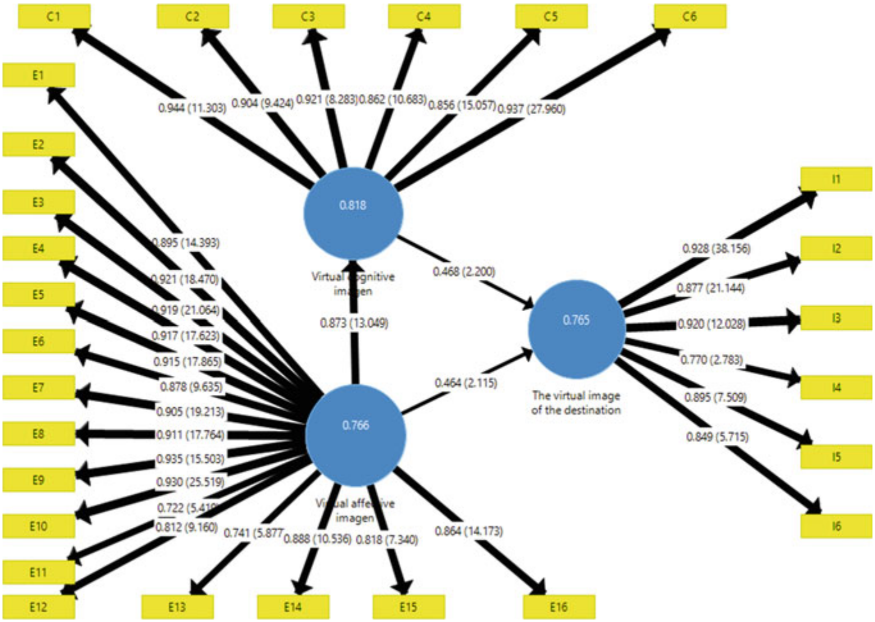

Fig. 10.4 Results structural model No. 2 when the virtual affective image is hierarchical to the virtual cognitive image and to the virtual image of destiny

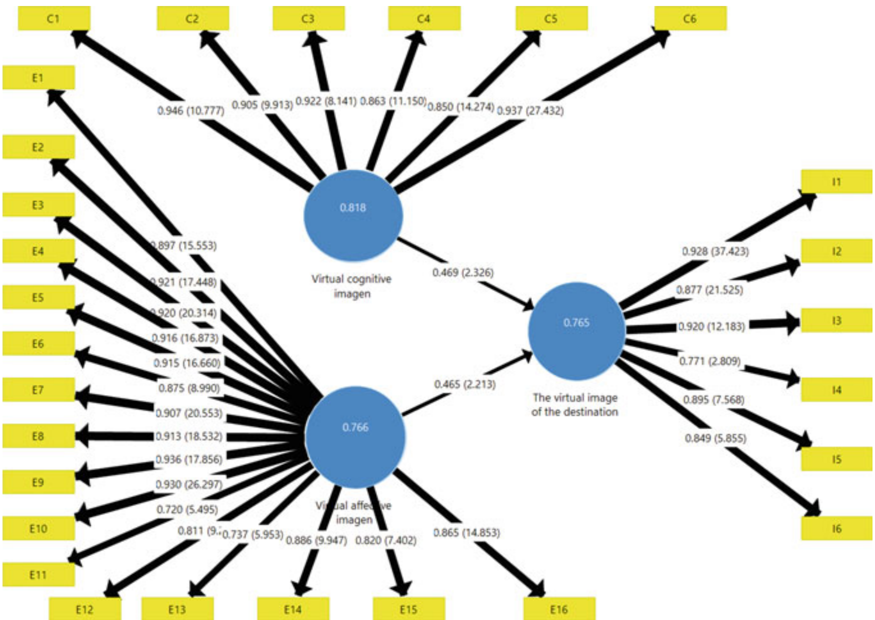

Fig. 10.5 Results structural model No. 3 when the virtual cognitive image and the virtual affective image influence the image of the virtual destination in parallel

Table 10.3 Discriminant validity model No. 1

Factor		F1	F2	F3
F1	Virtual cognitive imagen	0.905	N/A	N/A
F2	Virtual affective imagen	0.873	0.875	N/A
F3	The virtual image of the destination	0.872	0.871	0.875

Table 10.4 Reliability and convergent validity of the measuring instrument model No. 1

Factor	Indicator	Load	Weight	P-Value	Value t	AVE
F1. Virtual affective imagen	E1		0.895	0.000	14,028	0.766
	E2		0.921	0.000	18,755	
	E3		0.919	0.000	21,003	
	E4		0.917	0.000	17,539	
	E5		0.915	0.000	17,852	
	E6		0.878	0.000	9,471	
	E7		0.905	0.000	18,504	
	E8		0.911	0.000	17,582	
	E9		0.935	0.000	15,132	
	E10		0.930	0.000	25,035	
	E11		0.722	0.000	5,408	
	E12		0.812	0.000	9,284	
	E13		0.741	0.000	5,851	
	E14		0.888	0.000	10,676	
	E15		0.818	0.000	7,129	
	E16		0.864	0.000	13,893	
F2. Virtual cognitive imagen	C1		0.944	0.000	11,732	0.818
	C2		0.904	0.000	9,127	
	C3		0.921	0.000	8,062	
	C4		0.862	0.000	10,899	
	C5		0.856	0.000	14,940	
	C6		0.937	0.000	28,559	
F3. The virtual image of the destination	I1	0.928		0.000	37,859	0.765
	I2	0.877		0.000	20,094	
	I3	0.920		0.000	12,512	
	I4	0.770		0.000	2,860	
	I5	0.895		0.000	7,501	
	I6	0.849		0.000	5,653	

Note AVE = Average extracted variance

Table 10.5 Hypothesis contrast model No.1

Hypothesis		Standardized beta	P-value	Value t
H1	Virtual cognitive imagen –> Virtual affective imagen	0.873	0.000	12,801
H3	Virtual affective imagen –> Virtual image of destination	0.464	0.032	2,141
H2	Virtual cognitive imagen –> Virtual image of destination	0.468	0.026	2,228

Table 10.6 Discriminant validity model No. 2

Factor		F1	F2	F3
F1	Virtual cognitive imagen	0.905	N/A	N/A
F2	Virtual affective imagen	0.873	0.875	N/A
F3	The virtual image of the destination	0.872	0.871	0.875

In all models the values of t are significant since have a value >1.96; the average extracted variance too is substantial >0.765 in all factors. Also, the loads and the weights are significantly higher in all observable variables (Tables 10.9, 10.10, and10.11).

The principal component analysis of the database shows the weight of the factors in components 1, 2, and 3 in the rotating Varimax matrix (Fig. 10.6 and Table 10.12).

All hypotheses are favorable the t value is >1.96. The study shows that emotional and cognitive impact of a destination characterized by the heritage and emulated with virtual reality positively influences the image of the virtual destination. The positive emotional and cognitive impact of heritage on the virtual tourist is confirmed. Also, the analysis confirms that the models are possible.

10.4 Future Lines of Research

In this study virtual reality videos are used considering that the main attraction is heritage and not multimedia production, the videos principally show heritage infrastructures without any other specific objective in stimulation design, therefore, a potential line of future research is the design and analysis of virtual reality videos with more specific communication and stimulation objectives.

Table 10.7 Reliability and convergent validity of the measuring instrument model No. 2

Factor	Indicator	Load	Weight	P-Value	Value t	AVE
F1. Virtual affective imagen	E1		0.895	0.000	14,393	0.766
	E2		0.921	0.000	18,470	
	E3		0.919	0.000	21,064	
	E4		0.917	0.000	17,623	
	E5		0.915	0.000	17,865	
	E6		0.878	0.000	9,635	
	E7		0.905	0.000	19,213	
	E8		0.911	0.000	17,764	
	E9		0.935	0.000	15,503	
	E10		0.930	0.000	25,519	
	E11		0.722	0.000	5,419	
	E12		0.812	0.000	9,160	
	E13		0.741	0.000	5,877	
	E14		0.888	0.000	10,536	
	E15		0.818	0.000	7,340	
	E16		0.864	0.000	14,173	
F2. Virtual cognitive imagen	C1		0.944	0.000	11,303	0.818
	C2		0.904	0.000	9,424	
	C3		0.921	0.000	8,283	
	C4		0.862	0.000	10,683	
	C5		0.856	0.000	15,057	
	C6		0.937	0.000	27,960	
F3. The virtual image of the destination	I1	0.928		0.000	38,156	0.765
	I2	0.877		0.000	21,144	
	I3	0.920		0.000	12,028	
	I4	0.770		0.000	2,783	
	I5	0.895		0.000	7,509	
	I6	0.849		0.000	5,715	

Note AVE = Average extracted variance

Table 10.8 Hypothesis contrast model No.2

	Hypothesis	Standardized beta	P-value	Value t
H4	Virtual affective imagen –> Virtual cognitive imagen	0.873	0.000	13,049
H3	Virtual affective imagen –> Virtual image of destination	0.464	0.035	2,115
H2	Virtual cognitive imagen –> Virtual image of destination	0.468	0.028	2,200

Table 10.9 Discriminant validity model No. 3

Factor		F1	F2	F3
F1	Virtual cognitive imagen	0.905	N/A	N/A
F2	Virtual affective imagen	0.873	0.875	N/A
F3	The virtual image of the destination	0.874	0.873	0.875

Table 10.10 Reliability and convergent validity of the measuring instrument model No. 3

Factor	Indicator	Load	Weight	P-Value	Value t	AVE
F1. Virtual affective imagen	E1		0.897	0.000	15,553	0.766
	E2		0.921	0.000	17,448	
	E3		0.920	0.000	20,314	
	E4		0.916	0.000	16,873	
	E5		0.915	0.000	16,660	
	E6		0.875	0.000	8,990	
	E7		0.907	0.000	20,553	
	E8		0.913	0.000	18,532	
	E9		0.936	0.000	17,856	
	E10		0.930	0.000	26,297	
	E11		0.720	0.000	5,495	
	E12		0.811	0.000	9,241	
	E13		0.737	0.000	5,953	
	E14		0.886	0.000	9,947	
	E15		0.820	0.000	7,402	
	E16		0.865	0.000	14,853	
F2. Virtual cognitive imagen	C1		0.946	0.000	10,777	0.818
	C2		0.905	0.000	9,913	
	C3		0.922	0.000	8,141	
	C4		0.863	0.000	11,150	
	C5		0.850	0.000	14,274	
	C6		0.937	0.000	27,432	
F3. The virtual image of the destination	I1	0.928		0.000	37,423	0.765
	I2	0.877		0.000	21,525	
	I3	0.920		0.000	12,183	
	I4	0.771		0.005	2,809	
	I5	0.895		0.000	7,568	
	I6	0.849		0.000	5,855	

Note AVE = Average extracted variance

Table 10.11 Hypothesis contrast model No.3

	Hypothesis	Standardized beta	P-value	Value t
H2	Virtual cognitive imagen –> Virtual image of the destination	0.469	0.020	2.326
H3	Virtual affective imagen –> Virtual image of destination	0.465	0.027	2.213

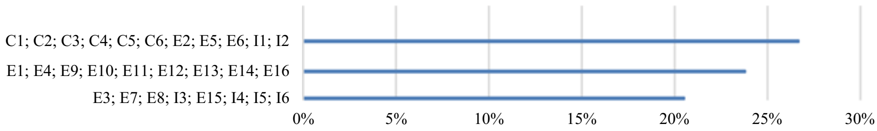

Fig. 10.6 Weight factor matrix (rotated Varimax)

Table 10.12 Principal component analysis, factor matrix (rotated Varimax)

	1	2	3	Commun	Specific	component	Factors	Weight (%)
C1	−0,401,516,388	0,17,329,859	−0,85,874,392	0,928,688,932	0,071,311,068	1	E3; E7; E8; I3; E15; I4; I5; I6	21
C2	−0,364,794,189	0,31,065,925	−0,765,815,709	0,816,057,667	0,183,942,333			
C3	−0,414,941,633	0,25,228,205	−0,801,196,713	0,877,738,965	0,122,261,035			
C4	−0,528,051,456	0,2,293,615	−0,657,362,143	0,763,570,024	0,236,429,976			
C5	−0,10,224,684	0,56,268,325	−0,717,149,256	0,841,369,917	0,158,630,083			
E1	−0,452,306,339	0,7,056,879	−0,334,123,408	0,814,214,883	0,185,785,117			
C6	−0,518,368,945	0,4,574,753	−0,646,633,509	0,896,124,911	0,103,875,089			
E2	−0,465,536,497	0,55,222,484	−0,587,736,052	0,867,110,172	0,132,889,828			
E3	−0,611,640,753	0,45,869,769	−0,564,200,475	0,902,830,155	0,097,169,845	2	E1; E4; E9; E10; E11; E12; E13; E14; E16	24
E4	−0,419,713,371	0,59,471,668	−0,590,361,608	0,878,374,069	0,121,625,931			
E5	−0,483,336,762	0,5,596,895	−0,571,507,903	0,873,488,041	0,126,511,959			
E6	−0,311,473,029	0,53,403,422	−0,680,465,867	0,845,241,788	0,154,758,212			
E7	−0,656,250,684	0,58,034,731	−0,330,180,423	0,876,487,076	0,123,512,924			
E8	−0,678,633,811	0,4,941,622	−0,425,951,049	0,886,174,427	0,113,825,573			
E9	−0,538,500,728	0,70,352,958	−0,318,305,423	0,886,255,243	0,113,744,757			
E10	−0,414,531,811	0,77,165,728	−0,336,806,564	0,88,073,024	0,11,926,976			
E11	−0,050,323,241	0,89,577,276	−0,143,989,553	0,825,674,249	0,174,325,751			
E12	−0,3,012,722	0,7,116,888	−0,328,015,737	0,704,860,207	0,295,139,793	3	C1; C2; C3; C4; C5; C6; E2; E5; E6; I1; I2	27
E13	−0,005,149,952	0,8,398,803	−0,277,317,471	0,782,330,418	0,217,669,582			
I1	−0,530,455,172	0,52,364,864	−0,626,944,029	0,948,649,401	0,051,350,599			
I2	−0,477,018,486	0,52,477,892	−0,555,131,149	0,811,110,138	0,188,889,862			

(continued)

Table 10.12 (continued)

	1	2	3	Commun	Specific	component	Factors	Weight (%)
I3	−0,842,222,741	0,17,585,752	−0,350,615,456	0,863,196,211	0,136,803,789			
E14	−0,284,449,354	0,6,056,065	−0,596,041,881	0,802,936,588	0,197,063,412			
E15	−0,558,237,002	0,53,264,162	−0,317,388,384	0,696,071,034	0,303,928,966			
I4	−0,765,261,719	0,04,719,525	−0,380,789,439	0,732,853,487	0,267,146,513			
E16	−0,337,610,451	0,8,333,122	−0,226,269,907	0,859,588,118	0,140,411,882			
I5	−0,826,720,477	0,1,599,398	−0,342,986,083	0,826,686,942	0,173,313,058			
I6	−0,804,342,039	0,31,379,512	−0,176,552,679	0,776,604,343	0,223,395,657			
	7,413,864,728	8,47,156,919	7,579,583,724	23,46,501,764	4,534,982,357			

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Chapter 11
Collective Rural Brands and Consumption of Agroecological Products

Nicolas Ortiz-Esaine and Diana Dominguez Gutierrez

Abstract This work focuses on the development of rural communities through their productive and commercial orientation. This is done through collective rural brands as a vehicle to achieve identity, representation, and commercial value. Concepts and scopes of ecological consumption and commercialization of artisanal, ecological, and organic products are analyzed. At the field level, shared intelligence is built through interviews with marketing, sustainability, and ecology experts. And interviews with organic food consumers. It is complemented with the analysis of real cases of implementation of rural collective brands. Finally, an integrative analysis of schemes and models is proposed for the participatory development of collective and scalable brands.

11.1 Introduction

Worldwide, more than 90% of consumers are willing to pay a little more for a product with a positive social and environmental impact. Millennials (25–34 years old) are looking for products with added value, rather than low prices.

Consumers who care about the environment consider that a green product has a competitive advantage that is valued in the purchase process. This assessment can be reflected in being able to pay more for a green product than for a product that is not green and also in showing a rejection of products not perceived as organic [4].

Likewise, according to studies carried out, consumers care about the environment and therefore have favorable attitudes in the consumption of products that have a less negative impact on ecology [7, 12]. More than half of the interviewees have more intention to buy from companies that carry out ecological practices than from those

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that do not. The explanation is that they care about the environment and the responsible consumption of products that take care of the planet. On the other hand, the image of an ecological product and the reputation positively influence the consumer's purchase decision.

11.2 Theoretical Framework

"Natural", "ecological" or "artisanal" products, refers to products obtained from ecosystems and different from those of sawn wood or agricultural systems, and that have not undergone a domestication process; These include exotic flowers, medicinal plants, etc. [6]. Organic foods have been found to have more than twice as many antioxidants as industrial foods. Likewise, antioxidants are essential to prevent cellular aging and also cancer [20]. Ecological products are those that are designed to reduce the consumption of natural resources and minimize negative environmental impacts [20].

It starts from the design, the raw materials that are going to be used in the manufacturing process, the production processes, the waste generated in the process, the distribution, the transport, until the disposal and reuse of the product. What differentiates an ecological product from a traditional one is that the environmental damage throughout its life cycle is less [5, 8, 17].

11.2.1 Green Consumer

It is a type of consumer who prefers products and brands with an ecological focus, despite the low availability and high prices of these products [2]. This new type of "green consumer" is emerging concerned about the damage that companies and irresponsible consumption may continue to affect the environment (Chamorro 2011). With this, the "Green Marketing" seeks that companies adapt the manufacturing process of a product so that it does not pollute the environment [8].

The green consumer has been called a person who cares about the protection of the environment, so when making the purchase, his decision will be motivated by those products that generate less pollution and damage to the environment [8, 11].

Likewise, within the behavior of the green consumer, internal variables such as their values, personality, disposition and external variables such as information, advertising, social groups such as friends and family intervene. For this reason, green consumers are not the same, they differ from each other and present different ecological attitudes [9]. These different attitudes are ecological awareness, ecoposition, and ecoactivity. The first refers to the ecological beliefs and knowledge that the consumer maintains and the information they remember on the environmental issue. The second depends on the culture that the consumer has and the environment that surrounds him, as well as the place where he wants to belong and the level of education he maintains. The third is the tendency to act ecologically and depends a lot on the personality of the consumer [3, 8].

Likewise, Calomarde divides the green consumer into five groups: eco-actives, eco-conscious, eco- passive, eco-skeptic and eco-friendly. The first group is made up of consumers who are willing to pay a little more for a product that has less impact on the environment, that is, for a green product. The second group, the eco-conscious are consumers who are willing to receive information on ecological issues. The third group, the eco-passives, are the consumers who think that the rest can solve environmental problems. The fourth group is consumers who have a negative attitude toward environmental consumer groups. Finally, organic products are people who are not willing to pay a high price for an organic product [3].

However, Hamann divides them into four groups, such as consistent environmentalists, environmentalists with still inconsistent behavior, inconsistent conscious environmentalists, and non-environmentalists. The first group of consumers is people who care about the environment and that this is reflected in their behavior. The second group is people who are aware of ecological problems and therefore are beginning to change their behavior. The third group is consumers who are aware of environmental problems but do not change their buying behavior or attitudes despite it. The last group, non- environmentalists, are people who do not care about the environment and this is reflected in their attitudes [8].

On the other hand, consumers who have positive attitudes toward the environment do not necessarily buy green products and this may be due to the fact that they consider that with the effort they make, of wanting to consume organic products, this attitude does not make any improvement in the problems. However, education can lead a consumer to buy green products, as these people are very knowledgeable on the subject, and studies also show that people with higher levels of awareness are more likely to develop pro-environmental behaviors [10, 13].

11.2.2 Green Marketing

Green marketing is about buying environmentally responsible products. Likewise, it is about the integration of the environmental component in decision-making when buying a good or service, since the product is chosen based on the type of packaging, whether it is recyclable or not, and based on the amount of waste [1, 3, 4].

Currently, that a product is green does not generate added value for the consumer because they expect it to have this characteristic as one of all its qualities or benefits [14]. So at the time of payment, it does not generate value. Also, in the case of difficult purchases such as a car, people see other characteristics and needs when making a purchase decision where green is not the most relevant.

Companies have focused a lot on advertising based on the commercial level, but advertising in green marketing is only part of the communication that companies must carry out, it also corresponds to educate the consumer on environmental and social issues to create a better society in environmental protection [18]. Green

Marketing consists in acapt a new mindset to the organization a marketing performance; impacting on the way to generate value [16]. Today many brands emphasize their social, artisanal, and fair trade role. The social purpose of the products is reaffirmed, which today generates a greater perception of value [15].

11.3 Methodology

The objective of this research is to explore the attitudes toward the consumption of collective brands in agroecological products (artisanal or organics) in relation to regular products of mainstream industry. And how it represents opportunities to build collective brands for rural communities. It is the first step in establishing a scalable analysis and implementation model.

This investigation was carried out with an explorative approach. First of all, we made (05) in-depth interviews were conducted with specialists on the subject of marketing, sustainability, and agroecology from government, NGO, consultancy, academic and private institutions. We afford topics such as rural development, sustainability business, green consumers, organic markets, and branding specific ways.

Also, we made (02) group dynamics with a total of (16) consumers. We afford topics such as product, packaging, stores, habits, brand image, perception of social responsibility were addressed.

In the future, the comparative review of successful cases of rural collective brands is projected. And a quantitative research to measure the market value of these collective brands.

11.4 Results

A product must be offered with a design that is eco-friendly on the packaging, eco-labeling must also be taken into account, which is very important as it guarantees the quality of the product and the credibility for the store.

On the other hand, the price, which is generally high, also guarantees the quality of the product and the ecological guarantee. Regarding the distribution, especially in the introduction of the product, it must be specialized in order to be able to adequately inform customers and also gain their trust.

Communication with the client is very important; the message that is conveyed should be simple as most brands do. However, more emphasis can be placed on the ecological problem that the product solves and the contribution that the consumer manages to make when shopping in the store.

The media used by organic store brands seem good to them; however, they could also have specialized blogs to communicate in a more personal way.

11.4.1 Specialists

The world's socially responsible and committed companies practice ethics and transparency first and foremost. In addition, it is important, according to experts, to highlight the issue that the brand is responsible for the environment and also socially responsible, beyond generating profits.

Product	The experts stated that brand identity is what defines who the brand really is and how it is perceived by its target audience; They are also the attributes and elements that compose it and how these elements are perceived by the people who come into contact with the brand. The brand identity is what differentiates the brand from the others
Brand	Organic store brands in terms of visual identity are quite specific, the name is already in front, the word eco or organic is given directly. Green and brown are widely used, which are more related to the environmental or ecological theme. On the subject of packaging, they use recycled paper or organic paper instead of plastic. The experts considered that the brand personality of organic stores should be based on trust and transparency
Place	Organic food stores should always project a fresh, young, and healthy image, as that is what they offer
Positioning	To position organic products, in this case organic food stores, it is necessary to manage a series of factors such as the characteristics of the user and the benefits of the products offered as an organic store, the distribution channels, the company's environmental policy, and eco-labeling

11.4.2 Consumers

The participants mentioned that the values with which they associate their favorite brands are the following: respect for the environment and their body, trust, ethics, responsibility, honesty, and transparency.

Consumption	They are seen consuming organic products in their homes for breakfast or lunch; the other two participants are seen consuming them in their three meals of the day and even if they eat a snack such as cookies or fruit. Finally, regarding the benefits of organic food, they mentioned the following: High quality, health, nutrition, and organic. They all agreed that their favorite brands have these characteristics and that they also feel good and confident that they buy products with a guarantee, so they are willing to pay a little more. Their health is something they value and take great care of

(continued)

(continued)

Product	As for the packaging that your favorite organic food brand uses, its packaging is of different brands; however, they are all clear packaging or are also made from recycled brown paper. In addition, the participants highlighted that as their preferred brands are ecological, they do not use pesticides, hormones, they are not transgenic; that is, genetically altered. The main environmental attribute for them is that their brand is organic and does not cause harm to nature or man Regarding any environmental attribute that characterizes their brand of preference, the interviewees commented that this includes environmental aid practices, the collection of garbage on the beaches, the separation of waste in different bins, and that their producers are all duly certified organic
Brand	Participants remembered the logos of their favorite organic food brands. They also commented that they always associate their organic food stores with a space where they can feel calm and can "breathe" health. Another part of the interviewees said that they saw and associated their brands with guarantee, satisfaction, taste, and quality; very similar to what the focus group members answered. They responded that they find them as brands that are identified with the well-being of the human being, health, truthfulness. On the other hand, they affirmed that the attributes of their favorite brand are: The taste, the fact that they do not have chemicals, the eco-labeling, and that there are no adverse reactions in your body from consuming them
Place	Participants commented that their favorite stores are adorned with recycled materials or with things that allude to nature such as wood, stone, painted in bright colors. Participants agreed that their favorite store promotes a culture of health, trust, and harmony with the environment. Participants really have knowledge about the sustainable practices carried out by their organic store of choice; They mentioned that with the fact that they sell organic products they are already friendly to the environment and contribute to society The interviewees, for their part, commented that the sustainable practices carried out by their favorite stores are that they use paper bags and not plastic, which pollutes a lot and takes 500 years to degrade; They also have agreements with farmers to have a fair price and therefore fair trade. Their stores also have a certificate of guarantee that they are organic
Positioning	They responded that the values with which they related to their organic food stores of choice were first and foremost honesty; Regarding the most outstanding attributes, the guarantee was found, the taste, the aroma, the fact that it does not generate adverse reactions in your body; that is to say, healthy and among the benefits that consider good taste, adequate nutrition, quality and that they are organic

11.5 Conclusions

In the market there are different types of ecological products, some are related to products obtained from agricultural and livestock practices that are more environmentally friendly with the environment and also products related to traditional practices. Likewise, commerce provides friendly products, which are ecotourism, which is the development of areas with natural characteristics. Natural wood products, that is, they are those that timber species and their products use as raw or transformed material. Likewise, sustainable agricultural systems, which are the activities of breeding or cultivation of species within the framework of good environmental practices, inorganic and/or ecological agriculture systems, etc.

Governments and also health organizations are gradually educating the population to lead healthier lives to prevent disease and avoid medical expenses. And it is that organic foods are presumed much healthier since they do not contain added chemicals and also follow their natural growth cycle.

The use of the collective brand will give you competitive advantages and position your products in the local and regional market, in addition to increasing sales and consumers. The community is a kind of strategy, which allows, jointly, to develop common guidelines. The use of a collective brand encourages the search for certain quality standards. This is also related to the need for innovation. The use of a collective mark does not preclude the use of individual marks.

A collective brand is a sign used by a group of people who belong to the same group to make consumers aware of certain characteristics that their products share. It is a commercial strategy to mobilize social elements, which derives from a social cause and aims at the collective welfare. Starting with building the brand with the community, and that its elements are designed by them, in order to communicate to the market, the authentic values of the community, product, and brand.

Collective brands are business organizations, at various levels of production, whether agricultural, agricultural, or artisanal. The objective of these is oriented to the consumer public. So that each organization can use the collective brands to face the market, having, in some way, support.

The objectives of developing a collective brand are (A) Strengthen the marketing and marketing capacities of beneficiary small producers, in accordance with an approved training plan. (B) Identify channels and events of national and international scope that lead to the promotion and commercialization of products with added value. Manage participation and accompany producers in the process. (C) Prepare a business plan, with special emphasis on commercial and financial aspects (present marketing plan and financial plan separately), for each group of producers.

The creation of the collective brand would provide benefits such as (A) Promotion of products from a region or area. (B) Homogenize the quality of the products. (C) Have a common marketing strategy. (D) Cope with expenses jointly. (E) Differentiate yourself from other products.

Agroecological Marketing

Revaluing the organic, the natural, and protecting the environment is becoming quite important today and is becoming a trend in the world, more and more. However, the expert emphasizes that the category of organic products should be better defined. It must be well marked that it is ecological and it is not just a fashion as it happens with light.

An informed consumer will be a person who has a lot of power, not only to consume organic products but also for any other product. Its main informants will be companies and the state mainly. With this they will learn to value ecological products and leave behind purchase inhibitors such as price and time.

Time and price refer to the fact that when a person sets out to buy a green product, he may know that it is good for the environment and society, but this is not perceived at the moment but in the short term. The benefits will be seen in the medium or long term, so it is possible that your benefits are not so valued and therefore you are not willing to pay a higher price for this type of product compared to a more comfortable one that is not "green".

For this reason, educating the consumer is important for the sale of green products, because it is a way of teaching the consumer to value and really know the benefits that this type of product contains.

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Chapter 12
The Importance of Public Communication Campaigns for the Disclosure of World Heritage

Artur Filipe dos Santos and Marta Loureiro dos Santos

Abstract The cultural heritage is a crucial asset to understand the historical heritage of humanity and is an essential support to legitimize the path toward the future, since, as in the past, future generations will judge our actions, whether or not we have been able to preserve the path we have trodden to our present. It even serves to protect another good, also invaluable, the intangible heritage, nowadays very in vogue, and that begins to take the first steps in its safeguard: it is the gastronomy, songbooks written and sung, legends, the typical and ancestral clothing, among others, who write in the "skin" the history that is urgently needed to be preserved. This paper is the result of antecedent research, emanated from the doctoral thesis in Communication and Heritage, presented in 2012 at the University of Vigo, which aimed to study the importance of Communication in the award of the title of "World Heritage", under the aegis of the UNESCO World Heritage Center (United Educational Nations, Scientific and Cultural Organization) to the urban historic oldtowns, and its contribution to the promotion of protected heritage, with a view to preserve and exploit the economic potential. This article aims to build a reflection on the public communication campaigns carried out by both the UNESCO World Heritage Center along with national and local authorities, aiming to build an image of defense of the cultural heritage, as well as the promotion of a more sustainable tourism, fundamental for the preservation of heritage and its relationship with future generations.

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12.1 Introduction

Public Communication campaigns play an essential key role in the necessity of informing people about the efforts of disclosure and awareness not only of world heritage but in many fundamental subjects of modern society.

Atkin and Rice give a definition of what is a public communication campaign:

> Public communication campaigns can be defined as purposive attempts to inform or influence behaviors in large audiences within a specified time period using an organized set of communication activities and featuring an array of mediated messages in multiple channels generally to produce noncommercial benefits to individuals and society [16].

The same authors point out the complexity of these campaigns:

> The campaign as process is universal across topics and venues, utilizing systematic frameworks and fundamental strategic principles developed over the past half-century. Campaign designers perform a situational analysis and set objectives leading to development of a coherent set of strategies and implement the campaign by creating informational and persuasive messages that are disseminated via traditional mass media, new technologies, and interpersonal networks (Atkin and Rice 2012).

From the beginning of the UNESCO organization for the protection of cultural and natural heritage, the World Heritage Center (WHC) proved the importance of the public campaigns throughout the years on what it concerns in promoting the need of safekeeping the cultural heritage and the disclosure for all generations.

12.2 Antecedents of Public Campaigns in the Preservation of Cultural Heritage in the Twentieth Century

When UNESCO created the World Heritage Center (WHC) in 1975 in Paris, a process initiated at the time of the signing of the Convention Concerning the Protection of the World's Cultural and Natural Heritage [18], ratified by 21 UNESCO-seating Member States (THE WHC), and embracing the following goals:

> The United Nations Educational, Scientific and Cultural Organization (UNESCO) seek to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity [23].

Until 1965, in addition to international cooperation around the preservation of the valuable estate of Abu Simbel, the heritage of Egyptian civilization and the protection of endangered goods in Italy, Indonesia and Pakistan, little was invested in international cooperation in cultural sites or in developing public campaigns of communication regarding the safekeeping of cultural heritage.

However, before World War II, the League of Nations (founded in 1919, extinct in 1946) sought consensus in the concert of nations concerning the protection of the legacy of mankind [4]. But the politicization of the organization as well as its (failed) objective of avoiding future global conflicts, did not allow much room for concertation around the keeping of heritage [9].

Nevertheless, the so-called "Athens Charter", dated 1933 [8], was obtained in the auspicious of this organization, which aimed to establish a body that would help states better protect their monuments, as well as support them in the restoration of cultural and historical assets, being drafted, as well as signed by some of the greatest architects, urban planners and historians of that time, of which stands out the name of the French architect Le Courbusier, one of the architects of what would become the headquarters of the United Nations in New York.

The Letter of Athens, drafted as the theme of completion of the IV International Congress of Architects and Technicians of Historical Monuments, which took place precisely in Athens, Greece, in October 1931, on the auspices of the League of Nations, had as objectives the preservation of the architectural characteristics of the monuments, the protection of the cultural and social characterization of the site where the monument is located, the protection of monuments against economic speculation and the use of monuments for educational, social and cultural purposes, creating a kind of basic law on modern urbanism to be adopted by states, countries and city authorities in particular [2].

Thus, already before the emergence of the organization that would launch the challenge of creating the classification of universal cultural sites, the UNESCO World Heritage Center, within the framework of the United Nations, on the other hand, several countries often sought to join efforts for the preservation of historical and cultural assets, in a clear organization of public communication campaigns.

12.3 The Importance of Communication and Public Campaigns for the Protection and Dissemination of World Heritage

It is reflected on this theme and its space in the universe of communication sciences and in the cultural, educational and tourist dissemination of heritage, its definition and the contribution of public communication campaigns throughout the process that led to the creation of the World Heritage Center, the processes of application and classification of cultural sites.

Manuel Martin Algarra, Universidad de Vigo, Spain, points out the importance of the study on public communication campaigns:

> Research on public communication campaigns raises questions of great theoretical interest in the development of communication science [1].

Narasimha Reddi, professor of Public Relations at the University of Canberra, Australia and former president of the Indian Society for the Study of Public Relations, first defines public communication as follows:

> Public Communication is the conscious attempt to change or modify the beliefs, attitudes, values and behaviors of an audience in the public arena through symbolic manipulation of the senses. Communication that emanates from public authorities intended for the benefit of the community is called public communication [15].

As far as the definition of public communication campaigns concerned, William J. Paisley addresses this theme in the light of the American experience:

> Public communication campaigns are a familiar and essential of American civil culture. Campaign topics range from personal issues such as health to social issues such as equal opportunity, energy conservation, and environmental protection. Campaigns are regarded as public service programs if their goal is widely supported by the public and policymakers, If their goals are controversial, however, then campaigns are regarded as advocacy strategy [13].

If we think about the definition of a public communication campaign, we conclude that the governments, by having the need to raise awareness, disseminate or even call for a change of behavior, at the educational, social and even economic-tourism level with a view to the preservation and promotion of heritage, promote public communication campaigns, occupying their own space on the media path, different from the place occupied by the media, as Martín Algarra states:

> Like any topic of general interest, health occupies an increasingly important and wide-ranging place in the media. However, they do not always find the most appropriate ways and contents to achieve a healthier society, are more aware of the importance of health, more aware of what to do to maintain and increase it and are more prone to behaviors that can make individuals feel better. On the other hand, the media not only do not exercise a task of promoting health but, either because of the economic constraints of their dependence on advertising, which imposes the spectacularization of public communication or because of a lack of professional quality, the media are in many cases diffusers of confusion and promoters of insane behaviors and attitudes [1].

By developing campaigns to promote scientific and cultural knowledge at the global level, especially in the less industrialized countries, UNESCO sought to support states and local authorities in organizing initiatives to reduce the level of illiteracy in the most deprived populations.

As studied by Mastura et al. [11], UNESCO, by launching a public communication campaign with the various members of this institution and with the members of the United Nations, was able to create a global projection for the importance of the global heritage of all mankind, thus contributing to create a new media space that the media at the time could not occupy, because it does not have this dimension or, above all because it is not simply the charism or the goal of media. However, these media are still an essential supporting vehicle for much of the information created by the public communication campaigns organized by UNESCO, although some of the campaigns created by state or city authorities try to forge an advertising image "through media, based on marketing techniques and a strong rhetorical dimension" as said by Peixoto [14].

Even today, the World Heritage Center, a faithful depository of the conclusions of the 1972 Convention, develops public communication campaigns, in partnership with the Member States of this organization, regional authorities, with universities, schools, public bodies, private entities, promoting information programs with the essential objective of raising awareness of the preservation and dissemination of heritage, not forgetting to continually feed a collective awareness of thinking heritage as a historical and natural legacy [5].

To understand the importance of developing these campaigns, even to promote ideals of sustainability and to ensure the communication of information, not only for tourists but mainly to local and country citizens and also to business subjects, Buhalis and Keeling suggest, by refereeing the cultural heritage of Cappadocia, Turkey) that it is essential a firm collaboration between public and private sector, evolving public campaigns of heritage disclosure, regarding the main role of non-governmental organizations: "They should organize public campaigns, seminars and workshop to inform residents and businesses about sustainability issues in the region" [27].

Tim Winter, citating Ramakrishna Mission Institute of Culture, highlights the im- importance of public campaigns in order to develop indigenous culture but also increase the respect for other cultures:

> A true appreciation of foreign cultural values is only possible for a nation that is master of its own destiny and of its own culture, and conscious of the genuine nature of its own personality. For this reason, a campaign for the understanding of one's own culture must accompany efforts for the appreciation of the values of other nations [28].

12.4 Examples of Public Campaigns for the Dissemination of World Heritage

One of the examples of public communication campaigns, which the World Heritage Center launched, together with state and regional authorities, was to safeguard cultural sites in Ethiopia, alongside the preservation and restoration campaigns:

> Ethiopia-International Campaign to Safeguard the Principal Monuments and Sites of Ethiopia: the area of Africa that is present-day Ethiopia has a long history rich in tradition; its sites and monuments bear witness to the civilizations that have had their roots in this territory for more than 2,700 years. The buildings and monuments of Aksum, Gondar, Harar and Tiya reflect periods of great influence, growth and prosperity, while the churches and mosques of Lalibela, Lake Tana, Harar and Adadi Maryam testify to the ingenuity and faith that has given strength to the people of Ethiopia in times of adversity. Considering that these riches are part of the cultural heritage of all humankind, the General Conference of UNESCO has approved the Organization's participation in support of an International Campaign to Safeguard the Principal Monuments and Sites of Ethiopia. With the help of UNESCO, the Ethiopian Government has initiated and organized a campaign to preserve, restore and present six important sites, four of which are registered on the World Heritage List. With the assistance of the international community and public opinions and through technical and financial organizations and the family of United Nations agencies, the people of Ethiopia are now in a position to achieve their praiseworthy aims. It is my hope that the people of the world will continue to show solidarity by contributing the necessary technical equipment, supplies, training and funds that are necessary to restore and preserve these sites and so ensure the success of the Ethio- pian campaign. (…). The campaign is being implemented

> by the Government of Ethiopia guided by the National Committee for the Preservation of Historical Sites and Monuments. The Director of the Center for Research and Conservation acting under the Committee will administer and implement the promotional and preservation activities of the campaign. UNESCO and the United Nations Development Program have indicated their support for the campaign, in the form of assistance and advice [20].

Another example is communication campaigns aimed at Education, with the promotion of the theme of heritage among younger audiences:

> The UNESCO program that gives young people a chance to voice their concerns and to become involved in the protection of the world's natural and cultural heritage. World Heritage Education the UNESCO Young People's World Heritage Education Program (WHE Program) seeks to encourage and enable tomorrow's decision-makers to participate in heritage conservation and to respond to the continuing threats facing our heritage. Launched in 1994, the WHE Program provides young people with the necessary knowledge, skills, network and commitment to become involved in heritage protection from local to global levels. New pedagogical approaches are developed to mobilize young people to participate actively in the promotion of World Heritage [24].

The main goal of these programs is to develop a close campaign among young people, for the importance of protecting cultural heritage, essential aim that the Convention on Cultural and Natural World Heritage of 1972, points to article 27, of the necessity to involve young people in the preservation and promotion of universal heritage [18].

Another example of great importance at the level of heritage-related public communication campaigns, which has been uninterrupted annually since 1999, is the "European Heritage Days" initiative, or also entitled "European Heritage Days", originated in Granada (Spain) on 3 October 1985, during the 2nd Council of Europe Conference of European Ministers responsible for Architectural Heritage [6].

Although this initiative is not closely linked to UNESCO listed heritage, this organization is often a partner, which has as its main objective to raise in the european citizens an awareness of the importance of defending heritage as a safeguard for future generations:

> Throughout Europe, during the weekends of September, the European Heritage Days open the doors of numerous monuments and sites, many of them usually closed to the public, allowing Europe's citizens to enjoy and learn about their shared cultural heritage and encouraging them to become actively involved in the safeguard and enhancement of this heritage for present and future generations [6].

12.5 Public Campaigns on Digital Media

It is undeniable the importance of digital age for the disclosure of cultural heritage. The capacity of reaching various publics is enormous, regarding the reality that we live in our days with the rise of Web.30.

Visser [26] infantize that "cultural and heritage institutions around the world have recognized the potential of the digital age to help them overcome many of the challenges they face". Having said that, the UNESCO recognizes the importance of digital media such as websites, mobile applications and social media for the dissemination of all information regarding heritage.

Pointing to the fundamental key role that the UNESCO World Heritage Center website for that effort, Lin and Weng [17] points that:

> There are many introductions about World Heritage on the Internet, especially the official website of United Nations Educational Scientific and cultural organization (UNESCO), which provides the authoritative and comprehensive data of world heritage. It is usually the most popular platform to obtain world heritage information.

According to the WHC webpage, there are more than 128 thousand members registered on the website [19].

Having a look at the WHC homepage we can automatically find information about more than twenty public campaigns that are being developed by UNESCO, country, and local authorities such as the "World Heritage and Sustainable Tourism Program", the "World Heritage Cities Program" and also "Central Africa World Heritage Forest Initiative" [25].

Another good example of how far the disclosure of world heritage can reach, even outside the UNESCO main webpages like the WHC homepage or the UNESCO national committees websites, we find, for example, the Google Arts and Culture Website dedicated to world heritage, providing digital excursions of over 1000 world heritage websites [12].

The main goal of this Google Arts and Culture website is to "explore UNESCO World Heritage, preserving the most outstanding places for future generations to enjoy" [7].

Focusing on mobile applications, there can be found more than ten, related to world heritage such as Hongluiu Li "World Heritage Sites On map", Deutche Welle "DW World Heritage 360" or Harper Collins "UNESCO World Heritage" [3] but none of them are official UNESCO mobile application. That is yet to be developed according to UNESCO WHC [25].

It is also important to point out the information regarding public communication campaigns regarding world heritage that can be found on the ICOMOS (International Council on Monuments and Sites), a non-governmental international organization linked to UNESCO, dedicated to the conservation of the world's monuments and sites. The "Caja de Experiencias" program or "No Culture No Future" are two examples of public communication campaigns that can be found on ICOMOS [10] website.

In social media, we can find various pages relating to world heritage, with highlights to the UNESCO *Facebook* main page [22], followed by more than one billion people or in this organization *Instagram* [21], with 2.3 thousand followers. Although these pages are mainly focused on published photos and videos, information according to public campaigns can be found such as the World Arabic Language and Heritage Day program or the ResiliArt for Beirute.

12.6 Conclusion

As with several other social and/or cultural issues, public actors who are active in the heritage sphere also find themselves in need of communication campaigns to inform the public opinion, motivate the younger generations for the importance of education based on the need for the preservation and dissemination of heritage, as well as raising awareness of the various areas of society, not forgetting the business sector, for the keeping of world heritage as a legacy but also as economic and social value available to countries. In this reality, the role of UNESCO, from the World Heritage Center, in communion with the national and local authorities of the member countries of this United Nations organization, is of particular importance, by the global range of action that communication campaigns can achieve, with the aim of communicating on cultural heritage, its protection and safeguarding, but at the same time as a product of high tourist quality, obtaining resources from the business sector for the continuity of the most varied national and transnational projects to keep the universal cultural heritage. Digital media, with a special focus on social media, is an indispensable tool for the dispersion of information, privileged vehicles for the dissemination of public campaigns related to the protection and promotion of cultural heritage.

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Chapter 13
Technological Attributes that Predict Tourists' Intention to Visit Destination, Recommend and Destination Image: Empirical Evidence from the Malaga Chatbot

Orden-Mejía Miguel and Assumpció Huertas

Abstract Chatbots are a technology that is causing disruption in the tourism industry. Despite its implementation in destinations and services, there are no tourism studies that examine the informativeness, accessibility, interactivity, and empathy in behavioral intentions. Statistical tools such as exploratory factor analysis and the hierarchical regression method were used in the data analysis. The results suggest that the attributes of informativeness were the most significant predictor of the behavioral intentions, followed by perceived empathy.

13.1 Introduction

Smart tourist technology (STT) refers to both general and specific applications that can enhance tourists' experiences as well as generate added value [26]. Examples of STTs include augmented reality (AR), Internet of Things (IoT), near field communication (NFC), virtual reality (VR), sensors/actuators (Beacons), near field communication (NFC), payment systems (Blockchain), and chatbot or dialogue systems.

This study focuses on chatbots, they have revolutionized various economic sectors [24], especially those that require instant information and personalized user services [3]. For this reason, they are being implemented to a wide extent in the tourist sector and especially in the scope of tourist destinations. Chatbots can be currently

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found in several places, for example, websites, mobile applications, smart destinations, airlines, restaurants, hotel reservation sites, transportation, and smart speakers, among others. Important companies such as Google, Facebook, and Microsoft see chatbots as the next popular technology [9]

Nowadays, in the field of tourism, have begun to emerge studies focused on AI and intelligent automation [37] and others focused on robots [30] tan mainly describe their applications, benefits, and future implementations. But studies that analyze the impact of these technologies on the tourists' experiences are still scarce [37], and the focus exclusively on chatbots, is non-existent. Therefore, this study aims to know the attributes of STTs (Informativeness, accessibility, interactivity, and empathy) that influence and predict the tourists' intention to visit destination, recommend, and destination image.

The manuscript is structured, after this introduction, in a second section where a review of the scientific literature is made; a third section where the methodology used in the research is defined; a fourth section presents the results of the research, and finally, the conclusions are presented.

13.2 Literature Review

13.2.1 Chatbot

Chatbots were created from the concepts "chat" and "robot" [11]. Chatbots, also called conversational agents, conversational interfaces, dialogue systems, digital assistants, or intelligent assistants, among other names, are computer programs that interact with users in natural language [32]. They are technologically designed to communicate using text or spoken words and to respond flexibly and interactively in a conversation with humans [6]. Chatbots can answer tourist questions about the attractions to visit in a destination [31] or establish tourist recommendations for hotels [27]. Due to the inherent benefits in productivity, profitability, service, and customer satisfaction, they are causing disruption in the tourism sector, where they are increasingly used for searches, reservations, orders, or payments.

13.2.2 Relationships of Destination Image and Behavior Intentions

Previous research has examined the relationship between STT attributes and behavioral intentions [15] (Pai et al. 2020). Fishbein and Ajzen (1977) argues that behavior intentions are the best way to predict a person's behavior and to reflect his or her willingness to perform a behavior. Behavior intention in this study refers to tourists' intent or commitment to visit and recommend a focal smart tourism destination, after having interacted with the chatbot. This leads us to explore the following hypothesis:

H1: The intention to recommend is explained by the perception of informativeness, empathy, accessibility, and interactivity while using the chatbot.

H2: Touirists' visit intention is explained by the perception of informativeness, empathy, accessibility, and interactivity while using the chatbot.

Studies showed that user generated content, disseminated through social media, is a decisive DI formation agent [21]; and social media are important tools to the co-creation of DI [25]. Afterward, smart destinations started to introduce new technologies also with the aim to achieve a good image to destinations [2].

But existing studies on AI, chatbots, and robots have focused on the costs and benefits of these new technologies [13], on the interactivity and empathy that generate [6], or on the attitudes created by robots of the tourist industry to know the resistance of tourists to use them [14]. Ivanov and Webster [13] showed that benefits of applying AI, chatbots, and robots in tourism and hospitality companies were: the promotion of quality services, the creation of value for tourists making the service delivery process funny and entertaining, the promotion of positive Word-of-mouth and the creation of an innovative high-tech image. Buhalis and Cheng [5] analyzed more concretely the application of chatbots in hotels and showed their benefits, but they highlighted that it is necessary to continue advancing in the analysis of its full potential. These are studies focused basically on the tourist companies, and not on destinations. And those that focus on destinations [20] analyses the role of STT in general, and not only of chatbots, highlighting its advantages and benefits, and its influence on the attractiveness of destinations and on subsequent decisions of visit by tourists, but do not empirically analyze its impact on destination image. This leads us to explore the following hypothesis:

H3: The destination image is explained by the perception of informativeness, empathy, accessibility, and interactivity while using the chatbot.

Figure 13.1 shows the model of the analysis carried out in the study.

Attributes of Smart Tourism Technologies (STTs)

Lee et al. [17], No and Kim [28] have categorized STT by four unique attributes such as accessibility, informativeness, interactivity, and personalization. Informativeness is an essential aspect to measure the effectiveness of STT in destinations. Informativeness refers to a synergy between the quality and trustworthiness of information provided by STT at tourism destinations [28]. Consumers' perceived informativeness is positively associated with their trust in chatbots [39]. In this study, informativeness refers to the perception the tourist has of receiving relevant, reliable, quality information from the chatbot, during a conversational session.

Accessibility in digital products improves usability [36]. It is an important factor for the joint creation of tourist experiences [4]. However, a recent study showed that accessibility was not the primary factor for tourists to maximize a memorable experience at the destination [15]. Accessibility in tourism technologies is defined as the degree to which a visitor accesses information sources easily, during the trip, using intelligent technology systems such as the internet, mobile applications [28]. In this

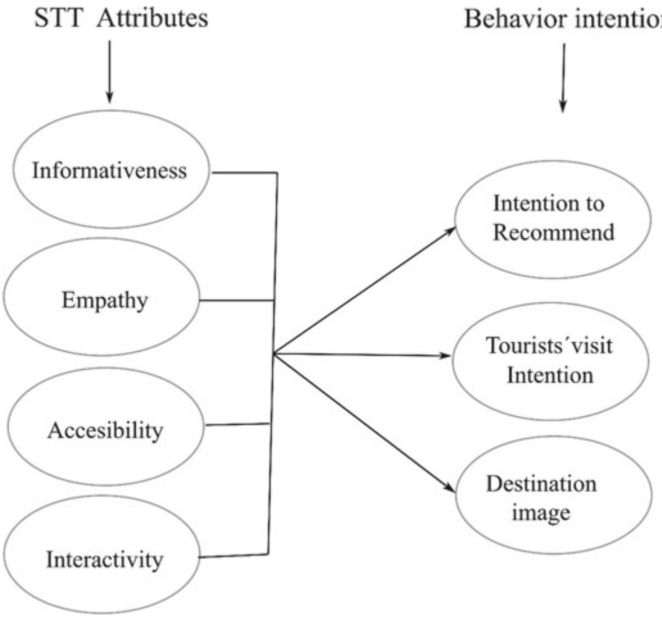

Fig. 13.1 Model between STT attributes and behavior intention

study, accessibility refers to ease, in terms of use and access [without complications] to the services or contents of the chatbot, by current tourists.

It is especially interesting to investigate the interactivity of chatbots because interactivity is one of their key characteristics and increases their humanness [10]. Recent studies on smart end-user technologies have suggested that interactivity is a key dimension of technology quality for smart services [7]. A greater message interactivity in a chatting context heightens a feeling of the other's presence [35]. The use of a chatbot for interactive message exchange can be a promising tool to create positive user engagement and enjoyable user experiences [12].

Psychological studies reveal that empathy is a two-dimensional construct [38]: (1) Cognitive empathy "comprehension of another person's emotions" [38] and (2) Affective empathy "vicarious emotional response to the perceived emotion of others" [22]. Chatbots with empathic features emulate affective empathy [19]. Empathy can be defined in the technology context as the humanoid "ability to identify understand and react to others' thoughts, feelings, behaviors, and experiences" [23]. In this study, a chatbot with empathy refers to its ability to identify the user's emotions from the conversation [40].

13.3 Methodology

The study analyzes the tourist chatbot "Victoria la Malagueña" of the destination Malaga. The research consisted of an experiment with students from the Rovira i Virgili University, Spain. The participants had to interact with the chatbot for 10 min, to make inquiries about restaurants, transport, museums, tourist routes, services, tourist activities, or weather conditions, imagining that they were on vacation in those places. After interacting with the chatbot, they independently completed a questionnaire about their experience using the chatbot. The experiment was carried out between October and November 2019, applying the convenience sampling technique. The data collected from the 247 participants was organized, tabulated, and analyzed using the statistical software tools SPSS 25 and Gpower 3.1.

The questionnaire had two sections of questions. The first corresponded to questions about sociodemographic aspects, the frequency of tourist trips, and the time they spend on internet entertainment. The second section referred to the statements that measured the attributes of STTs such as informativeness, accessibility, and interactivity, which were adapted from previous studies [17, 28]. The empathy construct was designed by the authors from the studies of Chaves and Gerosa [6] and Zhou et al. [40]. Furthermore, behavioral intentions were adapted from [1]. In relation to destination image [18]. All items were measured on a seven-point Likert scale [1 = Disagree, 7 = Agree].

First, a factor analysis was performed to identify the underlying structure of the data, a technique widely used in tourism research [16]. Likewise, the Kaiser–Meyer–Olkin (KMO) sampling adequacy measure was used to determine the factorization of the data [34]. Second, the hierarchical multiple regression method was implemented to find positive or negative predictions between the theoretical attributes of STTs (informativeness, accessibility, interactivity, empathy) and behavioral intentions and image.

13.4 Result

Exploratory factor analysis (EFA) was used as a data reduction technique, applying the maximum likelihood extraction method and the promax oblique rotation technique. The analysis was applied to the 17 statements of the questionnaire that formed a four-dimensional structure: "informativeness", "interactivity", "accessibility" and "empathy". The KMO value of the data was 0.861. In total, four factorial attributes were part of the solution and represented 57.56% of the total variance explained. The Cronbach's alpha of the factors ranged between 0.92 and 0.70. Bartlett's sphericity test obtained a significant value ($x^2 = 2100{,}325$; d$f = 136$; $p < 0.001$). Factor loadings exceeded the critical value of 0.50.

The most valued attribute in the model is "Informativeness", which refers to the useful, appropriate, and relevant information provided by the chatbot. This factor represents 31.22% of the explained variance. The second attribute, ranked in order of importance is "Empathy", which refers to the ability of the chatbot to generate empathic responses during a conversational session. This factor represented 10.33% of the variance. The third highest-rated attribute was "Accessibility", which refers to the ease of use and access to the chatbot at any time. This factor included 9.13% of the variance. Finally, the fourth attribute was "Interactivity", which refers to the response time of the chatbot to the user, as well as the ease of sharing information with other users. This factor comprised 6.87% of the total explained variance (Table 13.1).

This factor represented 10.33% of the variance. The third highest-rated attribute was "Accessibility", which refers to the ease of use and access to the chatbot at any time. This factor included 9.13% of the variance. Finally, the fourth attribute was "Interactivity", which refers to the response time of the chatbot to the user, as well as the ease of sharing information with other users. This factor comprised 6.87% of the total explained variance.

Table 13.1 Factor analysis of the STT attributes

Attributes	Mean	SD	Loading	α
INF:Informativeness (variance explained = 31.22%)				0.92
INF1: Chatbot provided useful information	3.84	1.72	0.946	
INF2: Chatbot provide quality information	3.74	1.68	0.907	
INF3: Chatbot provided adequate information	3.90	1.72	0.870	
INF4: Chatbot provided detailed information	4.38	1.71	0.861	
INF5: Chatbot provided relevant information	4.41	1.99	0.716	
INF6: Chatbot provided substantial information	4.15	1.69	0.674	
Empathy (variance explained = 10.33%)				0.82
EMP1: It was fun when it replied	4.11	1.94	0.783	
EMP2: I was impressed by the responses of the chatbot	4.16	1.81	0.752	
EMP3: I smiled at the chatbot's responses	4.98	1.72	0.722	
EMP4: I liked chatting with the chatbot	4.33	1.73	0.572	
EMP5: In general, the chatbot has empathy for *chitchat*	4.17	1.57	0.493	
Accessibility (variance explained = 9.13%)				0.79
AC1: I can use the chatbot anywhere	5.79	1.52	0.962	
AC2: The chatbot has an easy-to-use interface	5.89	1.33	0.702	
AC3: I accessed the chatbot without a complicated registration process	5.76	1.39	0.607	
Interactivity (variance explained = 6.87%)				0.70
INT1: The chatbot responds to my requests promptly	3.39	1.73	0.677	
INT2: It was easy to share information through chatbot	2.89	1.61	0.657	
INT3: Chatbot was highly responsive to users	3.30	1.73	0.652	

Note Total variance explained (%) = 57.56; SD = Standard deviation

Table 13.2 Relationship between the attributes and the intentions to recommend the destination

Model	F	R2	ΔR2	B	Standard Error	β	p	1-β	f^2
	26.471 (4,242)	0.304	0.293				0.001	1	0.414
Informativenes				0.775	0.113	0.442	0.001		
Empathy				0.266	0.217	0.143	0.038		
Interactivity				0.225	0.112	0.111	0.046		

13.4.1 Relationship Between Attributes and Intentions to Recommend the Destination

Regression analysis is used for the variables of interest. It helps to provide an estimation of the relationship among the variables and the impact of independent variables on the outcome variables that exist within a population (Shrestha 2020). Table 13.2, shows that all the indices of significance, statistical power, and effect size are adequate and that together the variables predict 30.4% of the intentions to recommend. The regression model was significant in the F test ($p = 0.001$), which indicated a real relationship between significant predictors and intentions to recommend. There were no multicollinearity problems between the independent variables (tolerance > 0.2; VIF < 10), and independence between the residuals could be assumed (Durbin-Watson = 1.720).

The "Informativeness" attribute was the most significant predictor of the intentions to recommend ($\beta = 0.442$, $p = 0.001$), followed by the "Empathy" attribute ($\beta = 0.143$, $p = 0.038$). It seems that tourists would be willing to recommend the destination if the information provided by the chatbot is useful, of quality, and with empathetic features. For this reason, chatbot designers must aim to sophisticate the levels of understanding of the machine learning algorithm, so that it can deliver coherent responses to user requirements. Likewise, it is necessary to increase the ability to respond with effective tones depending on the context of the dialogue, this could humanize the human-chatbot conversation.

13.4.2 Relationship Between Attributes and Intention to Visit the Destination

According to Table 13.3, three attributes, which accounted for 61.7% of the variation, appear to influence the intention to visit the destination. The model was significant in the F test ($p = 0.001$). Likewise, the multicollinearity indicators VIF (Variance inflation factor) lower than 10 and the tolerance values higher than 0.20 indicate that there are no high correlations between the factors of the model. Finally, the

Table 13.3 Relationship between the attributes of the STT and the intentions to visit the destination

Models	F	R2	ΔR2	B	Standard error	β	p	1-β	f^2
	97.663 (4,242)	0.617	0.611				0.001	1	1.61
Informativeness				0.908	0.077	0.561	0.001		
Empathy				0.449	0.087	0.262	0.001		
Accessibility				0.222	0.070	0.135	0.002		
Interactivity				−0.018	0.077	−0.010	0.810		

Drubin Watson indicator (1.742) was located within the two units, which allows a generalization of the data.

The "Informativeness" attribute was the most significant predictor of the intentions to recommend ($\beta = 0.561$, $p = 0.001$), followed by the "Empathy" attribute ($\beta = 0.262$, $p = 0.001$) and the "accessibility" ($\beta = 0.135$, $p = 0.038$). These results confirm H2. Nonetheless, the interactivity did not obtain a significant value that predicts the intention to visit the destination. Therefore, the interactivity of the chatbot should be improved during a conversational session by incorporating interactive images of the attractions, making the options for sharing information more user-friendly. Thus, they can influence potential tourists (national or foreign) who have the intention to visit Malaga.

13.4.3 Relationship Between the Attributes and the Destination Image

The results of Table 13.4 show that three attributes represented the $R^2 = 52.1\%$ of the variation with respect to the image of Malaga. The F ratio obtained significant values. There were no multicollinearity problems between the independent variables in terms of tolerance and inflation of the variance. The Drubin Watson indicator

Table 13.4 Relationship between the attributes of the STT and the image of the destination

Model	F	R2	ΔR2	B	Standard error	β	p	1-β	f^2
	65.812 (4,242)	0.521	0.513				0.001	1	1.08
Informativeness				1.088	0.096	11.309	0.001		
Empathy				0.405	0.108	3.373	0.001		
Accessibility				−0.069	0.087	−0.038	0.427		
Interactivity				0.203	0.096	0.097	0.035		

(1.904) with a value close to two units, allows to assume independence between the residuals and therefore the data can be generalized.

The "informativeness" attribute was the most significant predictor of the destination image ($\beta = 11.309, p = 0.001$), followed by the "empathy" attribute ($\beta = 3.373$, $p = 0.001$) and the "interactivity" ($\beta = 0.097, p = 0.035$). The "accessibility" does not predict the image of the destination ($\beta = -0.038, p = 0.427$). This last result can be explained by the ease of access that you have to use the chatbot, and because the level of effort is minimal for its use. In other words, respondents scored very high on the scale when it came to accessibility, which translated into high kurtosis levels.

13.5 Conclusions

The intent to recommend the destination is predicted by the informativeness, empathy, and interactivity attributes. However, accessibility does not play a predictive role. This could be explained because the ease of access to chatbot-based dialogue systems is simple to use and easy to share information, therefore, the participants do not consider an attribute that allows recommending the destination.

However, the intention to visit the destination is predicted by informativeness, empathy, and accessibility. Thus, empathy in the chatbot's responses becomes the second predictor attribute of visit intention. That is the more empathetic the chatbot's responses, the greater the intention to visit the destination. Therefore, this attribute should be further improved, in order to further influence users who are trying to visit a destination.

Finally, informativeness is the attribute that best predicts the image of the destination. Therefore, care must be taken to maintain the level of effectiveness in the responses to users, so that they get a satisfactory image of the destination. Likewise, the empathy attribute becomes another essential predictor in the image of the destination. Therefore, chatbot designers have the opportunity to further improve the forms of affective responses to user questions. This could help humanize conversations with chatbots.

The main limitation of the present study is that the participants in the experiment were mostly young people under 24 years of age. Although it is a key target population for the study, it would also be interesting to discover the interests, behaviors, and opinions of other age groups.

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Chapter 14
The Potential for ICT in New Museums—The Case of the Douro Museum

Isabel Vieira, Didiana Fernandes, Bárbara Amaro, and Aida Carvalho

Abstract The relationship between the exponential growth of Cultural Tourism and the multiplication, requalification, and diversification of Museums is widely accepted. The swift evolution and proliferation of Information and Communication Technologies have opened up new possibilities, both in the management of heritage assets and in the way they should be shared with the public, by providing new entertaining and educational ways to do so. The Douro Demarcated Region, unique from a historical, economic, social, cultural, and environmental point of view, received in 2008 Portugal's first Territory Museum, the Douro Museum, which has been exploring the resources made available by ICT to better fulfill its Mission of musealization of the territory. This process includes an online presence (to disseminate activities and share information about the Region), an exhibition space (which is equipped with tools and devices that convey a wide range of information), and digital access to the collections (focusing on a more specialized/academic public). These experiences have shown that the use of technologies broadens the museum ecosystem and multiplies the types of audience who take part in the various museological and cultural initiatives. This way, ICT is increasingly recognized as important tool used to broaden the museums' scope of influence across a given territory.

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14.1 Introduction

We live in the Information Age. However, to say that we live in the Age of Information and Communication Technologies would be more appropriate, given the omnipresence of devices through which that information reaches us. Their capacities and applications have developed in such a way that they became a major part of any sector of human life, including—or above all—those related to leisure and Tourism.

14.1.1 The Tourist-Museum Binomial

Tourism is an example of an economic activity with sustainability and accessibility concerns, in which the specialization of supply and the requalification of products are key elements to differentiation and success. 2019 was the sector's tenth consecutive year of worldwide economic growth [1]. Prior to the Pandemic, Tourism accounted for 10.6% of all jobs and 10.4% of global GDP [2]. Cultural Tourism—in which museums exert a powerful attraction—has been the fastest-growing segment of the tourist industry. On the other hand, funding, sustainability, and relevance needs have led museological institutions to explore their touristic potential. Thus, the Tourist-Museum binomial became an interdependence relationship [3].

Contemporary Museology. Long gone are the days when the word "Museum" was synonymous with exhibition or collection. Modern Museology, triggered by the scientific and Enlightenment enthusiasm of the eighteenth century, gave way to the principles introduced by the New Museology movement of the 1960s [4]. This movement was responsible for the birth of the "integral museum" that broke down the traditional boundaries of museological action (conservation and exhibition) to address people's needs and those of contemporary societies. From mere inert and hermetic institutions, Museums became a unique link between the social and cultural structures [5, 6].

The current ICOM (International Council of Museums) definition of "Museum" places them "at the service of society and its development" [7] since development cannot be conceived without upstream cultural action [8].

14.1.2 ICT and Museology

The possibilities that ICT opens up for Museology are vast and focus on two essential aspects: (1) the creation of products and experiences for the visiting/tourist public and (2) the construction of widely accessible documentary archives [9]. Their great potential is closely related to the digitization and the access to collections and data [9, 10, [11], but they are also closely related to the museums' educational nature, shaping the way these use technology to deepen their educational practices [9, 12, 13].

That way, ICT infinitely broadens the number and types of museum users. They offer a wide range of solutions to enrich the physical visits by opening a window to a number of possibilities and specializations, enlarging the exhibition ecosystem [11, 12]. Simultaneously, they make cultural consumption available when and where users want to hear or view it, turning "digital culture" into a synonym of "accessible culture" [10, 14].

ICT are channels of dialog between the Museum and its public, however, it is true that technologies can become a mere trend and that the proliferation of apps, QR codes, and interactivity is often used as an end in itself and adds no real value to the experience [10, 12, 14]. Despite the warnings that technology would devalue the communication between people who are moving physically around the museum space, their attention being absorbed by the electronic device and away from the central museological object [13], experiences have shown that, when used correctly, it keeps visitors mindfully in contact with the objects and the time spent in the exhibition is longer than without any technological devices [10].

However, the application of ICT to the museological environment carries some problems, namely the costs associated with their design and installation, the need for specialized maintenance, and frequent content updating. Another complex issue is related to the way museum collections can be made available to the public, and the need to create normative, scientific, and methodological frameworks that regulate the use of information outside the museum environment [9, 10, 13].

Overall, we can say that the use of ICT is not a panacea for contemporary museums, but it can highlight the work done and provide the public with a visit that does not end when they leave the museum, as they can carry it (literally) in their pocket [15]. This is because, in addition to the use of technology in the exhibition space, social media have introduced a shift in the power balance and given visitors a greater control. The museum is responsible for choosing the way it will deal with this new paradigm: will it consider it a threat or an opportunity. Listening to the messages or comments left on social media lets the museum know what matters to the public. At the same time, sharing behind-the-scenes images of an exhibition set-up, rather than just showing the final result, gives the public a sense of being part of an exciting "secret". Instead of waiting for the public to show at the end of such process, the museum is calling and building its audience through social media, which is a better marketing tool than other forms of promotion, since it requires little financial and human resources [10, 15].

To illustrate these concepts, we will look at the use the Douro Museum—a Territory Museum—makes of different types of media and technologies to carry out its mission of being a reference in the preservation of the memory and in the dissemination of the heritage of the Douro Demarcated Region. After exposing the methodology that conducted our research (Sect. 14.2), we will demonstrate the unique case that is this first Territory Museum in Portugal (Sect. 14.3) as we highlight the ways in which technology enriches the user's experience, whether online, in the exhibition spaces or digitally accessing the collections (Sect. 14.3.1). The choice of this Museum stems from the need to understand how ICT can serve the mission of an institution that has its focus of action outside its four walls, spread across an area of 250,000 hectares.

14.2 Methodology

In order to investigate how ICT can be adjuvants in the processes developed by Cultural Tourism institutions, such as museums—more specifically those whose typology spawned from the New Museology Movement—we analyzed the case of the Douro Museum. We aim to learn which technologies are being used by that institution and how, and understand the potentialities and limitations of such use.

This article is a case study since it provides a unique example of a real entity in a real situation to illustrate themes and concepts that otherwise would be just abstract principles [16]. Taking into account the research objectives, a qualitative approach was followed—the most suitable for understanding social phenomena in the environment in which they occur [17]. The data collection methods of choice were direct observation and documentary analysis.

The sources selected were mostly official institutional documents (Activity and Accounts Reports of the Fundação Museu do Douro), information and communications available online through the institution's own channels (website or social networks), internal documents (activity reports prepared by each Service), and quantitative data from the entities that were responsible for managing the programs or products available. In addition to the analysis of these sources, which provided a detailed account of the actions carried out by the various services of the Douro Museum, some informal conversations with collaborators were useful to clarify some details regarding the information collected.

For data collection, we resorted to the use of reading sheets (for analysis and synthesis of information) and content analysis, with the purpose of observing changes and innovations in ICT. The quantitative analysis focused on the frequency of the characterizing elements, while the qualitative focused on the value of novelties and interests. Strategically mutually exclusive analytical categories were defined—Online presence, Exhibition space, and Digital access to collections—so that, later, relationships and associations could be established and then combined to draw conclusions.

14.3 The Case of the Douro Museum

One of the most prominent New Museology experiences in Portugal is the Douro Museum (DM), the first Territory Museum in the country, dedicated to the Douro Demarcated Region, the wine-growing area for the Port and Douro Appellations of Origin. Its 250,000 hectares reveal a striking landscape contrast to the surrounding regions and an identity cohesion rooted in its wine-growing vocation [18].

As a Territory Museum, its mission revolves around two main spheres: (1) approaching the various manifestations of the region's heritage and (2) maintaining a constant communion with the routines of the region, its people, and its institutions [19]. It is to be hoped that the pursuit of these objectives could be compatible with the creation of exhibitions and cultural programming aimed at the visiting public, attracting flows of people and capital to the territory.

Created by a Decree-Law issued by the Portuguese Parliament, it is managed by the Fundação Museu do Douro, F.P., which guarantees the territorial representativeness and institutional diversity of its founders. Conceived as a polynuclear structure that spreads across the region, its headquarters was inaugurated in December 2008, in Peso da Régua, the historical and institutional capital of the Demarcated Region. In 2019, 56,767 visitors visited the DM headquarters. In 2020, given the pandemic context, that number dropped to 14,602 [20].

14.3.1 ICT in the Douro Museum

Nowadays, museums favor a close communication with their different audiences (institutions, partners, locals, and tourists). The recent context of the Covid-19 pandemic has naturally reinforced the power of digital communication, so there was a focus on sharing information online and a significant investment was made to provide their staff with the training to make the best possible use of these resources and allow a greater dissemination through social networks, newsletter, and mailing.

A large part of the DM publications and exhibitions has already been available in digital format thanks to the work carried out by the museum's Educational Services. They have also been responsible for exploring audio-visual resources to create products like the IMATERIAL project, which was designed to create a vast database that includes a collection of video and audio recordings of places in the Douro landscape (*Apeadeiros* project), of unique stories told by the inhabitants of the region (*First Person Stories* project) and of experiences linked to the cultures of the region and the families that work its lands (*Cultures and People* project).

As for the contact with the public, ICT provides the DM with several possibilities that are explored according to three main spheres:

Online presence. The DM's primary digital tool is undoubtedly the institution's website—www.museudodouro.pt. Launched in 2008, it was awarded an Honorable Mention by APOM (Portuguese Museology Association) and was renewed in 2015. It was given a more attractive image and new features that include tabs related to the different services offered by the Museum (Educational Service, the Douro Museums Network, and collections databases). A detailed analysis of the website shows that it provides a wide range of contents (informational, emotional, interactive, and transaction-oriented), as shown in Table 14.1.

Since August 2019 the result of a partnership with the Regional Directorate of Culture of the North, carried out by DETALHAR, is available: the 360º virtual tour of the Museum. More recently, the result of the partnership with Google Arts & Culture platform was also presented, offering a virtual visit to two exhibitions and access to a catalog of 86 objects from the Museum's collection. The use of these two different tools is shown in Table 14.2.

Table 14.1 Content available on the website

1—Informational content		4—Interactive elements	
1.1—Information about present collections	✓	4.1—Audio-guides	
1.2—Information about old collections	✓	4.2—Catalogs	
1.3—Information about future collections	✓	4.3—Virtual tour	✓
1.4—Exhibition calendar	✓	4.4—Educational Platform	✓
1.5—Timetable	✓	4.5—Podcasting	✓
1.6—Ticket price	✓	4.6—Videocasting	✓
1.7—Information about concerts		4.7—Blog	
1.8—Information about cinemas		4.8—RSS subscription	
1.9—Information about presentations	✓	4.9—Mailing list (bulletin news/e-news)	
1.10—Workshops	✓	4.10—Word finder	
1.11—Meet the artist		4.11—E-mail address	✓
1.12—Lectures (Conferences)	✓	5—Presence on Social Media	
1.13—Group activities	✓	5.1—Facebook	✓
1.14—Restaurant/cafeteria	✓	5.2—Twitter	✓
1.15—Training/Research/Restoration		5.3—Google +	
2—Information about Institutional Content		5.4—Youtube	
2.1—Information about the museum	✓	5.5—Pinterest	
2.2—Activity plan		5.6—Flickr	
2.3—Annual report/activities	✓	5.7—Foursquare	
2.4—Museum's publications	✓	5.8—Linkedin	
2.5—Job offers		5.9—Museum Own Social Network	
2.6—Sponsors/patrons	✓	5.10—Google Art Project	✓
2.7—Newsroom		5.11—Other Social Networks: Instagram	
3—Emotional Content		6—Transaction orientation	
3.1—Picture Slideshow	✓	6.1—Online ticket office	
3.2—Video Slideshow	✓	6.2—Virtual shop	✓
3.3—Zoom		6.3—Online reservation	✓
3.4—Download games/Games		6.4—Friends of the Museum Membership	

Source Adapted from Camarero et al. [21]

Table 14.2 Use of the DM virtual visits

Dates	Users	Nr. of visits
360º Virtual tour		
2019 (From Aug. to Dec)	466	605
2020	1668	2068
2021 (Until June 11th)	588	679
Google arts and culture		
From Feb 19th to May 31st	836	2193*

*365 to virtual exhibitions and 1828 to collections catalog

Social networks have proven to be a valuable tool for maintaining the museum's communication with the outside world during the lockdown caused by the pandemic. Twitter, Instagram and, most of all, Facebook were vehicles used for sharing experiences, encouraging people's participation, and sharing results. Live videos managed to draw people's attention to the opening of Leni Van Lopik or Rui Pires's exhibitions, among others, and to the International Photography Awards. In addition to these live events, Facebook was also used to disseminate the work carried out by the Educational Service and the Conservation and Restoration Service, to showcase projects in progress (such as the preparation of the Armanda Passos Room and the rehabilitation of the Panificadora building) and promote training activities, such as the History of Photography Course webinars hosted by José Pessoa. The quantitative data on the scope of these initiatives, which took place until May 20th, 2021, are presented in Table 14.3.

The number of followers for each Social Network, until May 20th, 2021, is shown in Table 14.4.

The Douro Museum is also on TripAdvisor with an overall rating of four out of five points (March 14th, 2021). As for the ratings, 172 (40%) of them were excellent, 185 (43%) were very good, 58 were reasonable and 12 were bad.

Exhibition space. The resources that the museum offers its visitors are designed to provide a representation of the heritage assets—both tangible and intangible—that

Table 14.3 Scope of the events transmitted via Facebook

Service/Activity	Publication date	Pageviews
Leni Van Lopik's exhibition opening	3/05/2021	2.5 thousand
Rui Pires's exhibition opening	14/12/2020	4.8 thousand
International Photography Awards 2020	14/12/2020	4.6 thousand
Educational service, Docum. MALHAS, by Paula Preto	5/03/2021	5 thousand
Conservation and restoration, RIJOMAX Watch	4/10/2020	2.5 thousand
Presentation of the Armanda Passos room	17/02/2021	3.5 thousand
Rehabilitation works of the Panificadora building	24/02/2021	919
3rd History of Photography Training Course—José Pessoa	3/03/2021	667

Table 14.4 Social networks followers

Social network	Nr. of followers
Facebook Douro Museum	15,485
Twitter Douro Museum	615
Instagram Douro Museum	2551
Facebook DM Educational Service	829
Facebook Douro Museums Network	1849
Twitter Douro Museums Network	19
Instagram Rede de Museus do Douro	331
Facebook Sounds of Douro	4310

are scattered across the territory. This is the case of the Video Wall that displays images of the Winescape—the central topic of the museographic survey conducted in a UNESCO Cultural Landscape. The size and definition offered by such equipment allow for a more immersive and detailed viewing of the traditional aspects that make up the Douro landscape mosaic.

The screens are a constant presence around the exhibition space, providing videos and photographs meant to illustrate the concepts described in the panels and the objects on display. As an example, let us consider the complex task of grafting: in addition to a text alluding to the process and the presence of the tools used to perform such task, a video shows what the process is all about. This simplifies and shows a number of complex tasks related to traditional know-how that would otherwise be difficult for the tourist to understand.

A collection of great visual and historical interest is that of the Port Wine Labels and Posters. This vast database is displayed on two screens placed next to some real labels, thus allowing the contact with a much larger number of specimens.

Two other databases are available thanks to the presence of two interactive screens: (1) one about the Quintas located in the Region allows visitors to deepen their knowledge about the properties and eventually helps them define a circuit that meets their personal preferences; (2) the other focuses on the genetic heritage of the vine, i.e., the grape varieties authorized in the Region. The information is available in Portuguese and English and includes illustrative photographs.

In the center of the exhibition, there is a 3D model that reproduces the topography of the region, while a vertical light projection provides data and figures on demography, heritage, and the agricultural crops that can be found in the different geographical locations. This way, a large amount of statistical data becomes available, and the visual component makes it easier for the visitor to understand the information conveyed.

Audio-visual resources are also used to share museological processes the public is not normally familiar with. The Conservation and Restoration Service makes extensive use of this resource and some of their interventions are displayed on two screens placed around the exhibition space. One of those screens shows the process of disinfesting objects in an anoxic atmosphere and is placed next to a display case containing objects that are undergoing this specific intervention. The other screen shows the different restoration processes of several objects under the “Identify to Conserve” project. In addition to raising the visitors’ awareness about the importance of preserving these assets, these videos share the scientific knowledge and good practices that guide each intervention.

The Educational Service has its own screen, in the public area of the Museum to disseminate the cooperation projects developed with schools, associations, and the local population.

Audio-visual resources are also frequently used in temporary exhibitions. In Georges Dussaud photo exhibition, for instance, videos were used to reproduce the words of some of the people who were photographed 20 years before. Similarly, videos were also shown in different art exhibitions to share the creative process of artists such as Antoni Tàpies or Bartolomeu Cid dos Santos.

The DM also provides, in the public access areas, an interactive screen that provides information about the exhibitions currently on tour and the products that can be purchased in the shop. This device also includes the digital Visitors’ Book, where visitors can take a picture that documents their visit to the Museum and leave a message. This postcard is stored in the Guest Book and can also be sent to an e-mail address provided by the visitor. An interactive table provides information about the heritage and cultural programming that is being offered in the 21 municipalities of the Region. These two devices illustrate one of the ICT weaknesses previously mentioned: the need for a continuous update of the contents.

In 2018, the museum tour was enriched with audio guides. This resource was part of the Douro INclusive Program and made the contents accessible to different types of audiences. It received, in 2019, the APOM Award in the Management and Multimedia Application Category. Those devices can be rented at the Museum, but the application can be downloaded for free to mobile phones and provides text, audio, and video information. Information is available in Portuguese, English, French, Spanish, German, Portuguese Sign Language, International Sign Language, and in audio description. To make this experience even more stimulating, the visitor is given the opportunity to answer a questionnaire on the topics covered and can get a gift from the Museum Shop when he/she answers correctly to more than 50% of the questions.

Digital access to collections. One of the highest expectations for the first Territory Museum in Portugal was for it to organize itself as a center of resources and data that would be widely available. The museological collections, archives, bibliographical and photographic collections of the DM have been available online for quite some time now and a new portal is currently being prepared, thanks to the ProMuseus program developed by the Portuguese Museums Network/Ministry of Culture. This portal combines the museum’s collections and archive, has a simpler and more user-friendly layout than the old interfaces, and already has 20,503 entries.

14.4 Conclusion

This article lists the different applications of ICT by the Douro Museum that worked as vehicles information for and with its audiences. The online access to the collections is mainly aimed at an academic audience, whereas the exhibition space is designed to provide visitors with an interesting and enriching experience. The analysis of the messages left on the visitors' book and online comments proves that the presence of technological devices is as important as the quality of the personal attention offered to the visitors, both being equality crucial to provide a positive experience.

Social networks proved to be, in the context of the pandemic, the most complete resource for communication, by allowing information to be conveyed and contact to be maintained with the different audience segments. They were able to reach, for the many initiatives developed and offered by the DM, a share of audience that exceeded the number of physical visits that would be expected under normal circumstances, so they established themselves as indispensable tools to maintaining the work and Mission of the Douro Museum. This descriptive analysis and the values obtained prove that these tools should continue to be explored and innovated once the current lockdown context is overcome.

During the course of our study, we understood that the technological assets we found cannot be considered comprehensive of all the options ICT supply. The fact that we observed these technologies and the use made of them in a very specific type of museum, means that other institutions may have different opportunities, potentialities, and results. We also understood that without a proper study of the museum publics it is very difficult to understand in what way the existence of those resources is appreciated by each public segment. Such surveys constitute a valuable tool for the process of designing and building new technological resources in the future.

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Chapter 15
Language Tourism as a Catalyst After COVID-19. The Case of Malaga

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Abstract In an adverse international context in which the pandemic has caused a general paralysis of tourism, cities must adapt and find new market niches in which to grow safely. Among these new trends, in the field of cultural tourism, the growing interest in language tourism stands out. The main objective of this research is to carry out a deep analysis of the profile of the language tourist, proposing recommendations for an adequate and effective management. For this, the city of Malaga is used, which concentrates 15% of all language tourism in Spain. A mixed methodology will be carried out that combines qualitative techniques (in-depth interviews with stakeholder representatives) and quantitative (surveys of language tourists) to give a better answer to the research questions. The results confirm that this type of tourism is ideal in a scenario like the current one since we find ourselves with a tourist whose average stay and expense is higher than that of the conventional tourist. In addition, he is configured as a satisfied and faithful tourist. Also, recommendations are proposed for public and private institutions in order to attract and consolidate this type of tourism.

15.1 Introduction

Spanish is the second mother language in the world in number of speakers after Mandarin Chinese; as well as the second language in the global tally of speakers, counting native speakers, students, and those with limited competence. In other words, more than 572 million people around the world are among the potential users of the Cervantes language, 7.8% of the global population. However, the importance of Spanish is not only reduced to demographic terms; given that, in the economic sphere, the contribution to the world GDP of the Spanish-speaking countries is around 6.4% and it is considered to be the second most important language in the international arena; in addition to being the third most used language on the Internet [10].

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On the other hand, COVID-19 has had devastating effects on the economy in general and the tourism sector in particular. Worldwide, the decline has been spectacular, falling from approximately 1.461 million tourists in 2019 to 381 million in 2020. There was an unprecedented drop in international tourism, returning to 1990 levels [22].

Once we have synthetically exposed the value of these two realities, it would be possible to find a link between the two that would allow the development of a thriving economic subsector. This duality finds a solution in the concept of language tourism. This term, language tourism, is defined by the World Tourism Organization in 1991 as "the activities carried out by people during their trips and stays in places other than their natural environment for a consecutive period of less than one year, in order to make a linguistic immersion in a language other than that of its natural environment"

Despite constituting an important market niche for the tourism sector, this type of tourism has received little attention from academics. This work aims to delve into this type of tourism, presenting different perspectives, as well as recommendations for its management.

This work focuses on linguistic tourism as a holistic activity that provides meaningful learning experiences inside and outside academic contexts, a phenomenon that must be analyzed from the two complementary perspectives of supply and demand, taking into account the determining factors and impacts.

This type of tourism must be considered as something that transcends the obvious and shows a more realistic vision of what it implies in the economy since this type of tourism is linked, in practice, to leisure activities beyond mere learning of the language. Similar to other cultural activities with which it presents a strong synergy, language is considered a cultural resource and, therefore, language tourism would be included within the technical definition of what is called Cultural Tourism [14].

It is estimated [10] that the number of Spanish students exceeds 22 million, therefore, promoting tourism focused on this sector could be a consistent source of benefits.

The main objective pursued by this study is to establish solid bases for the commercialization of any destination as a tourist destination for learning a second language, starting from a successful experience such as the destination Malaga and the Costa del Sol; as well as analyzing its weaknesses and strengths in order to provide measures that improve supply and increase demand. In turn, a series of secondary objectives are derived from the present study, such as establishing the profile of the language tourist, knowing the degree of satisfaction and their intention to return and the factors that influence this. Finally, another secondary objective will be to verify if this type of tourism is a dynamic element of the city in terms of tourist activities.

The main novelty of this work is the consideration of language tourism as a complement or alternative to any other type of tourism. There has been a reduction in the number of tourists in all destinations due to the pandemic caused by COVID-19 and this could become a tourist product rather than complement the offer.

Likewise, the practical contribution is defined by the positive impact that an improvement in the commercial strategy of the city of Malaga as a language tourist destination would have. The assumption stems from the lack of literature on the matter and the need for a more in-depth study of the quality of the local language supply and the characteristics of the demand. This study would allow establishing lines of action that would have an impact on an increase in income, an increase in the diversification of the tourism sector, an expansion of the subsector, and a decrease in seasonality; in addition to improving the image of the destination and the effects that this could generate in other economic sectors.

According to Baralo [3], good practices and success stories, the characteristics and potential of the offer in different geographical regions, the different user profiles, their current needs, and expectations should be examined, and the effectiveness of the activities should also be assessed.

15.2 Review of the Literature

Language tourism is a relatively recent concept and is defined as "a tourist activity carried out by those travelers (or educational tourists) who make a trip that includes at least one night's stay in a destination outside their usual place of residence for less than one year and for which language learning is a primary or secondary part of their journey" [8], p. 10.

The main reasons that drive students to travel are closely related to personal development, adventure, and fun [25]. Teichler [19] already identified motivations such as learning a foreign language, the opportunity for personal development, improving knowledge and understanding of the host country, improving future job opportunities, and having the opportunity to travel.

Drozdzewski [7] states that language tourists have different motivations and, therefore, are heterogeneous. Despite this heterogeneity, language tourism represents a "distinct form of tourism", which differs from mass tourism, in particular, due to the prevalence of younger tourists [23]. Several studies have suggested that the main benefits of educational-based travel are associated with increasing levels of intercultural competence and fostering management skills [20, 25].

Language tourists are also an important driving force in the local economy. They stay longer than the rest of the tourists, they constantly contribute to the growth and improvement of the economy of the area, they have a high propensity to undertake domestic trips, they are more likely to return to the destination in the future and they can encourage family and friends to visit the place [12, 20]. Also, they have a higher average expenditure and entail less seasonality due to the diversification of the offer (especially the more consolidated destinations) [18].

This promotes an increase in the use of cultural and complimentary services and activities, and also allows optimal symbiosis with other types of tourism [2, 13, 17]. Language tourism can lead to a very beneficial intercultural development for both visitors and locals [3]. A good relationship between foreign and indigenous students as well as an integrated host the first by host families favor the provision of a tourism service quality and cultural enrichment of both groups [9].

15.3 Methodology

In order to solve the objectives, set out in this study, two complementary methodologies have been proposed, on the one hand, in-depth interviews have been carried out (qualitative technique) and on the other hand, a questionnaire (quantitative technique). According to renowned authors, both types of research and the dynamic context of tourism are important and must be combined in an integrated framework [5, 24].

First, a qualitative research method was chosen. This was based on conducting several in-depth interviews with agents actively involved in the sector, from the perspective of the supplier or consumer, with the aim of evaluating in a more accurate way what the current situation is in Malaga Capital and what could be its potentiality in the future.

Regarding the chosen sample, it was intentional and not random, trying to cover multiple points of view. In total, the number of participants amounted to seven: from the perspectives of the public offer, two teachers of Spanish for foreigners (including the head of the Department of Spanish for Foreigners of the Official School of Languages of Malaga), from the perspective of the private offer, a representative, three students and a representative of the host families. This modality has allowed us to obtain more detailed information, and its individual nature has given us the possibility of comparing the opinions of the various respondents who, sometimes, despite the similarities, displayed very interesting differential characteristics for their studies, such as the contrast of the public and private sector approach.

Subsequently, a quantitative survey was carried out, the universe of which consisted of students of Spanish as a foreign language who had made some type of educational stay in the city of Malaga. The reason for choosing Malaga as the object of analysis lies in the importance that language tourism has historically had for this destination. For years, public and private institutions have been aware of the importance of this type of tourism and that is why they have made considerable efforts to promote its growth. So much so that it represents 15% of all language tourists in Spain [21].

15.3.1 Qualitative Interviews

To capture the results of the in-depth surveys, we will proceed to use the data from the different perspectives studied to lead to a comparison between them as a summary. This synthesis is shown in Table 15.1.

Table 15.1 Summary table of stakeholder interviews

Perspectives	Type of students	Relationship with tourism	Aspects to highlight
From the perspective of the public offer (Official Language School)	Basic level: the students are usually of low income or have recently arrived in the country looking for a better situation than in their countries of origin. Advanced level: the most notable is that we find Russians and Europeans who are retired and have been in the area for many years	They try to promote cultural activities such as visits to museums and others, low-budget, among the students	The lack of infrastructure for a growing demand The absence of homologation of their degrees with the DELE The need to establish a higher level, C1, a mandatory requirement for some foreign professionals to be able to practice in the national territory The registration procedure is too long and complex
From the perspective of the private offer (Language Academies)	In terms of nationality, German-speaking, English, Italian and Polish stand out; the rest is made up of a very heterogeneous group, finding Scandinavians, Koreans, Japanese, etc.	The academies, offer cultural activities in the area such as visits to museums, flamenco shows, and gastronomic experiences; taking into account the type of student. Most of them also organize cultural and leisure trips to nearby places in the province, as well as outside the province to nearby cities	It usually comes in groups (sent by schools or specialized agencies) It is still a seasonal tourism, in which the months with the most arrivals are April and September Choose Malaga for the climate, the leisure offers, the good value for money, and increasingly, for its cultural atmosphere The academies demand a greater effort in advertising the city as a tourist destination in the segment of learning Spanish

(continued)

Table 15.1 (continued)

Perspectives	Type of students	Relationship with tourism	Aspects to highlight
From the perspective of accommodation (Homestay)	The most common nationalities are Germans, Poles, and Italians; although there is great heterogeneity. The average stay is around a week, although some come for a month, or even for three or more		Most of the students are usually very satisfied with the experience and return after a while, either repeating the educational experience or by travel of leisure A recommendation to improve relations with academies is to establish a survey of evaluation of students by families
From the perspective of university public demand (Erasmus)		Students Erasmus students usually spend their time exploring the city, visiting spaces cultural and leisure. Likewise, short trips are usually made to nearby towns such as Ronda, Nerja, or Gibraltar	Satisfaction with the destination is very high, highlighting the good value for money, the climate, the personality of the local people, the gastronomy, the beach, and the party. As a negative point, we can mention that the university is usually a bit difficult due to problems related to the language The intention to return to the destination is very high, with the visit to the city being repeated on more than one occasion since an emotional bond with the local environment is established

(continued)

Table 15.1 (continued)

Perspectives	Type of students	Relationship with tourism	Aspects to highlight
From the perspective of private demand (Students from Private Language Academies, work placements)		The interviewees have carried out tourist activities such as going for tapas, seeing a flamenco show, attending a cooking class to learn how to make paella, and an excursion to Seville	Satisfaction with the destination is optimal, highlighting the character of the local population, the prices, the gastronomy, the atmosphere Satisfaction in this aspect is high, highlighting the help and closeness of the family. The intention to return in the future is high; as well as the affirmation of recommendation of the destination to other foreign students interested in studying Spanish

15.3.2 *Quantitative Surveys*

The type of sampling used was non-probabilistic for convenience, fulfilling the premises of having carried out an educational experience in the city of Malaga and, in turn, being of a nationality from a non-Spanish-speaking country. This type of sampling is shown to be the most appropriate since it allows selecting those accessible cases that agree to be included. This is justified based on the convenient accessibility and proximity of the subjects to the researcher [16]. For this, since all the students spoke a language other than Spanish as their first language, the surveys were carried out both in English and Spanish. A total of 50 surveys were obtained.

Given the purpose of this procedure, questions were asked aimed at a characterization of the student where information was collected regarding socio-demographic variables such as age, gender, nationality as well as their interest in learning Spanish; In the same way, the characterization of the destination was sought, taking into account the strengths of the city at the time of its selection as a place to carry out its educational experience, the evaluation of its offer of Spanish courses, the fulfillment of preconceived expectations or the intention of returning to the city.

Table 15.2 the main characteristics of the respondents are shown.

To complete the profile of the language tourist it was considered necessary to know the duration of their stay (Table 15.3) as well as if they contracted a Spanish course (Table 15.4), and if applicable, what type (Table 15.5).

Table 15.2 Socio-demographic characteristics

Nationality	France 16%; Germany 13%; Italy 13%; Poland 10%; Belgium 8%: Austria 4%; South Korea 4%; United States 4%; Netherlands 4%; United Kingdom 4%; Russia 4%; Canada 2%; Denmark 2%; Finland 2%; Greece 2%; Japan 2%; Czech Republic 2%; Sweden 2%; Switzerland 2%
Gender	Female 82%; Male 18%
Age range	18–25 years 74% 26–35 years 24% More than 36 years 6%
Level of Spanish	Low: 12% Medium 66% High 22%

Table 15.3 Length of stay in the city

	Frequency	Percentage
1–2 weeks	7	14
2–3 weeks	3	6
3–4 weeks	8	16
1–3 months	2	4
3–6 months	18	36
More than 6 months	12	24

Table 15.4 Students who took a Spanish course

	Percentage	Type of course (public vs private)
Yes	49	16% Public 33% Private
No	51	Not applicable

Table 15.5 Course typology

	Frequency	Percentage
Internet	4	8
Intensive (20 h.)	25	50
Intensive (30 h.)	2	4
Intensive (40 h.)	7	14
Intensive (90 h.)	7	14
2 h per week	5	10

Regarding the length of the stay, the majority have chosen to be between 3 and 6 months (35%), followed by the range that goes between 6 months and a year (24%). At the opposite extreme, we can see that the least mentioned option is the one that covers between 1 and 3 months (4%) and between 2 and 3 weeks (6%). The remaining options, between 1 and 2 weeks and 3 and 4 weeks, have, respectively, 14 and 16%.

If we analyze the interest in learning Spanish, only 49% of those surveyed took a Spanish course in Malaga, of them, 33% chose to do it at the University of Malaga or in its Language center, and the remaining 67% in centers private. In addition, the course for which more students have chosen is the 20-h intensive, with 50% of those surveyed; followed by the intensive 40 h and the 90 h with 14% each. On the opposite side are the 30-h intensive (4%), the online Spanish modality, and the two-hour-per-week one with 9% of the respondents each answer.

Continuing with the analysis of this type of tourism, it is crucial to know the motivations that push tourists to visit the destination (Table 15.6). In this sense, improving future job search opportunities is shown as a priority.

Finally, various studies have contrasted the impact of the destination's image on the satisfaction experienced by tourists. The reason for taking into account the level of satisfaction with the products and services of the tourist destination is because it is supposed to affect the intention to return [11]. Tourist satisfaction is the last phase of the process and its importance derives from the role it plays in the repetition of the purchase or service, that is, in loyalty to the product, company, or destination [26];

Table 15.6 Motivations

	Frequency	Percentage
Learn a foreign language	7	14
Personal development	3	6
Future job opportunities	40	80

the good reviews it generates and, therefore, the existence of positive interpersonal communication [6, 15]. In this case, they were asked about satisfaction in relation to the destination, reaching a score of 8.88 points out of a maximum of 10. This seems to be related to the intention to return, which shows very relevant data since 89.80% affirm that they want to return to Malaga, 6.1% mention “maybe” as an option, and the minority, 4.1%, have no intention of returning to the city.

15.4 Conclusions

The main conclusions derived from this study assume and provide valuable information for those destinations that have been affected by the pandemic and the abrupt drop in tourists. Above all, recommendations are highlighted that can serve as a guide for those towns or cities that are looking for alternatives to reactivate their tourism sector.

In the first place, it should be noted that the results obtained by the quantitative empirical methodology are very similar to those that have been derived from qualitative fieldwork; therefore, we can reaffirm the reliability of these.

Regarding the profile of the student who chooses Malaga as a destination to learn Spanish, we can establish that they are of European nationality, mainly German, Italian, Polish, or Francophone and are predominantly female. The age range is between 18 and 25 years, coinciding with what is established in the research carried out by Uriely [23] and their command of Spanish is intermediate. Regarding the duration of the average stay, we can affirm that, in the case of students from private centers, it is around one to two weeks or three to four weeks; in the case of Erasmus students, it would be one or two semesters. The selected course will be an intensive 20 h and the internet would be your main source of information about it. Also, the results suggest that the main motivation to learn Spanish is the importance of the language in the future and the climate would be the determining factor in the choice of Malaga as a destination. Finally, it is worth highlighting the fact that the student usually makes tourist visits and participate in cultural events in the city.

Regarding seasonality, the results show that it is tourism with a considerable level of seasonality, the influx being concentrated in the warm months. This does not coincide with what Taboada de Zuñiga [18] affirms. The reason could be due to the fact that tourists who decide to visit Malaga do so mainly because of its climate, so this aspect should have a greater influence on the choice of destination.

Satisfaction with Spanish courses is very high, around the outstanding; as well as the general satisfaction of the destination. In addition, this satisfaction is reflected in a high intention to return, both in order to repeat the educational experience and to visit the city with other objectives.

After the socio-demographic analysis carried out, it can be verified that, in general, the results obtained in previous research are corroborated, making a profile of the language tourist that is quite similar [12, 20, 25].

The main objective of this study was to propose some recommendations and establish solid bases for the commercialization of any destination as a tourist destination for learning a second language. These would be summarized in the following points:

- Importance of the involvement and commitment of public entities. They must actively participate in the design and execution of communication campaigns for the language destination both on the web and with an institutional presence at international events.
- Improve communication and coordination between the reception houses and the academies or language teaching centers themselves. A public body is even recommended to mediate between the two.
- Implementation of competitive prices and improvement of the quality of language courses.
- Establish more fluid communication channels between all the intervening elements or institutions.
- Publication of schedules and levels at the beginning of the school period.
- Improvement of transport infrastructures, expanding their frequencies.
- Offer subjects at the University in different languages.
- Reduce bureaucracy.

The need to ascertain whether this type of tourism is a dynamic element of the city in terms of tourist activities was also raised. This fact is evident in the research carried out since the majority of those surveyed and interviewed admit to visiting other places and participating in tourist or cultural events.

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Chapter 16
Should a Young Entrepreneur Do a Crowdfunding Campaign? A Study Among Portuguese Higher Education Business Students

Susana Bernardino and J. Freitas Santos

Abstract Young entrepreneurs, especially the most qualified students, have recently begun to play a new role in the economy and to emerge as protagonists of new business projects, mainly focusing on market niches. Despite the growth that crowdfunding (CF) has experienced in recent years all over the world, it is a tool still under-exploited by young entrepreneurs. This communication aims to understand the behavior of potential young entrepreneurs toward CF and to analyze their predisposition to use this source of financing for starting a new venture in the tourism and hospitality industry. To achieve this goal, this communication uses a quantitative approach with primary data collected through an online survey. The results of the study indicate that potential young entrepreneurs have a low predisposition to use CF as a funding mechanism. This behavior is influenced by the characteristics of potential entrepreneurs, especially gender and past experiences in creating organizations and using collaborative financing.

16.1 Introduction

Youth entrepreneurship is seen as an entrepreneurial activity or behavior that is embraced by young people. As stated by Adams [1] there are different ways to define youth, such as age, cultural or economic characteristics. Notwithstanding, the most common definition is based on age [1]. For [2], youth is defined as people between the ages of 18–34 years old.

The relevance given to entrepreneurship in Portugal has increased significantly in recent years, which has strongly benefited by the role played by many higher education institutions through the inclusion of entrepreneurship-related subjects in

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their curricula [2]. However, as stated by a report of the Global Entrepreneurship Monitor entitled "An Ibero-American Perspective on Youth Entrepreneurship" [3], "the main barriers to youth entrepreneurship in Portugal concern the lack of available funds, little previous professional experience, and lack of clear information on the available programs supporting startup initiatives" (pp. 28–29).

When analyzing the sources of funds used by young entrepreneurs, GEM [3] observes that "entrepreneurs rely to a great extent on their personal savings to fund their entrepreneurial ventures in all areas of the globe" (p. 44). This situation severely constrains the possibility of potential entrepreneurs developing and implementing a business idea with external financial resources. The main obstacles are the traditional financing process that is aggravated by the absence of loan history, the difficulties of young people presenting guarantees, and the financial requirements placed by banks.

In Portugal, the same pattern is also observed [3], as about eight out of 10 young entrepreneurs use their own money to finance the entrepreneurial activity. It is also worth highlighting the role of family and friends' funds (25.2% and 11.5%, respectively), bank loans (20%), or government support (20.2%). Other kinds of funding sources such as those related to venture capital (10.1%) are far less common among young entrepreneurs in Portugal and just a very small percentage have used crowdfunding to collect finance to the entrepreneurial activity (2.4%) [3].

Crowdfunding is a relatively new financial tool, with high potential for funding projects in the tourism and hospitality industry that has been largely leveraged by the internet and information and communication technologies. According to Belleffiamme et al. [4], the concept of CF involves an open invitation, essentially through the internet, to provide financial resources, either in the form of donations (without rewards) or in exchange for some sort of reward and/or voting right, to support initiatives for specific purposes.

Compared with other funding options (such as business angels or venture capital funds), CF offers some advantages for young entrepreneurs calling for funds, not only related to the conditions of the fundraising operation but also related to other potential benefits such as the possibility of market validation and the benefits of word-of-mouth [5].

The objective of this communication is to understand the propensity of potential entrepreneurs to use CF and assess the main reasons that would lead them to resort to this source of financing. To achieve this purpose, the investigation uses a quantitative approach, by applying a questionnaire to students from different study cycles of a higher education school in Portugal. The communication is organized as follows. In Sect. 16.2, the theoretical background is outlined, by presenting different definitions of CF and summarizing the characteristics of the different business models of CF. Section 16.3 describes the methodology used in the investigation. After that, Sect. 16.4 presents and discusses the results obtained, and finally, Sect. 16.5 presents the main conclusions, limitations, and future investigation directions.

16.2 What is Crowdfunding and How Does It Work

16.2.1 Definitions of CF

Table 16.1 presents several definitions of CF that stress the role of the "crowd" and its participation through the internet in backing projects in the tourism and hospitality industry.

Taking into account the review of definitions we can assume that crowdfunding could be understood as a fundraising operation through which an individual or organization asks for funds through an open call directly to a large number of people (the crowd), who typically contribute with small amounts of money.

According to the different definitions, new generations of entrepreneurs, especially generation Z and Millennials composed of higher educated individuals are well-positioned to take advantage of this new financial technology. For instance, increasing the awareness of a tourism and hospitality project on social media or boosting the possibility of gathering funds for a social cause.

Table 16.1 Definitions of CF

Definitions	Authors
Efforts by entrepreneurial individuals and groups—cultural, social, and for-profit—to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries	[4]
Open call to provide financial resources that mostly takes place on an Internet-based platform and links fundraisers to funders with the aim of funding a particular campaign by typically many funders. In these definitions, the important characteristics of this new financial mechanism are emphasized. The process could be initiated by a group or an individual for launching a new project of cultural, social or profit nature. The funds are obtained from the crowd via online without financial intermediaries. However, this definition lacks the business models that might be used on CF	[6]
Tapping a large dispersed audience (the crowd) for small sums of money to fund a project or a venture	[7]
The initiative is undertaken to raise money on a new project proposed by someone, by collecting small to medium-size investments from several other people (the crowd)	[8]
Open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights to support initiatives for specific purposes	[9]
Umbrella term used to describe an increasingly widespread form of fundraising typically via the Internet, whereby groups of people (crowd) pool money, usually (very) small individual contributions to support a particular goal	[10]

Source Authors own elaboration

Table 16.2 Business models of CF

Business model	Definition	Examples
Donation	The backers provide funds based on philanthropic or civic motivations without expecting any return. In general, the donors support social causes to help solve problems of famine, health, and other charity-related programs [11]	Justgiving.com Gofundme.com
Reward	The backers provide funds to individuals, projects, or organizations in exchange for special perks, early editions of new products, appreciation tokens, or "community benefits" [4]	Kickstarter.com Indiegogo.com
Lending	The investors supply funds to individuals, groups, or small companies, expecting to be reimbursed after a given period, generally with an interest for the loan, without the involvement of traditional financial intermediaries [12]	Kiva.org Fundingcircle.com
Equity	Individuals or institutional funders purchase the equity of a new venture or enter into some sort of profit-sharing agreement with a company or organization [10, 13]	Wefunder.com Localstake.com

Source Authors own elaboration

16.2.2 Business Models of CF

Table 16.2 describes the four business models of CF (donation-based, reward-based, lending-based, equity-based) and some examples of platforms that operate according to each model.

The purpose of the business venture determines the adequacy of the business model of CF. Some of the models could be used for commercial purposes expecting to obtain the loan plus an interest or for social purposes anticipating no financial return on investment as the money is given as a donation. The suggestion of [14] is that entrepreneurs should select the business model according to the startup stage of the project and the resources needed. For instance, in the startup phase, the resources needed to achieve are related to product and market validation and, therefore, the lending model should be applied.

16.3 Methodology

CF is a new financial technology that can be used by entrepreneurs to fund new projects in the tourism and hospitality industry. However, to increase its use by potential young entrepreneurs, it is important to investigate the predisposition they have to use this source of financing.

To explore this topic, an exploratory approach is adopted, based on a quantitative study. Based on the existing literature and the research objectives, the authors have designed a questionnaire that was used to collect primary data.

For this purpose, the first group of questions collects information on the respondents' general characteristics, such as gender, age, and academic and professional background. The second group was designed to assess the propensity of respondents to use CF, based on a 5-point Likert scale, where 1 corresponds to strongly disagree and 5 to strongly agree.

The survey was administered between February and March 2020, on the Lime Survey platform. To collect the data, an email with the link of the questionnaire to the platform was sent to 4714 students of the Institute of Accounting and Administration of Porto (ISCAP), a higher education institution in Portugal, belonging to the Porto Polytechnic Institute. As students are from different business study cycles and the propensity to engage in future new ventures is high, we will consider them as young potential entrepreneurs.

A usable sample of 191 responses was analyzed through the statistical program SPSS, version 24.

The characteristics of the sample are summarized in Table 16.3.

The sample for analysis consists of either female (58.4%) or male (41.6%) respondents. The majority of the respondents are aged less than 25 years (67.9%), or between 25 and 35 years (19.5%). Some of the respondents are student workers (38.0%). The vast majority of respondents have never created an organization before (89.9%) or used the CF (95.7%).

Table 16.3 Sample characteristics

Variable	Categories	*N*	%
Gender	Female	111	58.4
	Male	79	41.6
Age	<25 years old	129	67.9
	Between 25 and 35 years old	37	19.5
	Between 36 and 45 years old	19	10.0
	Between 46 and 55 years old	4	2.1
	>55 years old	1	0.5
Working student	No	116	62.0
	Yes	71	38.0
Have launched a business	No	170	89.9
	Yes	19	10.1
Have previously used CF	No	179	95.7
	Yes	8	4.3

Source Authors own elaboration

16.4 Results

When analyzing the propensity of respondents to use CF as a possible source to fundraising a new business project (Table 16.4), we observe that just about one-fifth of the respondents (20.4%) have considered this possibility. Differently, 38.2% of the respondents consider that they would not use the CF as a financing tool.

Regarding the factors capable of leading to the use of CF, we observe that respondents are willing to use CF for launching/developing their business mainly if they do not have sufficient own resources (average of 3.2 and reported by 43.5% of respondents), if they cannot get funding through traditional funding sources (average of 3, 32.4% of respondents) or if they cannot get funding through their network of contacts (average of 2.7, 25.2% of respondents).

The use of CF as a way to overcome the impossibility of using other types of investors, such as venture capital, seems to be less relevant for the respondents (average of 2.5 and reported only by 17.3% of the respondents). It should also be noted that most of the respondents (39.8%) mentioned that they would not mind resorting to CF even if they had to return the capital obtained. On the other hand, only 20.9% of the respondents mentioned that the fact of not having to return the capital would be an encouraging factor, and therefore they are more prone to use donation-based CF.

The results analysis also indicates a greater predisposition of the respondents to use the CF reward-based models (average of 3.6 and percentage of positive answers higher than 50% in the answers related to the possibility of offering products/services, or a discount on them, to people who have supported the project through the CF platform). Only a quarter of the respondents are willing to use collective financing under the modality of loan-based CF (25.6% of the respondents, average 2.8) and less than a fifth of the respondents the equity-based modality (22.6% of the respondents, average 2.6).

The analysis of the correlation matrix suggests the existence of a moderate relationship between the different variables related to the propensity to the use of collaborative financing since a statistically significant association is identified for all pairs of variables. However, these moderate correlation levels are not able to affect the assumptions required to perform factor analysis [15].

The factorial analysis made it possible to reduce the data to two principal components (Table 16.5). The first principal component concerns the predisposition that respondents have to include compensations in return for the support obtained through a possible CF campaign. This component comprises the variables related to the willingness to offer products/services, discounts on products/services, payment of interest rates, and the sharing of profits with the financiers.

The second component, in turn, includes the push factors, or factors that lead respondents to consider the possible use of CF, namely due to the insufficiency of the funding obtained through the network of contacts, other traditional funding sources, another kind of investors such as venture capital, or founder's savings, as well as the non-obligation to return the capital obtained through collaborative financing.

Table 16.4 Predisposition to the use of CF

Variable	(1) %	(2) %	(3) %	(4) %	(5) %	No answer %	Average	Standard-deviation
In the future I intend to use a crowdfunding platform as a means of financing a possible entrepreneurial project	18.8	19.4	38.7	13.6	6.8	2.6	2.7	1.1
I only intend to use crowdfunding if my own resources (such as assets and savings) are not sufficient to launch/ develop my project	12.6	14.7	28.3	26.2	17.3	1.0	3.2	1.3
I only intend to use crowdfunding if I cannot obtain funds through my network (such as family and friends)	23.0	16.2	33.5	19.4	5.8	2.1	2.7	1.2
I only intend to use crowdfunding if I cannot obtain funds through traditional funding sources (e.g., bank loan)	14.1	14.1	36.6	23.0	9.4	2.6	3	1.2
I only intend to use crowdfunding if I cannot raise funds through other types of investors such as venture capital	24.6	20.4	34.0	12.6	4.7	3.7	2.5	1.1

(continued)

Table 16.4 (continued)

Variable	(1) %	(2) %	(3) %	(4) %	(5) %	No answer %	Average	Standard-deviation
I only intend to resort to crowdfunding if I do not have to return the capital obtained	21.5	18.3	34.6	9.9	11.0	4.7	2.7	1.3
I do not mind paying an interest rate for the capital I get through the crowdfunding campaign	16.8	20.4	34.0	18.3	7.3	3.1	2.8	1.2
I am available to offer products/services to the people who support my project through crowdfunding	7.3	8.9	29.3	26.2	27.2	1.0	3.6	1.2
I am available to offer discounts on products/services to people who support my project through crowdfunding	8.4	5.8	27.7	28.3	29.3	0.5	3.6	1.2
I am available to share a part of the profits of my project with the people who support my project through crowdfunding	22.5	20.4	33.5	14.7	7.9	1.0	2.6	1.2

Source Authors own elaboration

The variable "In the future, I intend to use a crowdfunding platform as a means of financing a possible entrepreneurial project" was excluded from the analysis as it did not exhibit a statistically significant factor weight [16].

The analysis of the indices calculated through the weighted average of the factors method [15] indicates some predisposition of the respondents to include compensations for the financing obtained (average of 3.2) while the use of the CF as a form of

Table 16.5 Factor analysis of the predisposition to use CF

Components	Factor loading	Average	Standard-deviation	Eigenvalue	% Var	% Accum var	Cronbach Alpha
Component 1: willingness to include compensation for financing		**3.2**	**0.95**	4.3	43.1	43.1	**0.8**
I am available to offer products/services to the people who support my project through crowdfunding	0.80	3.6	1.20				
I do not mind paying an interest rate for the capital I get through the crowdfunding campaign	0.78	2.8	1.20				
I am available to offer discounts on products/services to people who support my project through crowdfunding	0.78	3.6	1.20				
I am available to share a part of the profits of my project with the people who support my project through crowdfunding	0.68	2.6	1.20				
Component 2: push motivations for using CF		2.8	0.89	1.4	14.1	57.1	0.8

(continued)

Table 16.5 (continued)

Components	Factor loading	Average	Standard-deviation	Eigenvalue	% Var	% Accum var	Cronbach Alpha
I only intend to use crowdfunding if I cannot obtain funds through my network (such as family and friends)	0.83	2.7	1.20				
I only intend to use crowdfunding if I cannot obtain funds through traditional funding sources (e.g., bank loan)	0.77	3.0	1.20				
I only intend to use crowdfunding if I cannot raise funds through other types of investors such as venture capital	0.73	2.5	1.10				
I only intend to use crowdfunding if my own resources (such as assets and savings) are not sufficient to launch/develop my project	0.64	3.2	1.30				
I only intend to resort to crowdfunding if I do not have to return the capital obtained	0.60	2.7	1.30				

[a]The rotation converged in three iterations

Note Extraction method: principal component analysis; rotation method: varimax, with Kaiser standardization; KMO measure = 0.813; Bartlett's test of sphericity: $p < 0.000$. Listwise method: $N = 166$

Source Authors own elaboration

financing seems to be driven by push factors (average of 2.8, located at the negative pole of the scale).

Considering the personal characteristics of the respondents, Table 16.6 shows that male students, on average, tend to be more prone to include compensations for obtaining collaborative financing than females (average of 3.5 and 3.0, respectively), the same occurring in the case of push factors.

It should be noted that the pattern of response obtained is very similar, regardless of the respondents being student workers or not.

Students who have previously created some organization indicated that they were more likely to include compensations (average of 3.6) and to resort to the CF given the insufficiency of other sources of funding (average of 3.1, already located at the positive end of the scale), compared to the remaining respondents (average value of 3.2 and 2.8, respectively).

The same behavior is observed on the respondents who have already used CF, who indicate a greater predisposition to include counterparts in the financing than the other respondents (average of 3.9 and 3.2, respectively). It is interesting to note that the students who have already had some experience with collaborative financing gave a rating to the push factors very close to that of the other groups in the sample.

Table 16.6 Predisposition to use CF according to the characteristics of the respondents

	Component 1: willingness to include compensation for financing	Component 2: push motivations for using CF
Gender		
Female	3.0	2.7
Male	3.5	3.0
Age		
<25 years old	3.2	2.9
Between 25 and 35 years	3.2	2.8
Between 36 and 45 years	3.4	2.8
Between 46 and 55 years	2.3	1.9
>55 years old	5.0	5.0
Working student		
No	3.1	2.8
Yes	3.3	2.9
Have launched a business		
No	3.2	2.8
Yes	3.6	3.1
Have previously used CF		
No	3.2	2.8
Yes	3.9	2.9

Source Authors own elaboration

16.5 Conclusions

This research aimed to study the predisposition that potential young entrepreneurs have to use CF as a funding source for future projects. The results obtained allow us to understand in a more precise way the positioning and perceptions that potential young entrepreneurs have on the topic, which can be considered one of the most important stakeholders for the CF industry due to the potential they present in terms of creation of new ventures.

The results obtained reveal that potential young entrepreneurs have a low predisposition to use CF as a fundraising source for a future potential project. Nevertheless, there is some disposition to include counterparts to the financing operation, mainly offering products/services or discounts on their purchase. The greatest reluctance observed is to share the profits produced by the future project and also to pay an interest rate. The research indicates that potential young entrepreneurs are more likely to use non-investment business models, including reward-based CF and donation-based CF, as opposed to investment business models (including loan-based and equity-based CF).

It should be noted that, according to the research carried out, the predisposition to use CF is not driven by the inability to access other financing sources (except for the insufficiency of the entrepreneur's savings), which suggests the existence of other motivations for using this funding tool.

The results obtained also indicate that the characteristics and past experiences can influence the propensity to use the CF, namely the gender, the previous creation of an organization and the fact of having already used collaborative financing. Respondents who had already used CF indicate that they are prone to repeat this experience, although this decision is not based on the inability to access other sources of resources.

The conclusions obtained allow deriving some practical implications. Firstly, that there might exist an under-exploitation of the potentialities that CF can offer because potential young entrepreneurs have a relatively low predisposition to use CF, which could be improved through training and awareness programs on the use of different modalities of CF. The study suggests that the experience of individuals who have already used CF in the past seems to have been positive, as they are strongly predisposed to repeat. Their testimonial to students could have a positive effect on the financing of future projects in the tourism and hospitality industry.

The main limitation of this research is the fact that it is based on data collected through an online questionnaire conducted among students of a single higher education school in the area of management. The exploratory nature of the study recommends some caution in generalizing the results obtained to other countries or areas of study, specifically to tourism and hospitality industry.

In the future, it would be interesting to extend the study to students from other countries or other areas of education, such as engineering, health, arts, or design.

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Chapter 17
The Confraternities—A Secular Heritage of Differentiation

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Abstract The aim of this study was to demonstrate the importance of confraternities, whether Bacchic, gastronomic, or cultural, as a true receptacle of an immeasurable intangible heritage, so important for present and future generations, especially in the Douro region. To carry out this exploratory study, a bibliographic research was carried out, through consultations on web pages, articles in newspapers, reports and master's and doctoral theses, and published books. Secondary analysis was carried out based on data obtained at the congress of CEUCO—European Council of Enogastronomic Confraternities, in 2019, with some references and socio-demographic data, considering the different experiences of the different confraternities. In conclusion, we can say that this movement of the Confraternities has proved to be important both for the circular economy and for the preservation of endogenous products and, above all, for the maintenance of the intangible heritage and local development.

17.1 Introduction

Wine and gastronomy tourism emerges as a powerful strategy for differentiating destinations in the world. In Portugal, it has been recognized as a fundamental destination, if not as one of the best destinations for food and wine travel.[1] Without a doubt, the Confraternities are, par excellence, one of the promoters of the Mediterranean diet, which has been recognized, since 2012, as Intangible Cultural Heritage

[1] In addition to the distinctions, in 2020 Portugal also included the distinction of "Europe's Leading Wine Region Hotel 2020 - L'AND Vineyards, Portugal". Consult the "Turismo de Portugal" website for more information: http://www.turismodeportugal.pt/pt/Noticias/Paginas/portugal-e-melhor-destino-europeu-pelo-quarto-ano-consecutivo.aspx

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by UNESCO.[2] In the opinion of Moura [6], culture,[3] and here we can include gastronomic culture, plays an essential role, in terms of common roots of the immense fabric that was formed over the centuries in all areas of culture and whose meshes are they mirror and respond to each other in a kaleidoscopic way in space and time. The Confraternities appear as material and immaterial heritage and their dissemination and promotion has repercussions at a regional, national, and world level. Sonati et al. [8], states that the identity of people resides mainly in their language and food culture. It is increasingly important to address the issue of diet and food culture, associated with the knowledge and flavours of populations, places, countries, and regions. In this sense, and in the defence of this heritage that integrates the Mediterranean diet, the Confraternity appear as a means of preserving material and immaterial heritage and have a special intervention about its dissemination and promotion with repercussions at regional, national, and world levels. With a collection that is part of our memories, whether in gastronomic terms, or in Bacchic and cultural terms, the various Confraternities have repercussions in the future, being a form of differentiation. In the various scientific research documents, we can see that its roots go back to the Roman *collegia* and the Germanic guilds. It was in Rome that the first Colleges and Confraternities came together in taverns where snacks were made and the "servants" walked very well decorated, letting themselves be courted by customers who sometimes got into violent disputes, to get the favours of the employed [5]. In Portugal, the oldest Confraternities date back to the twelfth century [3]. One of them is the Confraternity of S. João do Souto in the city of Braga, whose former commitment was lost. Also noteworthy is the Confraternity of Fungalvás, village of the Parish of Our Lady of Purification (Nossa Senhora da Purificação de Assentiz) of Assentiz, Municipality of Torres Novas. But it is in Tomar that the oldest Confraternities are found (Bexiga, in the parish of Our Lady of Conception (Nossa Senhora da Conceição), that of Payalvo, village in the parish of Our Lady of New Church (Nossa Senhora da Igreja Nova), in the municipality of Tomar, and Santa Maria de Olaia, parish from the Municipality of Torres Novas, all of them with such primitive characteristics, but which still maintain the heritage collection.

[2] "The recent recognition by United Nations Educational, Scientific and Cultural Organization (UNESCO) of the Mediterranean diet as an Intangible Cultural Heritage of Humanity reinforces, together with the scientific evidence, the Mediterranean diet as a cultural and health model". (Serra-Majem et al., 2012, 157).

[3] "Not as a compensating and informing roller, but as an addition of breathing in freedom towards the other and each one, and that there is a framework of cultural and linguistic diversity, which duly values what is proper to this cultural dimension, the common roots of the immense fabric that was formed over the centuries in all areas of culture and whose meshes mirror and respond in a kaleidoscope way in space and time.".

17.2 The Mediterranean Diet and the Confraternities

The Mediterranean diet, recognized for its nutritional quality and healthy lifestyle that it promotes (among many other benefits).[4] The diaita (δίαιτα) referred above all to a diet practiced in the Mediterranean basin—it denotes a behavioural and organizational component that often went unnoticed by researchers in the area.[5] Nevertheless, the connection seems to be obvious and reflects the different dynamics that were generated, both from a social point of view and from an economic and political point of view (one cannot and should not abdicate the geostrategic notion that configured the Mediterranean as a commercial exponent for centuries in the profitability of its products). Brief, the Mediterranean diet as a phenomenon reflects the structures of society [5]. The Mediterranean Diet involves a set of know-how, knowledge, rituals, symbols and traditions about agricultural techniques, fishing, cattle raising, conservation, processing, preparation and, especially, sharing and consumption of food.

The Mediterranean Diet was the second Portuguese element to integrate the list of intangible heritage of the United Nations Educational, Scientific and Cultural Organization (UNESCO),[6] on December 4, 2013, having Tavira, a city in the Algarve, chosen in Portugal as a community representative of the application. The Mediterranean Diet is a cultural model that incorporates ancient social values and practices. By guaranteeing the preservation of the Mediterranean Diet and the values associated with it, it is also ensured that “the knowledge, creativity, identity and sustainability of territories and the environment are enhanced”.[7]

The nutritional model of this diet has remained constant through time and space, the main ingredients are olive oil, cereals, fresh or dried fruits and vegetables, a moderate proportion of meat, fish and dairy products, abundant condiments and whose consumption at the table is accompanied by wine or infusions, always respecting the beliefs of each community. The Mediterranean diet also gave rise to a considerable body of knowledge, chants, refrains, tales, and legends. All this knowledge and flavours are deposited in recipes that are in the possession of many Confraternities and have kept the art of making them over time.

[4] “The Mediterranean diet has numerous beneficial effects on among others the immune system, against allergies, on the psyche, or even on quality of life, topics that are currently fields of research. The Mediterranean diet has an international projection; it is regarded as the healthiest and the most sustainable eating pattern on the planet and is a key player in the public health nutrition field globally, but especially in the Mediterranean area. Moreover, this ancient cultural heritage should be preserved and promoted from different areas: public health, agriculture, culture, politics, and economic development”. ([9], 157).

[5] It did not go unnoticed by the American physiologist Ancel Keys who, in a study extended to different Mediterranean countries, found the lowest incidence of myocardial infarctions in the countries of the Mediterranean basin (which correlated with the consumption of olive oil at the expense of other fats) and that he would earn it prestige to appear on the cover of Times Magazine (Jan. 1961).

[6] The first one, was the Fado.

[7] Ana Paula Martins, mayor of Tavira.

17.3 The Confraternities in Europe and the Mediterranean Diet

We can say that the Confraternities are sentinels of the enormous and rich cultural heritage and, above all, of a living culture. This identity is present from the utensils, the products, the confection, and the recording in books, whether of the vineyard and wine, or of the traditions and, essentially, of the places. It is the culture passed down from generation to generation, eagerly hoping the chain does not break. This connection between gastronomy and culture is evident when referring to:

> A set of dietary practices determined over time by a society, begins to identify it and often becomes cultural heritage. The act of feeding, more than biological, involves the ways and technologies of cultivation, handling and collection of food, the choice, storage and forms of preparation and presentation, thus constituting a social and cultural process.

Bakthin will say, being invited or inviting someone to participate in the Confraternity, to carry out a food experience, to attend or to be present in the space, means giving it importance in a local context, believing in its value. It also presages the fastening of bonds of solidarity that intend to be thick and capable of reproducing the institution, giving it a particular identity that is celebrated at dinner, the paroxysm of work and its foundation. "The image of the banquet is organically associated with all popular festival images. The banquet is an essential moment of all popular rejoicing" ([2]: 277), as it is around a table, lecturing and discussing, laughing, or satirizing, feeding to excess drunkenness and voracity, that the group celebrates itself as a collective, canonize affirmative behaviour and systematize the network. It is by making the invitation that the group joins the wider collective, which builds a tangle of solidarities that sustain and credit the presence of relatives and friends during the time the work is being built. The banquet "is the triumph of life over death", of the body that renews itself, of the liberation of the word, completes Bakhtin. The conviviality at the table is a vital element of the cultural identity and continuity of communities throughout the Mediterranean basin, being a moment of social exchange and communication, an affirmation and renewal of the identity of the family, group, or community.

This work aims to discover the impact of confraternities on local development, considering the preservation of the Mediterranean diet. It intends to analyze, through a cultural, gastronomic, and Bacchic context, how each Confraternity works with the preservation of the intangible heritage. Its objective is to demonstrate the importance of Confraternities in tourism and, above all, in sustainability and local development. The Confraternities work with endogenous products and a whole recipe that, despite being ancestral, has been maintained through the promoted events. In this sense, either the Federation of Confraternities, the European Council of Confraternities, or each of the confradic structures, seeks, through its confreres and confreres, to preserve and disseminate an entire identity patrimony of the regions and the art of knowledge and flavours. Without a doubt, they are a true receptacle of an immeasurable intangible heritage.

All these traditions are being collected and compiled and it is, above all, the confraternities that are responsible for ensuring their dissemination and preservation (museums, wineries on farms and wineries, restaurants and taverns, products and their production or elaboration, transmit an empirical knowledge that is unveiled to us by the hands of professionals who in multiple palettes of colours, smells, and tastes make us discover this cultural wealth that focuses on gastronomy and wines. Congress such as: olive oil, citrus fruits, legumes, aromatic plants, wine, the smoker itself, form the basis of the so-called Mediterranean diet. It was verified, through the information given by the participants and representatives of the various confraternities, that it should be to consider, of immeasurable importance, the entire cultural and enogastronomic movement, promoted by each of the Confraternity, during the weekends and throughout the year. Visits made by the members of the Confraternity are scheduled annually and the members are divided to be present, throughout the country, at the commemorative events. At every moment, they appreciate the flavours of endogenous products and the way in which the various products and by-products are manufactured and handled.

17.4 European Confraternities Congress—CEUCO Algarve 2019

Through the European CEUCO congress, which took place in the Algarve in 2019, we sought to understand the functioning of the various Confraternities, and to know how the Mediterranean diet worked, as its focus was on the knowledge and flavour of the sea. We intend to make possible the systematization of the Gastronomic Confraternities, the Bacchic Confraternities or Oenophiles and the Cultural Confraternities within an association such as the European Council of Confraternities. With such a high number of participants, belonging to more than one Confraternity, it was not possible to obtain all the data referring to all 123 Confraternity registered in this congress. Although it was easy to analyze the products by sampling, it was not possible to properly track the products and by-products that make up the Mediterranean diet.

It was decided to analyze the Confraternities and the products they presented and not the members who registered, as there were situations in which the country did not correspond to the lecturer's registration, as he could be associated with several Confraternities, as honorary members.

To carry out this exploratory study, a thorough bibliographic research on the subject was carried out, through consultations on web pages, articles in newspapers, reports and master's and doctoral theses, and published books. The study adopted a descriptive analysis method to find the overall result. We also used a database obtained from CEUCO Portugal, referring to the European Congress, held in the Algarve in November 2019, with a sample of 580 participants, belonging to 123 European Confraternity, consisting of all those registered in the Enogastronomic Congress of the Algarve—Knowledge and Flavour of the Sea, from almost all European countries, with the exceptional presence of Macau.

Based on the data analyzed, we can say that there are more than 13 thousand kilometres covered in relation to the European gastronomic, Bacchic, and cultural Confraternities, which maintain the traditions of flavours and knowledge transported through culture and a territory. In addition, it should be noted that all this activity, either by the occurrence of chapters and/or enthronements, or by the congresses that are taking place, have created a differentiating movement in terms of destination, representing an added value for cities, places, and regions, influencing the dynamics of heritage tourism [1]. The Confraternity, whether Bacchic, gastronomic, or cultural, are the true receptacle of this immeasurable intangible heritage in terms of the preservation of the diet and food culture.

This movement of multiple Confraternities, represented by their members, are creators of development, sustainability, and preservation of ecosystems. From the recipes made known by our grandparents, and already received by them from their ancestors to the sale of endogenous products and identity of certain areas, make this secular heritage a means of differentiation, dissemination, and a sustainability strategy based on a circular economy structure. Undoubtedly, cultural initiatives and projects, duly based on logics of added value and differentiating characteristics, work as a unique and proactive element, not only for providing services to the community, but also for qualifying and empowering citizens taken individually and by the populations within a specific framework of favouring social and territorial cohesion [7]. In this sense, the gastronomic, Bacchic, and cultural Confraternity are promoters of an entire activity whose main result is sustainable development, neither sex, profession, nor region of origin influence the confradic experience.

It is a reality that involves all generations and all types of professions. The obligation is only to belong to a brotherhood complying with the values and principles that are inherent to it. In the Congress that we analysed, there was all that, in a sharing of knowledge and flavours. Each of the Confraternity created a space with decoration and products identifying the country and region of origin. The registered members were aged between 25 and 80 years, depending on the region they came from, they were mostly men or women (e.g. France Provence—98% registered women representing the wines of the region; Greece—78% registered men, chefs). In professional terms, not all the members of the Gastronomic Confraternity were involved in the restoration and not all the members of the Bacchic Confraternity were involved in the production or marketing of wines. Many registered members just wanted to maintain the tradition or recreate the flavours of the recipes or preserve the identity of their region. Thus, we were able to verify that the members of the Confraternity could be effective or honorary, all of them having as their main function the dissemination of culture and the preservation of heritage [2].

17.5 Conclusions

With this study it was verified that the European Confraternities, belonging to CEUCO, recognize the high importance of this type of congress and this type of activities, about the preservation of the diet and food culture. It is a medium where personalized contact is privileged and where the positive impact on the population's culture and heritage can be identified as an element of identity. During the event, knowledge sharing strategies were worked out and special attention was given to the need for the so-called "marriage" between Bacchic and gastronomic confraternities, to promote a region or a place considering its products and its knowledge. The articulation of various types of Confraternities can, with their experience, affect the entire development process of various regions and create a personalized point of contact. Undoubtedly, in terms of values and principles, there are no significant differences between the Confraternities, only their size and their dress. Defending and disseminating the authenticity of true gastronomy, without, however, repressing its natural evolution and adequate to technical progress and defending and disseminating endogenous products, are the main objectives of the Confraternity present at this Congress. We can conclude that this is undoubtedly the way to ensure the safeguarding and enhancement of cultural, material, and immaterial heritage existing in territories, which have their own cultural and food identity, marked by the historical and social evolution of their traditional flavours and knowledge. Safeguarding the Mediterranean diet will gain more notoriety and more followers if we manage to maintain the identity and differentiation in the use of the products that comprise it.

Limitations

One of the limitations of this work was to be able to articulate with the various Confraternities in order to see the similarities and differences between them, due to the various dialects used by the confreres and the specific terms of each region. This limitation allows us to work in the future with a guide of terms associated with gastronomy, with endogenous products, taking into account the diversity of brotherhoods, regions, and products. It could be a good reference for the Mediterranean diet network.

Greetings

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Chapter 18
Fluvial Waters and Their Functions for Tourism and Recreation. Recreational and Sport Uses for Rivers and Lakes at Serra da Estrela (Portugal)

Gonçalo Fernandes and Adriano Costa

Abstract The surface water resources of the inland regions (rivers, lakes, dams, canals, marshes, among others) have always been attractive to the population for the development of leisure and recreation activities, beyond those considered essential for the human presence. The existence of water has promoted recreational uses for the riverside communities, or for visitors, who seek in these surface leisure areas, of which bathing, sports activities, fishing, observation of natural ecosystems, among others, are important attractions to associate with tourism. These spaces can be used for recreational, sports or competitive activities, depending on the geomorphological conditions, existing riparian ecosystems, the size of the water bodies and the infrastructure developed. Given the environmental value of these resources and the ecosystems they represent, there is a latent fragility that requires proper management and adaptation of spaces to different uses and functions, without compromising the sustainability of ecosystems and user safety. The Serra da Estrela, being the largest mountain of the mainland in Portugal, originates from the main Portuguese rivers along with a set of lakes and dams of relevant importance for water supply to populations and economic activities, constituting the last decades as a bathing leisure and sports space. The study seeks to identify the main activities and sports and recreational uses of these surface waters, identifying the associated technical and legal requirements. In parallel, it aims to reflect on the importance of tourism and recreation of surface water for local communities, the strategies for promotion and valorization to be considered, to enhance this mountain tourist destination, with differentiated water based tourism products.

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18.1 Introduction

Tourism activities have relevant meaning and expression as factors of transformation of territories and their (re) organization, in terms of occupation, generated economies, and promoted socio-cultural relations. These territorial and socio-economic implications have their own meanings for rural and mountain territories because of the resources to be allocated to the activity (natural and cultural), existing ways of living, the supply of hotels and services, and the relationships to be established with the local communities. In this context, it is essential that the tourism sector successfully addresses several challenges, including population aging, growing external competition, sustainability concerns, and evolving demand patterns for specific forms of tourism.

The surface water resources of the inland regions (rivers, lakes, dams, canals, marshes, among others) have always been attractive to the population for the development of leisure and recreation activities, beyond those considered essential for the human presence, namely the supply water, agriculture and industry, transport and circulation [1]. The existence of water has promoted recreational uses for the riverside communities, or for visitors, who seek in these surface leisure areas, of which bathing, sports activities, fishing, observation of natural ecosystems, among others, are important attractions to associate with tourism [5, 8]. Inland waters acquire increasingly important for leisure and tourism, and various activities that are associated with them, and multiple users who seek them throughout the year with different interests and practices.

The study is structured in three parts, the first corresponding to the framework of the importance of inland waters in the development of tourism and leisure activities, the second promotes an approach to the Estrela Geopark and its potential in terms of recreational and leisure activities to be promoted, given the surface water resources held. Finally, we try to structure the different recreational and sporting practices according to their physical intensity and the required equipment, regulations, and safety rules. The aim is to illustrate the importance of river resources in the promotion of tourism and to assess the recreational and sports potential that the Estrela Geopark holds.

18.2 Development of Water-Based Tourism in Inland Territories

According to the World Tourism Organization [21] rivers provide solitude, beauty, and interesting history that appeal to local recreationists and tourists. There are also a number of significant, direct and indirect, roles that rivers play, including location for activities and places of tourist interest. Like other types of nature-based tourism, river tourism is closely related to the principle of living in harmony with nature, integrating with the environment. It represents an important resource for rural regions, generating new demands and activities related to tourism and leisure, revaluing their perception by local communities, and promoting investments in their qualification [5].

The management of water resources is a complex issue of collective interest and relevance to the environment, especially when the water sources such as rivers, lakes, reservoirs, canals, marshes, and other aquifers present concern conditions due to the uses and functions that support. They require actions and forms of control that ensure the preservation of their ecosystems and the quality of their water [7, 18]. They are public goods and their management should value and protect the interests of the local communities established there and of the economic and social activities developed, many of them ancestral. Over time there has been an increase in water use needs, both in quantity and quality, as a result of population growth and expansion of activities and consumption, which require more water resources and increased control over uses and functions developed [19]. The relationship between water and tourism is characterized by a double understanding of this element: as a precious resource and as an attraction [2, 10]. Given that water is a valuable and scarce resource, research should focus on identifying practical and business initiatives through which water-based tourism can be developed without compromising the quality and availability of water resources [1, 8].

The growing interest in the enhancement and exploitation of inland water resources for activities not related to the water supply to communities, industry, and agriculture, has been expressing itself in recent decades. Accompanying the growth of leisure and tourism experiences in rural areas, the appreciation of riparian ecosystems is a concern of local entities in the qualification of these resources and in generating new opportunities for local communities [8, 17]. The changing sensitivity to water and its importance for health and leisure signal the potential for the development of a social conscience capable of generating new business opportunities that can create value for interior geographic territories with new roles and users. This emerging water culture emphasizes the importance of achieving a harmonious, quality, and sustainable relationship with this element [7].

In terms of national fluvial tourism, the rivers, lakes, and reservoirs stand out for their significance as spaces for the reception and development of sports, recreational and recreational activities [13]. There is an investment in the development of infrastructures and equipment that allow the expansion of tourism and leisure and the creation of the necessary conditions for a qualified performance as recreational spaces, entertainment, and differentiated tourist activities. The investment in the qualification of the fluvial beaches, as spaces for recreation and leisure, constitute an effective way to promote tourism in inland regions. Investments in anchorages, in the development of fishing lanes, walkways or in the promotion of sports competitions related to canoeing, motorboating or more passive activities such as sailing and hiking contribute to the attraction of inland areas and the diversification of their tourism offer.

Leisure, recreational, sports, or competitive activities may take place in these spaces, depending on the geomorphological conditions, the characteristics of existing riparian ecosystems, the size of the water bodies, and the infrastructure developed. Due to the environmental value of these resources and the ecosystems that represent a latent fragility that requires the proper management and adaptation of spaces to different uses and functions, without compromising the sustainability of ecosystems and user safety. According to Moreira [15] diverse and sometimes even conflicting coexistence of socio-economic activities with different interests poses new challenges to the management of rivers and inland waters. Today's dynamics are unprecedented, as rivers have never been the subject of such diverse and intense interests and demand as they are. Its impact on waters and surrounding areas increasingly implies greater control, qualification, and regulation, capable of optimizing and adjusting uses and generating social welfare [15, 16, 20].

River tourism is an alternative type of tourism that includes nature walks and hikes, swimming, and sports activities such as amateur fishing, rafting, canoeing, kayaking, nautical sports, sailing in different formats, padel, windsurfing, among others. In mountain areas, and the particular case of Estrela Geopark, the possibilities are expanded, local communities perceive the potential and interest and public investments gain meaning, to allow satisfactory conditions of access and use.

18.3 Methodology

Serra da Estrela destination presents a diversity of fluvial resources that enhance its attractiveness and generate renewed uses associated with tourism and leisure. In this sense, we tried to identify the diversity of rivers, lakes and dams, to establish a reference framework about the existing potentialities and the practices to be developed. We promoted an analysis and inventory, collaboratively with Estrela Geopark (AGE), Serra da Estrela Natural Park (PNSE), and the Serra da Estrela Interpretive Center (CISE), of the developed recreational and sports practices. Field work was promoted, both in the inventory of the developed practices and their legal and technical requirements, and in the contact with local promoters of recreational activities and sports and responsible for river beaches, collecting information that allows the systematization of the current recreational and sportive uses of river waters. This approach allowed to identify the various activities according to the water mass and to classify their practice according to the physical intensity and the required equipment. It was promoted as systematization of the information about the recreational and sports activities in the surface waters of the destination Serra da Estrela, establishing in parallel indications about regulations or authorizations that its practice requires. It opens for the future the development of studies that allow characterizing the profile of the practitioners, the motivations in choosing Serra da Estrela, and the weaknesses that need to be corrected to foster de destination.

18.4 Surface Water in the Territory of Estrela Geopark and Associated Products and Services

The Serra da Estrela is the main Portuguese mountain and its geological, geomorphological, hydrofluvial, biological resources, ecological and landscape and climatic organization give it meaning and its own dynamics. These resources allow the construction of a different tourist offer, either at different times of the year, either in the practices developed or in the profile of tourists. This diversity allows promoting a multifaceted and diversified destination, in the potentialities and opportunities to consider, for the tourism and leisure activities to develop. In this context, we can consider a set of tourism products and activities, which are articulated around resources that, while not being exclusive, assume greater or lesser expression depending on the specificities of the form or the way it is practiced. Thus, we will be able to establish the following tourist products and activities associated with superficial water resources: Rural Tourism, Geotourism, Ecocultural Tourism, Adventure Tourism, Tourism Scientific, River Tourism, Health, and Wellness Tourism. The classification of this territory as a UNESCO World Geopark has increased the notoriety of this mountain destination and the tourist attractiveness so that the geological resources are articulated with complementary visiting interests, providing greater demand and, at the same time, recreational and fun experiences [6].

The surface waters of the Estrela Geopark territory are composed of rivers, lakes, and reservoirs, corresponding in total to a surface divided by 53.7 km^2 of retained waters (Lagos, reservoirs and RAMSAR site) and 826.8 km of running water, corresponding to rivers, their tributaries, and sub-tributaries (Fig. 18.1 and Table 18.1). The diversity of water lines, and the ecosystems they integrate, together with reservoirs and lagoons, provide the territory with strong potential for the development of water-based tourism and leisure activities.

The main activities carried out on these water surfaces, given their characteristics in terms of geomorphology, climate, ecosystems present, and recreational/sports interests of local communities and tourists, can be systematized in Table 18.2, according to the respective water resources, uses, and associated practices and existing restrictions. It appears that it is the practices related to bathing and recreational activities (near water surfaces) that are the most representative. The ease of access and the direct use of nature, particularly in the summer season, together with its reduced demand for equipment or technical support for its realization, enhance its recreational use by local communities and visitors. In this context, the river beaches represent a set of spaces that have been gaining meaning and notoriety, such as leisure equipment, constituting a value offer for the region and its communities, particularly during the summer. In recent years there has been an increase in "new" activities in the region and on surface waters, which imply greater organization and equipment. Of note, on the one hand, is the growth in sport fishing activities, due to the natural conditions and the existence of salmonid populations that attracts practitioners at national and international level. On the other hand, canoeing and padel

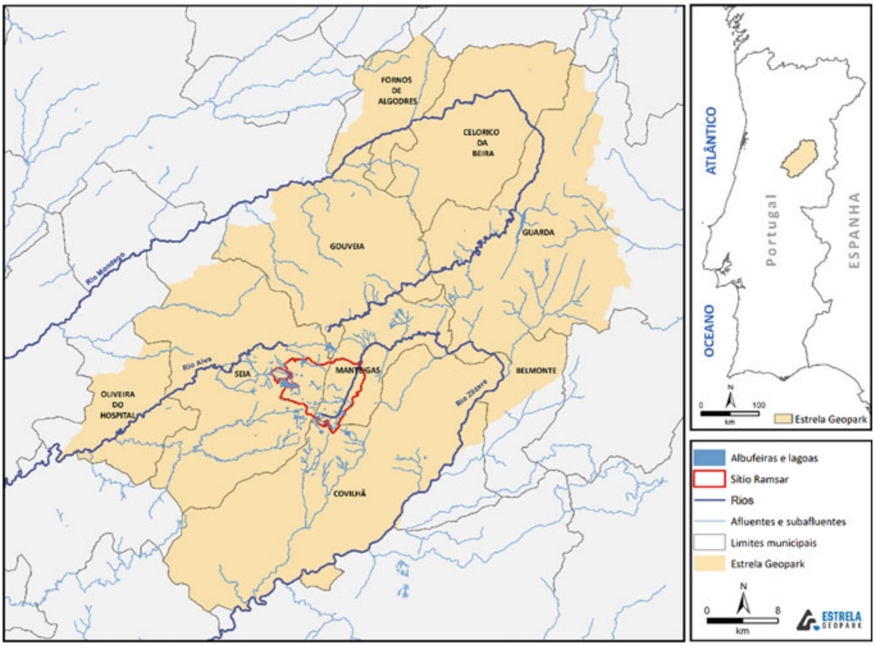

Fig. 18.1 Map of water resources in the Estrela Geopark territory. *Source* AGE—Associação Geopark Estrela

Table 18.1 Surface water resources, extension and associated watersheds

Water resources	*Surface/extension*	*Watersheds*
Rivers—Zezere, Mondego, Alva	*826.8 km*	*Tejo and Mondego*
Lakes and dams	*2.9 km*^{2}	*Natural or embalmed lakes in depressions of sub-tributaries of the Zezere and Mondego*
RAMSAR (Zone)	*50.8 km*^{2}	*Zone corresponding to the height Plateau of Serra da Estrela and Upper part of the Zêzere River*

Source: AGE—Associação Geopark Estrela

gaining fans, increasing the attractiveness of the region, for which the water quality and the landscape are decisive arguments.

The qualification and expansion of river beaches, as leisure facilities for local communities and visitors [3, 9] constitute arguments for the qualification of the destination and the expansion of the offer of bathing spaces in mountain regions, conquering a greater number of users and reinforcing the image of nature associated with the destination [12, 14]. The investments made, the qualifications and

Table 18.2 Surface water resources and associated recreational and sport uses

Water resources	Entertainment uses and sports	Restrictions
Rivers: Zezere and tributaries Mondego and tributaries Alva and tributaries	Recreational (contemplation and picnics); Bathing, Canoeing; Rafting Playful and sport fishing	– Only river beaches are properly trained for bathing practices, with means of support, access, and control – Sportfishing requires licenses for its practice due to its performance in rivers or the protected fishing zone of Serra da Estrela
Dams: Lagoa Comprida; Lagoa Escura; Lagoa do Vale Rossim; Lagoa do Viriato; Lagoa do Covão de Ferro; Albufeira da Barragem do Lagoacho; Lagoa do Covão do Forno; Poços de Loriga; Lagoa Seca Lagoa dos Conchos; Lagoa Redonda; Lagoa da Erva da Fome Lagoa do Covão do Curral; Lagoa do Vale do Conde; Lagoa dos Cântaros	Recreational (contemplation and picnics); Bathing; Canoeing; Windsurf and Padel; Playful and sport fishing; Scientific Activities	– Bathing practices limited to lagoons – Use of propelled vessels conditioned; – Fishing is subject to a specific calendar and obtaining special licenses for daily fishing in the protected fishing zone in the lagoons of Serra da Estrela
RAMSE zone—Protection zone on the Torre plateau relative to wet areas and small natural lakes	Walking and observation; Bathing; Scientific activities	Area of great environmental sensitivity, with human activities severely limited in this area of maximum restrictions under the PNSE regulations

Source: Authors elaboration

the provision of services promoted, are perceived to be of value to local communities and to attract visitors. The connection between the community, territory, and tourism is a fundamental process for the promotion of tourism in rural areas [8, 11]. River resources and the heritage associated with them, along their banks or in the surrounding villages, linked to economic activities, mobility, or water management structures are simultaneous with riverside ecosystems, elements with the potential to affect tourism and service development.

Tourist products developed based on surface water resources can be structured according to their intensity, the means used for their practice, and the time of year, implying different degrees of physical intensity and regulation. It should be noted that there is a relationship between the complexity of the activity carried out, the necessary technical equipment, and its realization with the associated levels of regulation. In this context, the forms, means, and moments of its realization have been translated into regulation, to reduce impacts on the natural resources that support the activities. Thus, the plans for the organization of dams and lakes and the regulations for activities of animation and sport, are established by the ICNF, based on the

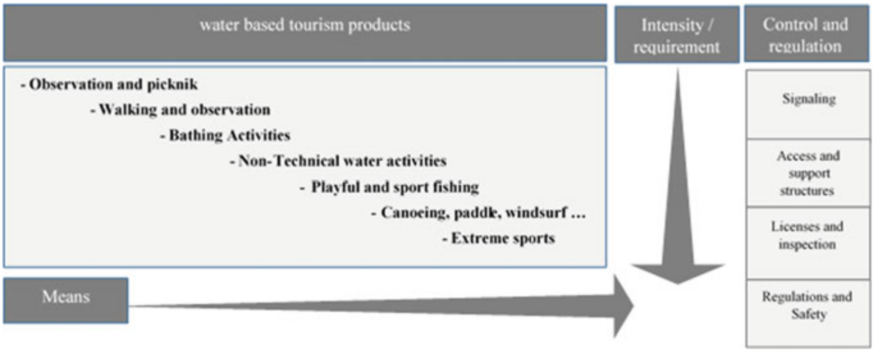

Fig. 18.2 Typologies of tourist and recreational activities in inland waters and physical and regulatory requirements. *Source* Adaptation from Fernandes and Gomes (2021)

principles of organization enshrined in the national planning policy and the guidelines and limitations established in the Serra da Estrela Natural Park plan. However, there is currently reduced signage and information, which allows a better knowledge of the potentialities, the requirements (technical and legal) for their practice, and the adequacy of means that allows the application of the various practices and their proper monitoring (Fig. 18.2).

Given the growing demand for the mountain destination, the development of several tourist products and the perception of the Serra da Estrela as a destination for sports and recreational practices associated with water gains dimension and generates new attractions. This practice becomes relevant to promote greater attention from local authorities on the potential of these demands and encourage the community to develop services associated with different water activities. One of the peculiarities associated with river tourism is the possibility of a combination of the aquatic environment with the terrestrial environment, through walks, sports activities, leisure activities, visits to villages, monuments, craftsmen, participation in gastronomic experiences, with their own local identities [4, 5]

These dynamics demand greater control of the practices developed, their appropriate signaling, requiring local authorities to map the uses and define rules for the safety of the practitioners and the qualification of the destination. Currently, some gaps urgently need to be addressed, particularly in the definition and signposting of recreational and sporting activities to be promoted and in their control, as well as the assignment of consensuses that limit potential conflicts between companies that promote these recreational and sports activities.

18.5 Conclusions

The surface water resources (rivers, lakes, reservoirs, dams, marshes) and the practices associated with them, established relationships with the territory and with the riverside communities that make them a relevant resource from tourism.

The growth of river tourism and leisure activities, particularly active in inland waters, is currently relevant, which advises that inventories of the potential held should be invented so that the existing and potential suppliers can be known and monitored to better manage it. Local administrative entities have a relevant role in the qualification, conservation, and dissemination of these resources, encouraging the involvement of communities in the promotion of economic initiatives and the construction of the image of the destination and its values in terms of leisure and tourist activities. It should be noted that the qualification of rivers, lakes, dams, among other water spaces for river beaches, has been promoted particularly by local administrative entities, creating infrastructures and equipment that promote the best conditions of access and use. It is worth mentioning that it is the quality of the waters, the heritage value of the landscape, the maintenance of the characteristics of the river ecosystems, and the own rurality that support the value of these spaces in tourist activity. In their appropriation, social, economic, and environmental interests tend to be divergent, implying the existence of principles and guidelines that promote their proper regulation, establishing limits and conditions for the uses and practices to be developed.

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Chapter 19
Trends and Segmentation of Medical Tourism: An Approach to Reproductive Tourism

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Abstract This study aims to understand some of the main trends in tourist segmentation in the context of medical tourism, with an emphasis on reproductive tourism (or, also called fertility tourism). The research study brings together a proposed conceptual model to test empirically to understand some of the main determinants of tourist demand in fertility tourism environments and their behavioral intentions (i.e. satisfaction and loyalty). Reproductive tourism presupposes the practice of traveling for fertility treatment abroad or to another region of the same country. In this sense, the conceptual model proposed by the authors emphasizes some variables that determine tourism demand in this segment, such as commitment, trust, service quality, perceived value, and cooperation. The outbound reproductive tourism journey can be explored in three stages—pre-trip, during the trip, and post-trip to better capture the experience of this tourist. In addition, more research efforts can be devoted to exploring the supply side of reproductive tourism—specifically, how various fertility destinations and clinics attract potential "reproductive" tourists. The present study represents an important contribution in relation to the management of tourist destinations and the development of the relationship with the consumer. This manuscript is an aid to marketing and management in specific contexts of medical tourism (i.e. fertilization tourism). The present study has as its main limitation its embryonic stage, not including collection of primary data or development of an empirical study.

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19.1 Introduction

Tourism, as an area of study, has expanded its scope, reflecting a growing recognition in the academic community, parallel to the application of interdisciplinary concepts and methods. In fact, tourism research has studied its various implications from a multitude of perspectives and with interdisciplinary perceptions. In this context, niche tourism can be considered an alternative, almost the antithesis of modern mass tourism (for example, medical tourism services). In this context, medical tourism as a niche emerged from the rapid growth of what has become an industry, where people often travel long distances to foreign countries to obtain medical, dental, and surgical care while they are tourists. According to Cham et al. [1], medical tourism is defined as the act of traveling abroad to obtain medical assistance. As a new form of tourism, health tourism has become one of the fastest growing international businesses in the tourism industry for developing countries [2].

Medical tourism and its related businesses and organizations have been considered as one of the most profitable hospitality sectors for many destination countries and cities in specific developing countries. Medical tourism has emerged as a particularly lucrative sector, a potential tourism market and a global healthcare phenomenon. In line with projections according to Connell [3], medical tourism is an increasingly important constituent of several national economies. In developed and developing contexts, medical services have been successfully designed and marketed to cross-border consumers [3, 4]. The range of services offered is wide and diverse, offering everything from surgical interventions, cosmetic, and aesthetic procedures to fertility treatments. To this extent, and as part of the broader trend in medical tourism [5], reproductive tourism has attracted substantial academic attention, presumably due to the global increase in infertility and the rise of medical tourism. With globalization and the rapid advance of information technology, this special form of tourism as a form of travel has grown. Some studies have illustrated that individuals engage in medical tourism to pursue different medical procedures, based on a wide range of motivations. Several studies in the field of marketing and tourism have discussed the relationship between destination and tourist buying behavior, noting that the variables that influence tourists seeking treatment abroad are diverse and comprise the quality of service [6], perceived value [7], commitment [8], trust [9]. Nevertheless, research that deals with medical tourism shows remarkable growth [3], the debate and theoretical understanding related to issues of an economic and marketing nature are considered as topics that need further attention and discussion. According to Connell [3], one of the issues related to the marketing of medical tourism that remains little analyzed is the recruitment of patients and the creation of value through the service. Although there are some studies that confirm that the intention of an individual patient to choose a specific medical service provider is related to the service and the destination offer, these studies still do not offer an integrated analysis of the medical tourist's decision making and recruitment of patients and their behavioral intentions, regarding the intention to return and the recommendation.

In this sense, this study develops the existing research, since it discusses the growing phenomena of medical tourism (in particular, reproductive tourism) and the perspective of relationship marketing. Based on the literature review, we propose a model that connects the dimensions of relationship marketing (that is, commitment, trust, and cooperation) with the consequent satisfaction with the medical tourist and the behavioral intention to repeat the experience or reinforce the experience with a marketing focused on tourist motivation (and, cumulatively, health).

19.2 Tourism Trends and Segmentation

Tourism is a phenomenon that moves millions of people around the world, taking as a major driver of the global economy. Every year, much due to the frequent changes in the tourism environment, fosters competition between and within tourist destinations [10]. It is multifaceted and geographically complex activity, where different services are ordered and delivered in different stages, from origin to destination [11]. To set Special Interest Tourism (SIT) in a broader overall tourism context, Trauer [12] suggest a "Tourism Interest Continuum". As a psychological phenomenon, a tourist trip is preceded by a specific need that generates a reason to travel and sets a goal for the trip, which follows the search for information [13]. Like other emerging sectors in a modern economy, tourism is a dynamic and ever-changing industry. Consequently, SIT, both as a product or sector and as a distinct entity within the overall tourism spectrum, has been largely ignored as an important area of study within the tourism field in general. Trends in global tourism demand suggest the emergence of sophisticated consumers looking for new, different, and specific tourist experiences. In such context, niche marketing seems a relevant response to market dynamics. Although niche marketing has been successfully applied to a high number and many types of businesses, there is a shortage of research addressing the way niche marketing may be applied to tourism [14].

New habits needs and trends in the global tourism arena create more sophisticated consumers who systematically seek different and specific experiences. In this context, as several authors have proposed, including Yeoman [15], niche tourism can be considered an alternative, almost the antithesis of modern mass tourism. While mass tourism is homogeneous in nature (a standardized and uniform product for a large market segment), niche tourism is defined by its heterogeneous nature (greater demand for a more distinct and unique product). This section therefore addresses the clarification of the concepts "medical tourism" and "reproductive tourism".

19.3 Medical Tourism

Medical tourism and its related businesses and organizations have been considered as one of the most profitable hospitality sectors for many destination countries and cities, in specific developing countries [16–18]. Reviewing research on medical tourism, not to mention domestic medical tourism, is a challenge due to the novelty of the concept, lack of specific data, and somewhat amorphous nature of the concept [17]. Medical tourism is partly the result of the globalization of health and tourism, which are already the main arenas for transnational economic activity. The process is generally facilitated by the private health care sector, but it involves the public and private sectors of the tourism industry. Medical tourists can enjoy surgery or medical treatment while enjoying a stay in one of the most popular tourist destinations in the world. In medical tourism, citizens of highly developed nations bypass the services offered in their own communities and travel to less developed areas of the world in search of medical assistance [18].

Medical tourism is fundamentally different from the traditional model of international medical travel, where patients generally travel from less developed countries to major medical centers in highly developed countries for medical treatment that is not available in their own communities [9]. Figure 19.1 shows how the sector can be classified and segmented. It must be unequivocally stressed that this division is neither closed nor ideal [18]. Medical tourism is conceptually full of nuances, contrasts, and contradictions, which results in difficulties in its description, and the lack of reliable data exacerbates this situation [20]. It follows from the nature of

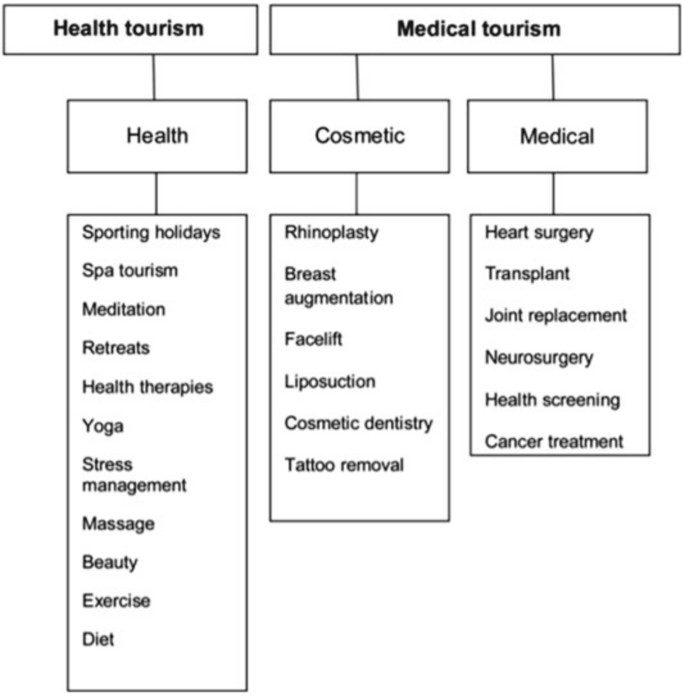

Fig. 19.1 Segmentation of medical tourism. *Source* adapted from [19]

medical tourism that it has the most diverse segments, or categories. Among these segments, reproductive tourism stands out.

19.3.1 Reproductive Tourism

Reproductive tourism (also known as fertility tourism, procreative tourism, and cross-border reproductive care) is the practice of traveling for fertility treatment abroad or to another region with the same country. Reproductive tourism has been defined as "the traveling by candidate service recipients from one institution, jurisdiction or country where treatment is not available to another institution, jurisdiction or country where they can obtain the kind of medically assisted reproduction they desire. As such, it is part of the more general 'medical tourism'" [21]. One can usually be considered as having fertility issues when they are unable to have a clinical pregnancy after 12 months of attempts with intercourse. Patients try fertility tourism when they realize that superior treatment and/or superior fertility doctors are available in other regions or countries. The fact that reproductive tourism is a growing global phenomenon outside of Euro-America has been acknowledged by the Task Force on Ethics and Law of the European Society for Human Reproduction and Embryology.

As a part of the wider trend of medical tourism [5, 22], reproductive tourism has amassed substantial scholarly attention, presumably due to the global rise in infertility and emergence of medical tourism. With globalization and the rapid advancement of information technology, this special form or tourism as a form of travel has burgeoned. Several commentaries have illustrated that individuals engage in medical tourism to seek different medical procedures, based on a wide range of motivations [23]. Conversely, reproductive tourism involves the reproduction of human life, which raises different yet important bioethical questions as to the child's status and future welfare [23]. Furthermore, this form of medical tourism involves not just the infertile couples but also other stakeholders such as third-party gamete donors or surrogates [22]. As such, reproductive tourism is a complicated variation of medical tourism. More importantly, the act of traveling to another country to receive fertility care, such as in-vitro fertilization (IVF) has been discussed and empirically examined across various disciplines, with a preponderant of works on the travel motivation of reproductive tourists [23]. The increase in demand has led to several medical tourism websites acting as broker between people seeking treatment and clinics worldwide that see international patients. These are some of the issues examined in Fertility holidays: IVF tourism and the reproduction of whiteness [24].

Reproductive tourism raises economic, religious, cultural-social, and moral tensions, among others. Leading controversies include [25–27]:

- religious, e.g. in Muslim couples, and total opposition of the Catholic church,
- socio-cultural, legal, and economic in relation to surrogate mothers, an attempt to internationalize laws toward the commercialization of surrogate services,

- ethical, legal, and economic aspect of trade in frozen human embryos for reproduction (instrumental treatment of embryos),
- bioethical aspects of the use of stem cell therapy,
- social diversity resulting from gender; there are cases of marginalization of men in the treatment of infertility,
- social exclusion same-sex couples gender and sexuality minorities, singles, and infertile people who want to use surrogate/in vitro fertilization services.

19.3.2 Main Motivations of Reproductive Tourism

The main interest for these individuals to become medical tourists is the high cost, long waiting lists, or even the absence of assisted reproduction technology services at home; prominent examples include UK couples visiting the US to obtain PGD and IVF to conceive so-called "saviour sibling" children (a child who will be an immuno-compatible match and supply a life-saving tissue—commonly umbilical stem cells—to a gravely ill sibling). According to Smith et al. [28], private fertility clinics have appeared in developing countries, offering a wide variety of fertility services at much lower prices than clinics in developed countries. While the "big players" in medical tourism, such as UK, Portugal, Bulgaria, Russia, Ukraine (legality of surrogacy services) and Australia, USA, Canada, Germany, Romania, India, Israel, and South Africa, are actively involved in the fertility sector, so too now are Latin American countries such as Brazil, Chile, Mexico, and Argentina. As with their North American, European, and Asian counterparts, private fertility clinics in Latin America are using the Internet to reach potential consumers in the lucrative global market for assisted reproductive services. Next to Brazil and Mexico, Argentina is the Latin American country with the most well-established private fertility industry. Smith et al. [28] concluded that many consumers looking to travel to a specific destination to access fertility services are provided with information on clinic websites that trivializes or under-represents the important risks involved in such procedures or offers only partial and ultimately self-serving facts. The consumer is often ill informed about important details of such treatments, including the possibility and/or need for follow-up care, which may well lead to unwise decisions or choices. According to Chien [29], approximately 15% of couples are affected by infertility worldwide. Subsequently, the use of assisted reproductive technologies is becoming increasingly popular, including the use of donor eggs, sperm, and embryos.

19.4 Conceptual Model Proposed

Preliminary research was conducted to develop the research instrument. Details of the preliminary research are given below. After the collection of the preliminary data, empirical data would be collected through fieldwork. This study discusses the growing phenomenon of medical tourism and the perspective of relationship marketing associated with specific contexts of reproductive tourism. Based on the literature review, we propose a model that relates the dimensions of relationship marketing (i.e., commitment, trust, quality of service, perceived value, and cooperation) with the consequent satisfaction with the reproductive tourist and the behavioral intention of recommendation or revisit. Several studies in marketing and tourism contexts have discussed relationship marketing from association to destination and consumer buying behavior, including the study of satisfaction, loyalty, or quality of service. An extensive review of the current literature reveals that there is no integrated theoretical framework for the holistic study of the medical tourism industry.

The proposed research model not only has implications for future research, but also provides useful information for reproductive tourism professionals. Based on the service marketing literature [30, 31] it is proposed that the perception of the quality of medical service will have a direct effect on loyalty and will have an effect indirect through perceived value and tourist satisfaction. Service quality can be understood as the result of comparing consumers' expectations with their perceptions of the service received [31]. The SERVQUAL scale has been systematically used to measure quality of service, which integrates 5 dimensions (tangibility; reliability; security; responsiveness and empathy) with adjustments that allow the assessment of service standards in medical tourism [32, 33]. Several studies have shown that more commitment and trust with the brand leads to a more positive satisfaction behavior, e.g. Belaid and Temessek Behi [34]. According to Bloemer and Kasper [35], commitment is the necessary condition for loyalty. Investigations into the brand engagement relationship have found that commitment plays a central role in predicting brand loyalty. Other studies report that more commitment leads to positive loyalty behavior. The correlation between trust, commitment, cooperation, and satisfaction is also a well-studied area, supported by the literature [36]. The credibility and integrity components of trust in the brand appear to be a harbinger of brand loyalty. To claim loyalty and achieve success, companies must pay more attention to consumer relations and thus gain trust. The marketing literature highlights the important role of perceived value in a patient's intention to refer a service to other people through the recommendation. Han and Hwang [37] found that the perceived value was significantly related to the perceived benefits of a medical hotel and that the perceived value positively affected behavioral intentions.

The literature highlights that satisfaction tends to favor the development of behavioral loyalty. These results are particularly evident in tourist contexts, such as the importance of satisfaction in revisiting or recommending family members or friends [38]. This aspect was corroborated in our empirical study. Based on this discussion, the conceptual model presented in Fig. 19.2 is proposed, which describes that, in a context of medical tourism, the increase in the quality of service, trust, cooperation, perceived value and commitment facilitate the development of behavioral satisfaction and loyalty. Thus, the following research hypotheses were formulated: H1: quality of service, trust, commitment, perceived value, and cooperation have a positive effect on the satisfaction of health care and reproductive tourism; H2: the quality of service has a positive effect on the value perceived by the reproductive tourist and H3: the

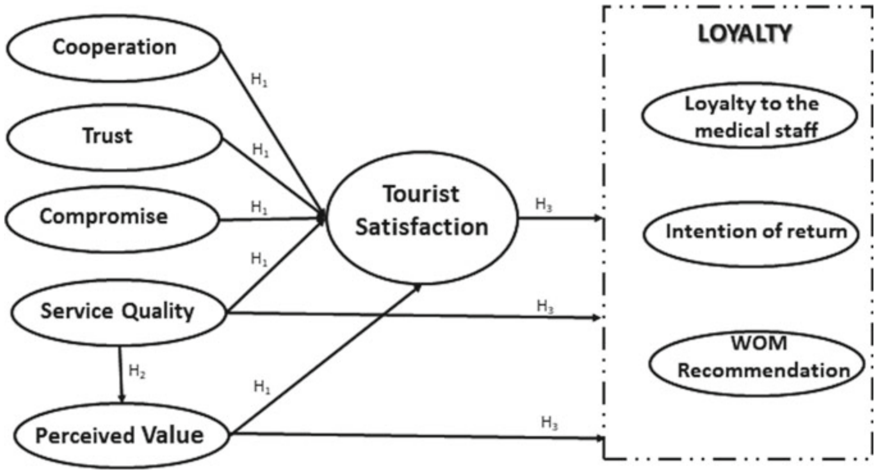

Fig. 19.2 Conceptual model proposed for reproductive tourism contexts. *Source* authors' own study

quality of service, the perceived value and satisfaction have a positive effect on the loyalty of the reproductive tourist.

19.5 Final Considerations and Next Steps

This study discusses the growing phenomena of medical tourism (specifically reproductive tourism) and the perspective of relationship marketing. Based on the literature review, we propose a model that connects the dimensions of relationship marketing (that is, commitment, trust, and cooperation) with the consequent satisfaction with the medical tourist and the behavioral intention to repeat the experience or reinforce it with a marketing focused on "reproduction" motivation. Several studies in marketing and tourism contexts have discussed the association of relationship marketing with destination and consumer buying behavior, including the study of satisfaction, loyalty, or quality of service.

Future studies can explore more deeply the understanding of the complex process of decision making for couples travel, in a post-pandemic scenario (i.e., covid-19), such as destination choice and risk assessment. Most importantly, the outbound reproductive tourism journey can be explored in three stages—pre-trip, during the trip, and post-trip to better capture the experience of that tourist. Therefore, technology plays an increasingly important role in promoting tourist destinations, distributing and marketing tourism, and supporting tourists before and during their stay in the destination [39, 40]. In addition, more research efforts can be devoted to exploring the supply side of reproductive tourism—specifically, how various fertility tourism destinations and clinics attract potential reproductive tourists. Insurance coverage (by country)—examples: Austria: approximately two thirds of the costs covered; Australia: Medicare covers almost all costs, unlike direct costs. It must be paid for by the patient; Belgium: the patient pays 5–10%. In the initial treatments, only covered SET; the Czech Republic: up to 4 cycles, age limit for women is 47 years old; Denmark: up to 3 cycles. Free fertility treatment only in a public clinic, to have a couple's first child; France: Some limitations in egg and sperm donation apply, otherwise, full coverage of 4 attempts; Spain: reimbursement only for treatment in public centers. Donation of eggs and sperm not covered. Regarding opportunities for the future, the growth of reproductive tourism can be explored in three stages—pre-trip, during the trip, and post-trip to better capture the experience of this tourist; to further explore the understanding of the complex travel decision-making process of couples, in a post-pandemic scenario (i.e. covid-19), such as destination choice and risk assessment.

In an interdisciplinary perspective, the present manuscript represents an important contribution in relation to the management of tourist destinations and market segmentation in contexts of medical tourism. This manuscript is an aid to marketing and management in specific contexts of information technology and documentation. Future studies may lead to a greater generalization of the results.

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Chapter 20
Encouraging Wine Storytelling in the Tourist Experience: A Preliminary Study

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Abstract Wine tourism has long since ceased to be just a visit to wine producing regions and wineries, just to taste or buy wine. In fact, wine tourism has become more complex as a tourist product, due to the requirement of visitors to obtain a differentiated experience, composed of multiple elements Wine tourism activities consist of, above all, wine tastings and cellar, wine house and wine museum visits. Currently, and in the future, wine tourism has provided and boosted the creation of genuine and unique tourist experiences, more and more differentiated tailor-made. This preliminary approach aims to evaluate the role of wine storytelling as an antecedent in the wine tourism experience, namely on other constructs as winescape attributes, sensorial attraction, wine excitement and cultural experience. A range of practical implications are provided for wine tourism managers, marketers and wine guided tours namely on the importance on the training the storytelling skill by the wine cellars staff. The new vogue of wine tourism forces us to challenge and re-visit the power relationships that exist within contemporary tourism and the host–guest relationship. As an interdisciplinary approach, this research contributes positively to

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the development of theory in relationship marketing and tourism contexts in wine management (theoretical implications). At the end, guidelines for future work will be presented.

20.1 Introduction

Wine tourism as the intersection between tourist and winemaking activities has been a much explored theme, nationally and internationally, by the scientific community, which has boosted scientific investigation about this issue. This phenomenon is due to the potential that wine tourism has as a destination and a product, not only as an offer, but as something people are looking for. That way, wine tourism has demonstrated impact, progress and evolution in the development of the tourist system, mainly because of new perspectives and trends, as well as identified challenges [1]. The tourist's involvement with the visited region results in a state of "wine excitement", which starts already with the decision making about the trip and extends throughout the visit [2]. This wine excitement makes the visitor more receptive to absorb the stories that make the wines, the producer and the region, to stand out in their minds and to make it a memorable experience. It is widely accepted that service providers involved in the wine tourism product, must deliver an experience that encompasses, not only the wines and gastronomy of the producing region, but mainly the global environment i.e., the winescape and its culture and tradition [1].

This study aims to evaluate the preliminary insights of wine storytelling as an antecedent in the wine tourism experience, namely on other constructs as winescape attributes, sensorial attraction, wine excitement and cultural experience and to explore the moderation effect of winescape attributes and sensorial attraction between storytelling and wine excitement and cultural experience. A literature review relating constructs domain, scale items and hypothesis development follows, methodology approach applied. Finally, the conclusions, implications and future research directions are presented.

20.2 Special Interest Tourism (SIT) and Wine Storytelling

Tourism is a phenomenon that moves millions of people around the world, taking as a major driver of the global economy. Every year, much due to the frequent changes in the tourism environment, fosters competition between and within tourist destinations [3]. It is multifaceted and geographically complex activity, where different services are ordered and delivered in different stages, from origin to destination [1]. Consequently, Special Interest Tourism (SIT), both as a product or sector in its own right and as a distinct entity within the overall tourism spectrum, has been largely ignored as an important area of study within the tourism field in general. Trends in global tourism demand suggest the emergence of sophisticated consumers looking for new, different and specific tourist experiences. In such context, niche marketing seems a relevant response to market dynamics. Although niche marketing has been successfully applied to a high number and many types of businesses, there is a shortage of research addressing the way niche marketing may be applied to tourism [4–6].

This emotional connection that allows visitors to absorb the cultural heritage, from social and landscape elements of the region and its producers, often starts with wine tasting [3]. By establishing an emotional connection with visitors, producers can position themselves in their minds as “brands of love”. This positioning allows them to differentiate themselves from their competitors, whether they are regions or direct competitors [7]. For the story to capture the attention of visitors, the narrative must contain elements of authenticity and emotion that coincide with the intention of the visit. The fact that each region and producer use different grapes and vinification methods, allied to the specific conditions of the wine terroir and the winescape, allows to build personalized narratives [3]. The experience of wine tourism is coated with hedonism, being wine a product that aims to offer sensations that give us pleasure through the senses [8]. The sensory experience when tasting wines is transversal to any visitor, regardless of their level of knowledge about oenology and the ability to distinguish the characteristics of the wines or the most professional method of tasting them [9]. The sensory analysis of tasted wines at the winery is influenced by the involvement with winescape and affect perception, memory, and emotions, regarding wines, the producer and the wine region [10].

20.3 The Portuguese Wine Industry and Covid-19 Implications

Internally the Portuguese wine industry is still a small sector within the national economy. Its weight in the food industry in 2019 is about 12%, and it has around 1.5–2.5% of the value in total exports. It employs 1.4% of the Portuguese work force, 1.9% of total number of active companies and a GVA of 2.0% of turnover and productive investment in the manufacturing industry. But it has a natural international vocation. On average the Portuguese wine companies export about four times more than other companies from all other sectors. In 2019, and according to Vini Portugal, the Portuguese wine exports reached 820 million euros, a new historic maximum, which represents an increase of 2.5% over the previous year. France, the United States, the United Kingdom, Brazil and Germany form the top 5 of the destination markets for national wines. In global terms, Portugal ranks 9th in the top 10 of the world’s largest wine exporters [1].

The tourism sector in Portugal is the largest export industry. It is responsible for 52.3% of the services exports and of 19.7% of total exports. Portugal had, in 2019, 26.9 million guests, 7.3% more than in 2018. Of these nearly 27 million people, 61% were foreigners. The tourist revenues registered an 8.7% contribution to the national GDP. Its employment has a weight of 6.9% in the national economy (336.8 thousand jobs in 2019). It also had an increase of 8.1% in the growth rate in tourist revenues and more 7.3% in the overall income in the last year [1]. It is clear from these figures that the wine sector has a lot to profit from a closer association with the touristic sector, even only if the wine tourism can attract a smaller segment of the tourists that visit Portugal every year. The estimated number by Turismo de Portugal, of wine tourist is Portugal in 2016 was of about 2.2 million.

However, recently, [11] demonstrated that infectious disease outbreaks (including COVID-19) impeded on tourism growth given the industry's reliance on human mobility. At the same time, however, the threats international tourism poses to global public health during a pandemic should also be well recognized [12]. As Covid-19 spread started globally from China to the rest of the world, in the APAC region, North America, Africa and Europe, the virus is as contagious economically as it is medically. The social media has been continuously reporting the situation on the national or regional level [13].

20.4 Conceptual Model Proposed

Preliminary research was conducted in order to develop the research instrument. Details of the preliminary research are given below. After the collection of the preliminary data, empirical data would be collected through fieldwork. This study discusses the role of wine storytelling as an antecedent in the wine tourism experience, namely on other constructs as winescape attributes, sensorial attraction, wine excitement and cultural experience. A range of practical implications are provided for wine tourism managers, marketers and wine guided tours namely on the importance on the training of the storytelling skill by the wine cellars staff.

The proposed research model not only has implications for future research, but also provides useful information for practitioners in the wine tourism. Based on this discussion, we propose that, in a context of wine tourism, the stories should include elements that attract the attention of visitors, causing excitement around the region and its wines.

Wine as a cultural product acts as a catalyst between culture, history, and landscape, through storytelling. Each sip of wine not only fills the mouth with sensations, but simultaneously fills the mind with images and the soul with feelings [14]. As such, we hypothesize:

H1a: Storytelling positively relates to winescape attributes
H1b: Storytelling positively relates to sensorial attraction
H1c: Storytelling positively relates to wine excitement
H1d: Storytelling positively relates to cultural experience.

The wines produced in a region, establish a relationship with the traditions and its inhabitants and with the local history and heritage, because they are the main motivation that originates the visit [15]. The essence of wine tourism is, therefore, based on the exploration of the various senses through the experiences provided by the elements that constitute the winescape [16]. Hence, the hypotheses are as follows:

H2a: Winescape attributes positively relates to wine excitement
H2b: Winescape attributes positively relates to cultural experience
H2c: Winescape attributes mediates the relation between storytelling and wine excitement
H2d: Winescape attributes mediates the relation between storytelling and cultural experience.

Finally, the use of storytelling in wine tourism allows the visitor to absorb the history of the producer and the wine brand, the region heritage, its myths, traditions and rituals, based on three narrative styles: descriptive, immersive and technical [17]. Drawing on these premises, the hypothesis is as follows:

H3a: Sensorial attraction positively relates to wine excitement
H3b: Sensorial attraction positively relates to cultural experience
H3c: Sensorial attraction mediates the relation between storytelling and wine excitement
H3d: Sensorial attraction mediates the relation between storytelling and cultural experience.

20.5 Final Considerations and Next Steps

Wine tourism presents more and more potential regarding quantity and quality. Wine tourism has undoubtedly been a trend which has become cemented by quality and offer diversity. Due to that, it has attracted an increasing number of wine tourists who visit and explore wine tourism spaces, registering an increasing flow which has made our country a more competitive and attractive wine tourist destination. This study discusses the increasing phenomena of wine tourism and the relationship marketing perspective associated to specific wine storytelling tourism contexts.

With a preliminary perspective, this manuscript has already identified that the global movement of tourism is seemingly showing an increased focus on the niche (wine) product or service. In this case, the question seems to be whether the further growth in demand for wine management and wine tourism—as a niche tourism example—products will continue until they become a form of mass tourism.

This is a preliminary approach that demonstrates the significant importance combined used of underlying five wine tourism experience dimensions having the storytelling has the key antecedent of the wine experience. Moreover, this study extends the scope into a wine tourism context, bringing new key drivers focused on wine tourist behavioral responses within visits to the wine cellars.

The storytelling around wines and their producers is invariably linked to the region to which they belong, and to their terroir (climate, soils and grapes). Hence, the narrative of a wine cannot be separated from the winescape where it is produced [14]. According to [18], storytelling about (wine destination) places is recognized as a tool to enhance the reputation of regions as they compete for tourism and economic development spending in the digital age.

Place, destinations, cities and regions offer distinctive characteristics beyond the physical geographic and topographic elements, especially concerning produce from a particular area, region, country or territory [19]. This multisensory experience is based on the search for new hedonic sensations, from visitors emotional connection to wine, the region and its culture and heritage [16].

On the other hand, in 2020, the global outbreak of COVID-19 has made an enormous impact on a wide variety of different industries. The slump in outbound expenditure has caused a severe damage to such services as transport, tourism, catering, retail and entertainment. It is estimated by the World Tourism and Travel Council (WTTC) that COVID-19 will cause the global tourism industry a huge loss that amounts to a minimum of 22 billion dollars [20]. According to the General Directorate of Health in Portugal, the new coronavirus, designated SARS-CoV-2, was first identified in December 2019 in China, in the city of Wuhan, Wuhan's Huanan Seafood Wholesale Market. This new agent has never been identified in humans before. The source of the infection is still unknown and the route of transmission is under investigation. Person-to-person transmission has been confirmed and infection already exists in several countries and in respondents who had not visited the Wuhan market [13]. Infectious disease outbreaks (including COVID-19) impeded on tourism growth given the industry's reliance on human mobility. At the same time, however, the threats international tourism poses to global public health during a pandemic should also be well recognized [12], in specific the case of culinary tourism [21, 22]. According to [23], the COVID-19 pandemic can have a profound impact on power relations between companies and their passengers and destination stakeholders in the sense that the companies' future operation can be largely contingent on attitudes of their passengers and destination stakeholders toward tourism in the face of public health risk.

A future study should include other emotional factors (e.g. brand love, commitment, trust, perceived disconfirmation). As an interdisciplinary approach, this paper contributes positively to the development of theory in relationship marketing and tourism contexts in wine management (theoretical and practical implications) [1]. However, the recommendations should be considered within the framework and limitations of the research: a convenience sample and set in two very established but also quite standardized in wine sites terms of visit format. Other research using similar methodological approaches and instruments in a new world setting, can provide different insights on the storytelling relevance and impact on the other constructs.

This study has already identified that the global movement of tourism is seemingly showing an increased focus on the niche product or niche service. In this case, the question seems to be whether the further growth in demand for wine management and wine tourism—as a niche tourism example—products will continue until they become a form of mass tourism. A future study should include emotional factors. The new vogue of wine tourism forces us to challenge and re-visit the power relationships that exist within contemporary tourism and the host–guest relationship.

As an interdisciplinary approach, this research contributes positively to the development of theory in relationship marketing and tourism contexts in wine management (theoretical implications).

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Chapter 21
Repurposing Sites of Death for Tourist Consumption: From Neglect to Memorialization

Sara Pascoal, Laura Tallone, and Marco Furtado

Abstract This chapter approaches three cases of the memorialization process undergone by dark sites, arguing that, on the one hand, places of painful memory are inherently critical and contribute to expand debates around their historical legacy, as they arise renewed awareness of legal evidence and of the crimes committed, while having significant symbolic meaning for victims and their relatives. On the other hand, these sites have to comply with the logics of contemporary cities, subject to market laws and the trivialization of culture and history. Auschwitz, French Guiana's Bagne and ESMA, in Buenos Aires, represent a challenge and an opportunity to observe different ways in which sites of difficult heritage are repurposed in order to both play a role as a site of memory and as tourist attraction.

21.1 Introduction

> Lieux de mémoire are created by a play of memory and history, an interaction of two factors that results in their reciprocal overdetermination. To begin with, there must be a will to remember. [1]

The recent proliferation of memorial sites built all around the world to commemorate the Significant Other dead [2] seems to show that there is an ever-increasing "will to remember" in order to deal with collective tragedy and difficult heritage. From New York's 9/11 Memorial to the Iwate Tsunami Memorial in Japan, this memorialization spree is closely related to a new "spectacularization of death" [3], in which the dead are given greater visibility and space within the public domain,

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somehow reversing, or at least offering a counterpoint to, the modern sequestration of death and of dying as discussed by Sharpley [4].

In addition to a number of interdisciplinary approaches, namely cultural, sociological, or anthropological, "contemporary memorialization is played out at the interface of dark tourism, where consumer experiences can catalyze sympathy for the victims or revulsion at the context" [2]. Loosely defined by Stone [5] as "the act of travel to sites associated with death, suffering and the seemingly macabre", dark tourism "reportedly constitute the largest sub-category of touristic activity in the global tourism economy" [6]. It is also argued that most travelers at some point engage in some form of dark tourism, even if inadvertently [6]. Thus, as increasingly socially acceptable environments where visitors can gaze upon and reconceptualize death [4] through entertainment, education or personal or collective mourning, dark tourist sites are subject to commoditization processes for tourist consumption, which incorporate not only market-related issues, but ethical, historic, ideological and authenticity considerations.

Inevitably involving some degree of interpretation of the past, through which heritage becomes meaningful for the visitor [7], memorialization runs the risk of jeopardizing the authenticity of the site and its significance to visitors [7], especially in the case of darker sites, like in memory of massacres or genocide. Moreover, "dissonant heritage" [8] implies that contemporary readings of the past inevitably disinherit those who may feel neglected or betrayed by the adopted narrative.

In addition, dark tourism sites face the managerial dilemma of determining the acceptable degree of commoditization of death and suffering, so that, on the one hand, they become real for the visitor, without, on the other, disrespecting the event and the memory of the victims represented. Usually voiced through the media, concerns about the moral ambiguities created by the use of some marketing strategies revolve around the risks of undermining the objectives initially set for the site [9], whether historical, educational, political or others. These moral ambiguities are found at mainly two levels—that of the individual visitor (why is (s)he there?, what is the appropriate behavior? What type of, if any, emotional engagement is expected?), and the collective level, as opening sites of memory to public visitation may be seen as an attempt to "create and maintain new moral frameworks" [10], within which the events represented may be analyzed, judged and their repetition prevented.

Developed within the authors' respective research areas, i.e., German, French and Spanish culture, the following three short case studies address some of these issues. Rather than following a fixed methodology, the three case studies intend to approach managerial issues related to the sites, in order to analyze the way in which they are capable of responding to and determining visitors' perceptions. Firstly, the Auschwitz concentration camp, epitome of dark tourism, raises ethical questions related to the degree of commoditization undergone by the main monument signaling the victims of WWII, as well as with the managerial tension between its role as remembrance monument and the actual financial needs to keep the place in operation. As contended by Tim Cole [11] in connection to Auschwitz, some sites may be "drained of meaning", especially when repurposed or rebranded as a tourist attraction. That may be the case of Le Bagne, the second case study presented, the notorious penal colony in French Guiana, analyzed from the viewpoint of the transformations turning the place into a holiday resort, thus partially erasing its bloody past and bringing about a tension between respectful memorialization and tourist behavior. Lastly, the ESMA Museum and Site of Memory (Buenos Aires) offers the possibility of looking at visitors' emotional engagement, arguing that, far from a merely voyeuristic experience, sites of memory may encourage a spiritual transformation through physical contact with a place where collective tragedy took place [11].

21.2 Auschwitz-Birkenau in Poland

Considered as the epitome of dark tourism, the Concentration and Extermination Camp Auschwitz-Birkenau, in Poland, is at the top of the list of the 20 most visited tourist destinations of its kind, according to the website dark-tourism.com.[1] It is the site of genocide and mass murder inextricably linked to WWII—the largest and most horrific conflict the world has ever experienced. As regards the Holocaust's representations in different genres in popular culture, Marshman states that it "has arguably led to the marked increase in both the number of museums dedicated to the Holocaust, and in the number of visitors to them. Our growing fascination with the Holocaust, coupled with the fall of communism and the opening up of the Eastern Bloc countries, has even led to the curious recent trend of Holocaust tourism" [12].

The camp "Konzentrationslager Auschwitz" (or "Auschwitz I") began to be built in the suburbs of Oswiecim in 1941 and operated like any other Nazi concentration camp, as local prisons all over the country were unable to hold more detainees, due to mass arrests of the Polish population all over the country. Following the construction of a second main camp in Birkenau (also known as "Auschwitz II"), which by 1944 could hold about 90,000 prisoners, and several sub-camps, Auschwitz-Birkenau became the largest concentration camp and extermination center in the East European territory occupied by Nazi Germany, where more than 1,100,000 people were murdered. As a symbol of terror, genocide, and the Holocaust, with the capacity to kill approximately 12,000 people per day, Auschwitz-Birkenau also became the center for the "Endlösung der Judenfrage", i.e., the final solution to the Jewish question under the Nazi regime—most of the deportees were killed in the gas chambers immediately or soon after arrival.[2]

The facilities of the Auschwitz-Birkenau State Museum were created in 1947, following an act of the Polish Parliament. They comprise the camps of Auschwitz I and Auschwitz-Birkenau on over 190 hectares, as well as several camp buildings, the ruins of gas chambers and crematoria, camp fence and the railroad spur (also known as the "ramp"). A project created by the International Auschwitz Committee in 1960 started including national exhibitions in some of the camp blocks, in order to display information about the Nazi occupation in countries whose citizens had

[1] https://rb.gy/s9oyq8.

[2] https://rb.gy/p5avuv.

died in Auschwitz. The former Czechoslovakia and Hungary were the first countries to open these national exhibitions during the first year of that initiative. Since 1979, Auschwitz-Birkenau concentration camp has been listed in the international list of UNESCO World Heritage Sites.[3]

The permanent exhibition testifies to the history of extermination and the conditions in which prisoners lived. In this sense, the commoditization of meanings and memories of this site may be considered by many a very sensitive issue. However, particularly as regards the former Nazi extermination camp Auschwitz-Birkenau, no admission fee is charged to visit the memorial [13]. As pointed out by Christoph Heubner, Vice President of the International Auschwitz Committee, "so far, the memorial has always dealt with this issue very cautiously. The reason for that has always been and still is that it is unthinkable for the survivors to have an entrance fee charged at this terrible place. To 'visit' the site where they were tormented and tortured after paying an entrance fee would turn Auschwitz into a museum in a way that would be unbearable for them."[4] [13].

Due to its proximity to the city of Krakow [14], one of the most popular tourist destinations in Poland for both national and international tourists, the Auschwitz Memorial is among the main points of interest and included in the Schindler's List Tour, which highly recommends a visit to the Auschwitz-Birkenau State Museum [15, 16]. A Newsletter released on the official website of the museum in January 2020 states that around 2.3 million people visited the memorial site in 2019 alone (170,000 more than in the record-breaking year 2018[5]). These encouraging results had also a positive impact on the city's economy: "the number of tourists coming to Kraków has been growing and in 2019 was visited by over 14 million people, including 3 million foreign tourists […]. In 2019 tourists staying in Kraków spent PLN 7.5 billion, and tourism-related GDP accounted for 8% of the city's total GDP" [14].

However, the current pandemic has negatively impacted the city's figures in tourism and respectively its financial development. According to the website notesfrompoland.com, roughly 8 million tourists visited the city in 2020—almost half the number of visitors recorded during the previous year. "The decline in tourist numbers during 2020 has inevitably led to a big drop in revenue […] – tourists spent 3.5 billion zloty […], less than half the figure of 7.5 billion zloty in 2019" [17]. The tourism sector registered an overall decline in the sales of products offered by tourism entrepreneurs, and many of them believe that in the coming years they will not see the same levels of tourist arrivals as those of 2019, leading to a several year process to make up for financial losses [14]. Even the Auschwitz-Birkenau State Museum has been affected by the COVID-19 outbreak. According to the museum's website,

> [t]he period of the pandemic has been very hard for the Auschwitz Memorial, which in 2020 was closed for visitors for 161 days, thus deprived of its greatest source of funding. The planned budget collapsed. Almost all subject-related activity of the Museum was limited,

[3] https://rb.gy/guqtfx.

[4] Our translation.

[5] https://rb.gy/1hlle7.

and investment projects were reduced to the necessary minimum. Thanks to exceptional aid provided by the Polish Ministry of Culture and National Heritage and increasing their subsidies from PLN 25 to 31 million, the continuation of Museum's basic activity was maintained together with workplaces.[6]

Being committed to preserve the site of atrocities and the crimes committed against humanity, the Auschwitz Memorial is dependent on high numbers of visitors, as the contribution "paid" for guided tours,[7] for instance, supports—among other purposes—the challenge to preserve the facilities unchanged. In this sense, Ewa Cyrulik, site manager, states: "Preserving a barrack requires a completely different approach than one used to preserve a church […]. There, the goal is to return the building to its original state, so its most beautiful state. Here, the goal is to leave everything unchanged" [18]. Under the current circumstances in which visits to the memorial site may still be limited, any form of donation is certainly welcome. An appeal made on the museum's website states that "the Auschwitz-Birkenau State Museum and Memorial imposes an obligation of remembrance and education on future generations throughout the world. Each institution and every person of good will desirous of helping to bear the burden of maintaining, preserving, and ensuring access to these most eloquent, authentic vestiges of the Holocaust and genocide"[8] are invited to make their contributions.

21.3 French Guiana's Bagne

As the world's leading tourist destination, France has its share of dark attractions. It includes two of the most important areas related to WWI, the Somme and Verdun, WWII sites related to the Holocaust, the Nazi Occupation and the Normandy D-Day landings, and also two of the finest examples of dark sites in their respective kinds: Père Lachaise cemetery and the fabled catacombs, probably the world's largest ossuary. Nevertheless, the most infamous dark destination is not located in metropolitan France, but in one of its former colonies, the French Guiana, used to build a brutal and pitiless penal colony, Le Bagne, in operation between 1859 and the end of WWII.

As a single territorial collectivity[9] since 2015, the French Guiana is still a transfer economy, largely dependent on subsidies and technical aid from metropolitan France. With a high unemployment rate, especially among the youth, the government has attempted to expand tourism, trying to make it one of the critical areas of economic development, namely through "a large-scale publicity effort (valued at €1 million per year) designed to enhance French Guiana's image as a tourist destination" [19]. Overall, the efforts to develop French Guiana's penal heritage site for tourist purposes

[6] https://rb.gy/zj0ryw.

[7] https://rb.gy/o7umb7.

[8] https://rb.gy/zj0ryw.

[9] Collectivité territoriale unique.

are still random and in need of more strategic and integrated management, as the government has privileged the development of ecotourism.

The Bagne may be included in the Dark Dungeons type of tourist product, according to the typology proposed by Stone [5]—a site or attraction "which present bygone penal and justice codes to the present day consumer and revolve around (former) prisons and courthouses" [5]. Stone also stresses that these type of products "essentially have a combination of entertainment and education as a main merchandise focus, possess a relatively high degree of commercialization and tourism infrastructures, and occupy sites which were originally non purposeful for dark tourism" [5].

Coming to the wider world's attention especially through the book and movie *Papillon*, the Bagne has long entered the realm of globalized popular culture and Literature, a process contributing to the memorialization of these sites, even if sometimes against the local population's neglect. Romanesque, literary or loose biographical representations and images of the penal colony seem to be at the heart of French Guiana's national identity, shaping a heritage blending local and global discourses of violence, incarceration and pain with those of unharnessed nature, as portrayed by the oxymoron "Green Hell". These are the main appeals for tourists, coming to Guiana to "walk in the footsteps of the convicts they heard about in their youth through literature and cinema (Dreyfus; Papillon, Seznec) and through the stories, testimonials and biographical accounts of former political prisoners or transported convicts (Charrière, Belbenoit, Lagrange)" [20].

The commoditization of the Bagne for tourist purposes, however, raises management and ethical concerns, as does the hybridity of its memorialization process and the interest aroused by stories about the *bagnards*' suffering, struggle to escape and resilience. The French Guiana enjoys an ambiguous image, combining the memories of the penal colony and those of a paradisiacal land. The opulent natural beauty of the jungle and the idyllic beaches coexist with a dark and gloomy past, full of suffering and death, stressing the tensions between a place of memory and a space for leisure. The commoditization of the penal heritage in Guyana rests in fact on a paradox—it contributes to the region's poor image, but is also a tourist asset of great interest. The Salvation Islands, with over 50 thousand visitors, is one of the most frequented places in the region. The Transportation Camp, at Saint Laurent du Maroni, accounted for more than 12 thousand visitors in 2018. Though figures remain modest, they count on the scale of Guyana, the last French region in terms of tourist frequentation.

Most of the heritage sites are well preserved or have been repurposed as visitor centers for tourist consumption. In 2015, the former Camp de Transportation was turned into a museum, *Le Centre d'Interprétation du Patrimoine et de l'Héritage*, where the locals (descendants of the prisoners and/or of autochthonous population) are a living memory whose voices and testimonies are heard in a permanent exhibition. The place thus embodies the memories of the Bagne, since it was built by and for the *bagnards*.

On one of the Salvation Islands, l'Île Royale, the penal colony has been converted into a restaurant and lodgings for tourists, namely the director's and guards' houses but also former convicts' dormitories, which are now *L'Auberge en Guyane*. The island also has a small museum, with no explanatory panels or leaflets. On Saint-Joseph, there is no information, and the ruins are officially banned to the public, though many venture into the maze of cells overgrown with lush vegetation. There are regular boat connections to the mainland, but the archipelago continues to be visited mostly by cruise ship tourists.

Since 2011, all three islands have been operated by the National Center for Space Studies (CNES), established in the 1960s, as they are strategically located under the trajectory of the launchers, CNES being responsible for security, maintenance and renovation work. However, tourist management of the penal colony is rather unsystematic. Visitors can choose a free visit or hire a guided tour. While guides like Serge Colin, who has been organizing guided tours for over twenty years,[10] roam the sites distilling historical anecdotes, tourists do not always display appropriate behavior. DAC officer Michel Verrot (Direction des Affaires Culturelles de Guiane) reports "people mimicking a death-row inmate, lying in the individual cells of the disciplinary district, or having barbecues". Attitudes that Michel Verrot puts on the account of the site's state of neglect. "If things are presented casually, then people adopt flippant attitudes", he analyzes.[11]

Though the patrimonialization process of the penal colony is therefore far from concluded, the dark history of this "lieu de mémoire" has finally begun to be acknowledged, after a long time being just a "lieu d'oubli" [21].

21.4 Argentinean ESMA

The city of Buenos Aires is no stranger to dark tourism, more specifically cemetery tourism. The cemetery of Recoleta, where Eva Perón is interred, is usually mentioned as a paradigmatic example of this type of tourism [22], as well as listed in travel websites as one of the main places to visit in the city.[12] Though not as internationally renowned as Recoleta, the Chacarita cemetery has for decades been the destination of tango fans, who visit Carlos Gardel's tomb, turning it into a pilgrimage destination.[13]

A completely different type of dark tourism, however, began to appear in Buenos Aires in the first decade of this century, as a number of clandestine detention centers, in operation during the military dictatorship that ruled Argentina from 1976 to 1983, were being signaled. Around 600 of these detention centers have so far been identified, used by the armed forces to kidnap, torture and murder thousands of people throughout the country. The largest and most notorious was ESMA (Escuela de Mecánica de la Armada), a former Navy School from which an estimate of 5000

[10] https://rb.gy/breiej.

[11] https://rb.gy/gnajlc.

[12] https://rb.gy/hchdpl.

[13] In addition to the flowers and numerous plaques left at the monument, it is customary for fans to light a cigarette and place it between the fingers of the singer's statue.

prisoners were taken to the infamous "flights of deaths" and thrown alive into the ocean.

Public visitation of ESMA started in 2004, after the Navy reluctantly returned the buildings[14] to the City of Buenos Aires, their original owner, but it was only in 2015 that Museo y Sitio de Memoria ESMA opened its doors, with a museographic narrative mainly based on survivors' testimonies, and featuring a number of video projections, panels and audio guides. Since 2017, ESMA has been inscribed on the World Cultural Heritage Temporary List,[15] in the so-called "never again" group, which includes genocide sites like Robben Island, Auschwitz-Birkenau and the Kigali Memorial.

Although the museographic approach used in ESMA has occasionally been denounced as a tool for a political sector to find legitimacy using the human-rights cause [23], the symbolic power of the site has rapidly grown, and has turned ESMA into a meeting point for human-rights demonstrations [24]. Two additional factors contributing to ESMA's visibility are, on the one hand, its privileged location—unlike other detention centers, which used to be in secluded areas at some distance from cities, ESMA may be found at a stone's throw from the river, in a densely populated area near the center of Buenos Aires, and, on the other, its grand architectural characteristics, especially the main building's façade featuring four Doric columns.

Between its opening in May 2015 and March 2020, ESMA received 400,000 visitors [25], i.e., a yearly average of 80,000. These figures may seem rather modest when set against other, more conventional museums in Buenos Aires, like MALBA, that welcomes around 400,000 visitors every year [26], but it compares rather well to other equivalent sites, like Rwanda's Kigali Genocide Memorial or South Africa's Robben Island, which in 2017 received 96,000[16] and 50,000 [27] visitors respectively. Of these 400,000 visitors, approximately 35% are students [28].

In fact, the managerial approach used in ESMA is noticeable different from, say, the Recoleta Cemetery, which provides specific information to tourists as well as offers guided tours.[17] Though ESMA does not discourage tourism as a leisure activity, its main, explicit, purpose is related to education and research, as attested by the temporary exhibitions and other activities carried out in the venue. The efficacy of the educational strategy seems to be confirmed by visitors' comments on ESMA's Facebook page[18]—in addition to the emotional reactions mentioned in most of their remarks, the words "memory", "history" and "learning" are present in almost all of them, many underlying the "moral obligation" of visiting the place for any Argentinean.

A more leisure-oriented approach, however, may in fact be found in ESMA—after all, it is listed on travel websites, like TripAdvisor, Lonely Planet and others,

[14] ESMA is in fact part of a 17-ha-complex that comprises several buildings housing human-rights organizations, cultural and research centres and, proximately, the Ministry of Justice.

[15] https://rb.gy/gqpfh1.

[16] https://kgm.rw/.

[17] https://rb.gy/msx58l.

[18] https://rb.gy/7u3a8x.

and featured in Buenos Aires' official tourist website.[19] But, as expected, there is a marked difference in the visitors' reactions to both places. A quick examination of tourist reviews posted on TripAdvisor[20] shows that most visitors to the Recoleta cemetery[21] underline its architectural beauty and the artistry of the elaborate mausoleums, using adjectives like "beautiful", "amazing", "unique", "interesting", some even highlighting the great photos to be taken there. In contrast, reviews about ESMA[22] focus on the emotional aspect of the experience, using words like "moving", "overwhelmed", "painful", "sad", or "powerful".

These, albeit superficial, observations confirm that places offering a reading of tragic historical events through an almost theatrical representation of death elicit a stronger emotional response than those where the dead are physically, and conventionally, disposed of—which brings us to the issue of the tourist experience at dark sites. Though much of the literature on dark tourism has paid attention to consumers' motivations [6], the fact is that, regardless of the visitor's reason for being there, what is presented at a site like ESMA is more powerful than expected and may release strong emotions, even from those who are not connected with the death event at a personal level and are seeking an educational and entertaining experience [29].

Moreover, Stone [30] suggests that "[w]ith embodied and emotionally engaged tourists, dark tourism potentially offers the Self an emancipatory place for reassessment and self-reflexivity that allows for a reconfiguration of outlooks and interpretative strategies". It is therefore the visitors' experiences, rather than their motivations, that allow for a connection to be established between the dead and the living. As a result, through the emotions triggered by the site, visitors may begin to overcome the sense of loss evoked by it and to feel "a new sense of solidarity and emotional energy" [6].

In the specific case of ESMA, emotion, as a shared "experience of involvement" [31] is emphasized by the building-as-witness approach used in the museographic production [32]. Considered material evidence in still ongoing trials, ESMA is presented as is, with no changes in its structure, as the scattered tiny traces are often all that is left of the disappeared. Thus, the actual corpses being absent, they are symbolically conjured up before the visitor, who is compelled to both take in the horror of the events which took place there, as well as be reassured, by the very act of memorialization, that a collective healing process is under way.

[19] https://rb.gy/lpzu6a.

[20] In order to focus as much as possible on reviews made by non-residents of Argentina, those written in Spanish were excluded.

[21] https://rb.gy/fc214p.

[22] https://rb.gy/3s3yk0.

21.5 Conclusions

As a direct consequence of post-modernity, dark tourism has received increased attention from tourist studies and the academia over the last decades, mostly related to English-speaking and Asian countries. This paper offers a contribution to approach these subjects in other geographical areas where dark tourism is still far from being a full-fledged field.

In this paper, authors have presented and reflected upon three cases of dark tourism sites, in Poland, French Guiana and Argentina, arguing that the memorialization process of these places of death and suffering must take into account educational aspects for the sites to be socially accepted. Memory needs to be built up in order to become history. Even if economic and political issues lie at the heart of the choices made for memorialization, these "lieux de mémoire", as pointed out by Nora [1], emerge and persist due to the certainty that there is no spontaneous memory, that it is necessary to create archives that shape and rise as landmarks of our collective memory. If what these sites stand for were not threatened, there would be not need to build them. And if the memories and traces that they hold were easy to preserve, they would be pointless.

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Chapter 22
Bibliometric Analysis of TOP 100 Most Cited Articles on Tourism Development of the Last 10 years

Jéssica Ferreira, Ana Cristina Silvério, and Paula Odete Fernandes

Abstract Tourism is considered a strong betting sector, not only for its ability to bring life to spaces that were once almost abandoned, but also to rethink and remake old traditions, making it an enriching tourist experience, preserving and valuing historical, cultural, and environmental resources, generating wealth and employment. Tourism development has been affected by the evolution of society and the various tourism markets. For this reason, a Bibliometric Analysis of tourism development and its components becomes essential. A thorough search of the Scopus database was conducted using "tourism development" as the search keyword. They were only considered open access articles of the last 10 years (2012–2021), accounting for a total of 1698 documents. In the progression of Bibliometric Analysis, will be used a software tool for creating maps based on network data, concretely the VOSviewer program. For this, the 100 most cited articles were stratified in descending order, and then, analyzed their relationships, as well as the most commonly used keywords. Many articles on tourism development have been published in recent 10 years. Hence, the Scopus database used has 1689 articles, 4253 authors, and 3524 organizations involved. The five countries with the most citations correspond to United Kingdom (214 documents and 3835 citations), Australia (100 documents and 2139 citations), United States (118 documents and 2018 citations), China (243 documents and 1768 citations), and Spain (203 documents and 1573 citations). The present analysis of highly cited studies can help in future studies, supporting the understanding of the trends in tourism development studies.

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22.1 Introduction

Tourism development concentrates on several important topics for the development of a country, such as economic, sociocultural, and environmental changes in the host community's life, some more beneficial than others.

A growing literature on tourism development and tourism sustainability has emerged over the past three decades in the field of tourism studies. While the discourse of sustainable tourism is oriented toward long-term sustainability, the literature on tourism development looks toward local-level responsibilities and practices of tourism development and management [1].

With international arrivals surpassing 1.5 billion for the first time in 2019 (UNWTO 2020) the long-term evolution of tourism demonstrates prolific path dependence with a decade of growth since the global financial crisis. This latest period of unfettered international tourism development has ended abruptly as the impact of COVID-19 has brought the sector to a near standstill [2].

In this context it is important to analyze the studies on tourism development, trying to identify the progress, new directions, and trends of tourism in recent years. To this end, a Bibliometric Analysis of the TOP 100 most cited articles on "tourism development" will be carried out, considering some fundamental aspects of the literary research of the last 10 years, such as the temporal evolution of the articles' publications; the most cited authors, and their relationship; the most used authors' keywords; the countries with more publications and citations; the journals and organizations with more article participation; and the methodology used in the TOP 100 articles.

For this analysis, there is a software tool for creating maps based on network data and for visualizing and exploring these maps, the VOSviewer program. The functionality of VOSviewer can be summarized as creating maps based on network data and Visualizing and exploring maps.

The main objectives of Bibliometric Analysis studies are to analyze the chronological trends of the desired topic, highlighting the evidence-based studies that are paramount in the field. In this way, this study aims to understand the TOP 100 articles, through their citations, as well as the best authors, organizations, and countries that contribute to the scientific development of the theme of tourism development.

The use of the Scopus database was selected to perform a title-specific search, with time restrictions, concretely the last 10 years (2012–2021) using "tourism development" as the search keyword, being only considered complete open access articles.

22.2 Literature Review

A 10 year-Bibliometric Analysis on tourism development was conducted from this list of TOP 100 articles with the most citations were reviewed, focusing on articles with more than 20 citations. This finding is consistent with the positive association between tourism development and economic growth that has been extensively documented in the literature for a wide range of countries and can be justified by the multiple beneficial effects of tourism on the economy of a country.

Tourism is considered a phenomenon of travel, motivated by several reasons, as travel for leisure, recreation, exploration, religion, family, or business purpose for a limited period. In the present world, tourism is the main cause of income for different countries that enhances the economy of both guests and host countries [3]. The relation between tourism growth and economic growth is positive for most combinations of quantiles of both variables in all countries.

While the tourism industry can identify economic and physical limits to their strategies, the other stakeholders' responses identify whether these strategies are socially acceptable or are likely to cause conflict within the region [4].

Even though there is a prevailing positive link, there is a considerable difference between various countries concerning tourism and economic growth. This heterogeneity can be driven by significant differences between countries in terms of the relative importance of tourism in their overall economies, the size and openness of each economy and its production capacity constraints, the role and effectiveness of local businesses in supporting tourism sector development, and the possible negative externalities caused by tourism in some countries. This observation suggests that the link between tourism development and economic growth is not uniform across quantiles, but that this relationship depends both on the sign and size of tourism impacts in a country and on the specific stage of the economic cycle a country is going through [5].

The concept and application of this new perspective in tourism are developed in many countries and the presented literature would play a key role not only in having a healthy and sustainable tourism industry but also in the economic growth of countries and their present and future stakeholders. The authors believe that sustainable tourism sustainability in sustainable tourism has taken the very first steps and needs more study and research. All the research is based on local situations, while, in the future, sustainable tourism will change to a transnational issue. Sustainable tourism development has attracted significant attention in many scientific studies, particularly in tourism studies and has been one of the very fast-growing areas of tourism studies research [6].

In 2015, some authors presented a study whose topic was on the review of the hypothetical environmental Kuznets curve in a tourism development context. Specifically, the authors assume that they do not agree with the relationship of tourism development with increased CO_2 emissions [7].

In contrast, the authors Raza et al. (2017) assume that the biggest problem of the tourism industry is its dependence on transport and this dependence is affecting the tourism sector as well as the economy due to CO_2 emissions. Energy consumption in tourism is dominated by transportation activities, which are associated with the combustion of fossil fuels and a consequent effect of greenhouse gas emissions. Therefore, policymakers should make policies that not only decrease the detrimental effect of tourism activities but also help increase the contribution of tourism in terms of economic growth [3].

Another tendency in the tourism development literature is the study of residents as receivers and practitioners of tourism. A study by Zhu et al. (2017) analyzed that with the expansion and maturity of the global tourism industry, historical-cultural villages are competitive in the international market, especially for sustainable tourism development. In that study, the authors found a significant positive relationship between residents' perceptions of tourism development potential and their perceived collective benefits. In other words, residents' perceptions of local sustainable tourism development potential could influence their perceived benefits or costs, especially from a communal point of view. Tourism development potential also had a significant direct positive effect on support for tourism development, meaning that tourism development potential could directly affect residents' attitudes toward tourism development [8].

In 2014 some authors present a study where they explore the residents' support for tourism development. The findings of this study offer several insights to scholars and practitioners that seek to understand and solicit residents' support for tourism development. Specifically, the results revealed that a more positive residents' image of the place leads to more favorable perceptions of the economic, sociocultural, and environmental impacts of tourism. These results suggest that place image is the "lens" through which residents judge the impacts of tourism, whereas a positive disposition toward place leads to a softer, more favorable assessment of tourism impacts (and greater support), and a less positive image leads to a harsher judgment (and subsequently less support) [9].

The destination tourism managers have to take into account the importance of involving residents in their tourism planning, trying to affect their perceptions of attachment to the place and quality of life. Residents must be important players in tourism development. Planners should use this information to design authentic tourism experiences that reflect the idiosyncrasies of the place. This could be a way to strengthen residents' sense of personal identification, belonging, and pride of place, and consequently residents' attachment to place. In addition, residents must be aware of the importance of tourism development on their quality of life. Tourism planners and residents have to keep in mind that infrastructural improvements to increase tourism and the development of tourism activities, such as festivals, are not just for the enjoyment of visitors [10].

Using a well-established literature base, the authors Bimonte and Punzo (2016) have developed a theoretical economic research framework, seeking to provide some answers to questions revealed by models hitherto used to analyze tourism development in a destination and residents' attitudes toward tourism. In contrast to other approaches, their study simultaneously focuses on the agents involved as well as on the effects of different development paths and possible interactions between them. They assume that tourism involves the coming together of at least two not necessarily similar populations (i.e., hosts and guests) that each population, usually divided into communities, has its preferences and expectations regarding the benefits and costs arising from tourism; the actual benefits and costs may differ due to the nature of the resource space (the common pool of resources, the use, sharing or exploitation of which must be agreed upon) [11]. In tourism development, several paths could lead to transformation in tourism if sufficient institutional innovation occurs on both the demand and supply side of tourism and if new paths also emerge. This would require a huge leap of confidence on the part of destination regions as they prepare to emerge from the crisis and would also require a change in collective tourism behavior, unlike anything we have seen before. This is not to suggest that a vigorous rebound will soon return to normalcy. However, while the evolution of tourism has always been fragmented COVID-19 presents a unique opportunity in a generation where the institutional pump is primed for transformation. Whether it leads to a radical transformation of the tourism sector remains to be seen, but the impression it will leave on both tourism demand and supply will have long-term incremental impacts over the next few years and ultimately bring us closer to tourism transformation [2].

22.3 Methodology

Bibliometric studies are characterized by their use of statistics to analyze academic literature. Several authors assume that the main Bibliometric indicators include the number of articles, the number of authors, the productivity of authors, and the productivity of countries or journals [12].

It is important to note that Bibliometric studies provide indicators of research output in a field over time and allow scholars to study science as a knowledge creation system [13]. For the universe of tourism, some Bibliometric Analysis studies analyze the universe of literature [14]. Increasingly, tourism is an area of consistent interest, which justifies this type of study and analysis.

In this context, this Bibliometric Analysis aims to understand the existing literature of the last 10 years on tourism development using a specifically stratified database. The collection from the scientific base SCOPUS—Elsevier database was consulted on June 22, 2021, passed through some filtering processes. Specifically, for a more detailed research, between 2012 and 2021, the following equations were applied: TITLE-ABS-KEY ("Tourism Development"); LIMIT TO (PUBSTAGE, "final"); LIMIT TO (OA, "all"); LIMIT TO (PUBYEAR, 2021–2012); LIMIT TO (DOCTYPE, "ar"); LIMIT TO (SRTYPE, "j"). After the filtering process, from this research 1693 articles were found. The parameters of interest were obtained from the selected studies, which included the following analyses: authors, article title, journal of publication, methodology, year of publication, and citation count according to the Scopus database.

This study purposes to conduct a Bibliometric Analysis with the focus of identifying the best articles with the most citations about tourism development in the last 10 years. For this purpose, this Bibliometric Analysis focuses on the TOP 100 articles with the most citations, and keywords with the most link strength. Then, this list with the most citations was analyzed, as well as the authors, journals, and countries of publication.

22.4 Discussion

A total of 1693 papers were collected and coded across the 284 journals over the 10-years time span (Fig. 22.1). In addition to the filtering process of the sample collection, another filtering process was performed in the analysis process, specifically, the minimum number of citations of a document considered was 10.

From the filter, just 448 documents meet the threshold. For each of the 448 documents, the number of citation links was calculated, and the 100 documents with the largest number of links were being selected.

From this graph, it is possible to retain that in the last 10 years there was an evolution in "tourism development" research, but after the year 2020 this evolution dropped drastically, it is easy to associate this drop-in research with the pandemic, and the consequences that resulted from it. After analyzing the sample in the VOSviewer program, 34 clusters were segmented. These clusters, distinguished by colors, show the relation of the articles to each other, as shown in Fig. 22.2.

By default, the program highlights the articles with more citations and allows the visualization of the articles with more emphasis. The VOSviewer can show the Bibliometric mapping in three different views; network view (Fig. 22.2), overlap view, and density view.

Some of the 100 articles in this network are not connected to each other, the largest set of connected articles consist of 64 documents (as can be seen by the interconnected network in the center of the figure). The size of the circles corresponds to the citations the articles have, the higher the number of citations, the bigger the circle. Hence, the five articles with more citations are Kim (2012), with 443 citations; Stylidis, (2014),

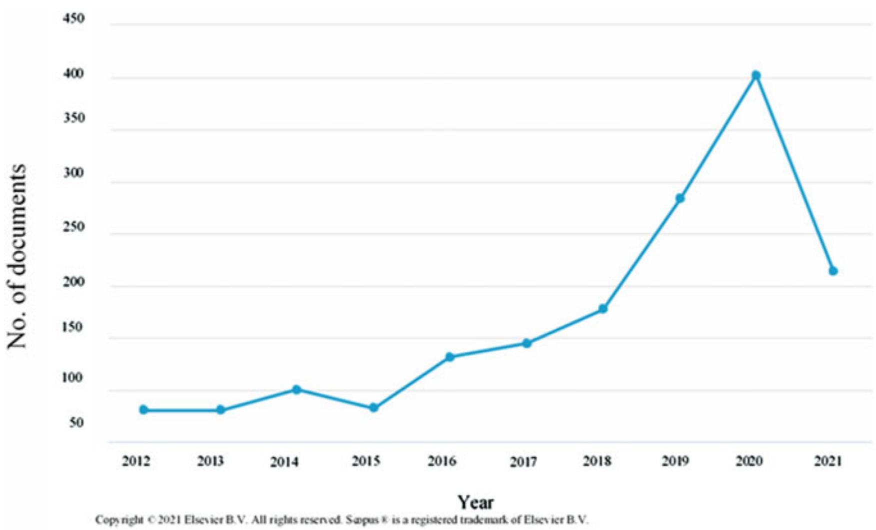

Fig. 22.1 Publication year of documents on "tourism development" over the 10 years

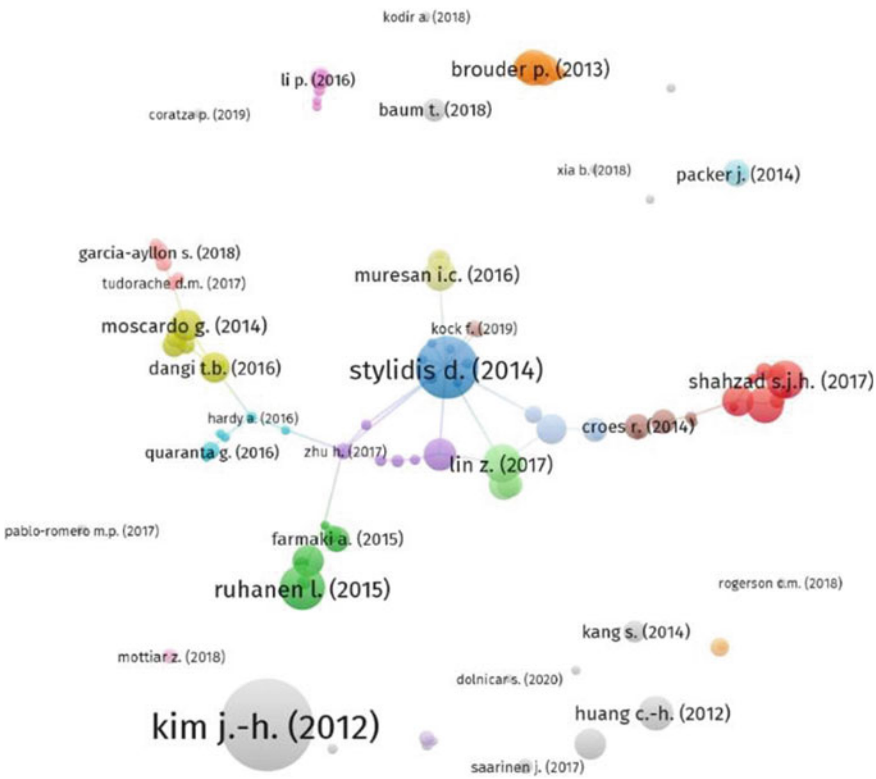

Fig. 22.2 Network visualization TOP 100 articles most cited using VOSviewer

with 232 citations; Ruhanen, (2015), with 136 citations; Shahzad, (2017), with 102 citations; and Lin (2017), with 101 citations.

In considering the TOP 100 most articles cited, it is also important to understand which authors have been cited and published the most, in the last 10 years. For this, the study of the authors' citations in the analysis observed about 4253 authors. Of these authors, only were considered those who obtained at least 10 citations and five documents, giving a total of 39 authors. From this analysis, the 10 authors with the most documents are shown in Table 22.1.

However, the authors with the most citations are not necessarily the ones with the most documentation, as seen in the following table. Especially, Table 22.1 also shows the 10 authors with the most citations, by highlighting the authors who are also on the list of authors with the most documents. In this analysis, it is found that the authors' Law, Lin, Wang, Saarinen, and Liu, were the TOP five authors with most citations and articles publicized.

To realize which keywords have underwritten most to research on tourism development in the last 10 years, we analyzed the co-occurrence of the authors' keywords, making a total of 5311 countries. In the process of choosing threshers, the minimum

Table 22.1 List of the TOP 10 authors

Author with more citations	Documents	Citations	Author with more documents	Documents	Citations
Li, G.	5	341	Liu, J.	12	85
Law, R.	6	183	Zhang, Y.	11	55
Almeida-García, F.	5	155	Wang, Y.	10	117
Lin, Z.	6	145	Li, H.	9	82
Sharif, A.	5	144	Liu, Y	9	42
Wang, Y.	10	117	Petrović, M. D.	8	45
Saarinen, J.	7	107	Saarinen, J.	7	107
Becken, S.	5	95	Rogerson, C. M.	7	52
Dolnicar, S.	5	86	Li, Y.	7	39
Liu, J.	12	85	Law, R.	6	183

number of occurrences of a keyword was 10, giving a total of 57 keywords. The program VOSviewer has created nine clusters, in which, through the different colors, it is possible to verify the connection between the keywords. The keywords with the highest importance is tourism and tourism development, in different clusters. Then, the keywords sustainable and sustainable tourism have a stronger weight than the others, also inserted in different clusters. Subsequently, it is possible to check keywords associated with rural tourism, ecotourism, geotourism, and cultural tourism, with values above 30 occurrences.

To comprehend which countries have contributed most to research on tourism development in the last 10 years, we analyzed the authors' countries, making a total of 120 countries. In the process of choosing threshers, the minimum number of documents of a country was 5, and the minimum number of citations of a country was 10, making a total of 63 countries.

After this analysis, it was observed that the five countries with the citations correspond to United Kingdom (214 documents and 3835 citations), Australia (100 documents and 2139 citations), United States (118 documents and 2018 citations), China (243 documents and 1768 citations) and Spain (203 documents and 1573 citations). The case of Poland, although it is in 4th place in the list of the five countries with the most documents, is only in 11th place in the list of the countries with the most citations.

It is also important to analyze that, of the 63 countries analyzed, Portugal is in 15th place in the list of countries with more articles, and 16th in the list of countries with more citations. In view of this analysis, it was possible to verify that the countries with the most recent publications are China Russian Federation, South Korea, and Indonesia.

To realize which journals have subsidized most to research on tourism development in the last 10 years, we analyzed the articles' sources, making a total of 284 journals. In the process of choosing threshers, the minimum number of documents

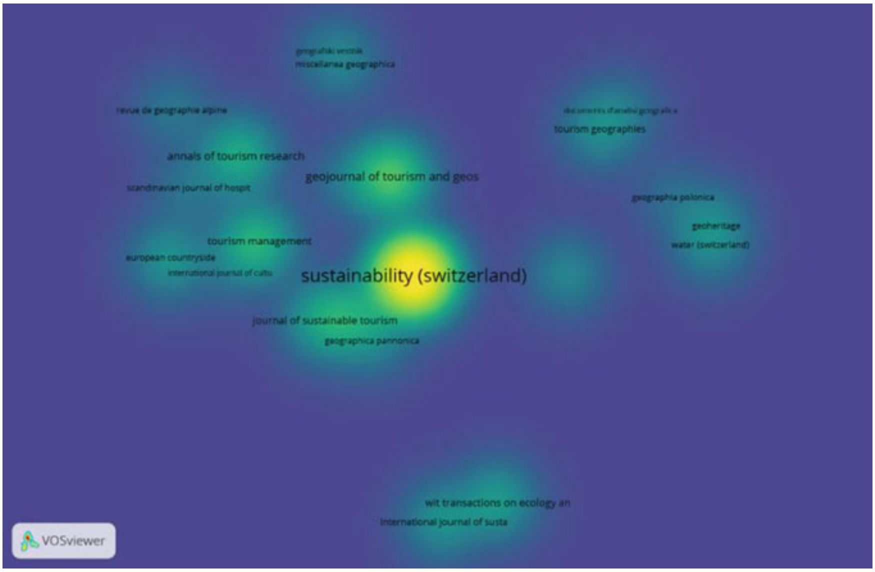

Fig. 22.3 Journals that contributed the most in publishing highly cited articles on Tourism Development, using density visualization

of a source was 5, and the minimum number of citations of a source was 12, making a total of 38 journals. Some of the 38 journals in the network were not connected to each other, so, the program considered 31 journals connected (Fig. 22.3).

In view of this analysis, it was observed that the five journals with the most citations, corresponding to Sustainability (Switzerland) (3569 citations), Tourism Management (2081 citations), Journal of Travel Research (1250 citations), Annals of Tourism Research (1156 citations) and Journal of Sustainable Tourism (10,009 citations).

On the other hand, compared to the published documents we analyze the five journals with the most documents are (Switzerland) (507 documents), Geojournal of Tourism and Geosites (115 documents), Annals of Tourism Research (66 documents), Journal of Sustainable Tourism (53 documents) and Tourism Management (51 documents).

In addition, to comprehend which organizations have subsidized most to research on tourism development in the last 10 years, we analyzed the authors' organizations, making a total of 3524 organizations. In the process of choosing threshers, the minimum number of documents of an organization was 3, had to be lower, to agglomerate more organizations, and the minimum number of citations of an organization was 10, as well, making a total of the 29 organizations.

Because of this analysis, it was observed that the five organizations with the most citations correspond to the: University of Surrey (8 documents and 223 citations); School of Hotel and Tourism Management in Hong Kong Polytechnic University (3 documents and 200 citations); School of Tourism and Hospitality in University of

Johannesburg (12 documents and 154 citations); University of Chinese Academy of Sciences (16 documents and 151 citations) and Department of Economic Sciences in University of Agricultural Sciences and Veterinary Medicine (3 documents and 97 citations).

Finally, the most used research methodology was also analyzed. In particular, the quality methodology was predominant in this list of TOP 100 most cited articles, in which more than half of the most cited articles are qualitative studies. Only seven papers used a mixed analysis, and the restaurants used a quantitative approach.

22.5 Final Considerations

Indeed, tourism development activities come with an increased demand for energy for various functions.

The results of this data search were stratified according to the citation count of each article, and the 100 most cited articles were selected as supporting for further analysis in the future. Therefore, in this Bibliometric Analysis, it was possible to obtain some pertinent results. Specifically, it was observed that this study was able to structure a list with the 100 most cited articles about tourism development in the last 10 years.

The notion of "tourism development" has been dedicated to the analysis of the residents of the tourist destination, as stakeholders and users of tourism services; the sustainability and care of the environment, in the face of tourism; and the active and visible impact of tourism on the economy and the development of the tourist destination, and of the country. It is notable from this analysis the fact that studies on tourism development have fallen in the year 2020, which can be justified as one of the impacts of the COVID-19 pandemic.

The main objectives of this study were to analyze the chronological trends of the desired topic, highlighting the evidence-based studies that are paramount in the field. For this objective, it became especially evident that the literary trends highlighted in the systematic literature review and subsequently highlighted in the bibliometric analysis do not coincide, leading to different conclusions. Specifically, the systematic literature review understood that the literary trends are based on economics, sustainability, and residents. While, for the bibliometric analysis, the research tendencies, besides also falling on sustainability, fall on rural tourism, ecotourism, geotourism, and cultural tourism.

In addition, it is possible to verify that the study on tourism development in the last 10 years has been prominent in the United Kingdom, Australia, and the United States. The newspapers with the most citations about tourism development are Sustainability, Tourism Management, and Journal of Travel Research.

22.6 Limitations and Next Steps

Finally, this study will serve as a source of research for other studies on the subject. In the future, studies will be made using this TOP 100 most cited arctic listing, particularly the elaboration of a systematic review on tourism development.

Also, it is suggested that this topic should accompany this process and pandemic path, continuing to be analyzed but extending its study to other keywords, also extending the research to other databases. We propose for the future the relevance of a conceptual model to be empirically tested using structural equations (e.g., tourism sustainable, "tourism impact", "segmentation", "tourism marketing" and comparison "pre" and "post covid").

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Chapter 23
The Azorean Rural Tourism Entrepreneurs Perception of This Activity Development Potential: A Preliminary Research

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Abstract This preliminary study intends to assess the Azorean entrepreneurs' perceptions regarding the potential for rural tourism development in the Azores Region. Based on this assumptions, the research used an exploratory methodology that allowed the assessment of the entrepreneurs' opinions of this insular territory. Consequently, the research showed that approximately 45% of the Azorean rural tourism entrepreneurs conduct their activity on the Azores Archipelago Capital Island (São Miguel), succeeded by the island of Faial and Pico Islands. The investigation also noticed that the majority of the entrepreneurs surveyed in this study designated the following causes for the potential development of rural tourism in this Autonomous Region and also for the development of their activity in this territory: (a) landscape (more than 85%); (b) being a resident/being established in the region (more than 80%); (c) culture (more than 70%); (d) prestige of the destination (more

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than 65%); and (e) the weather (63.6%). Moreover, it was also evidenced that the most significant part of the study participants dedicated to entrepreneurship in Rural Tourism approximately 6–10 years in the activity.

23.1 Introduction

It is a fact that rural tourism can decisively contribute to the development of rural or low-density areas and sustainable regional development, in general [1–6].

In this sense, it should be noted that these areas present several problems related to economic decline, the significant increase in unemployment, emigration, the adverse impacts of the restructuring of agriculture, and the loss of cultural identity [7–9].

If we analyze from a European perspective, the countries whose preponderance of their regions are the least competitive are Southern Europe, along with the outermost regions (Islands) where agriculture plays a relevant role [4, 10–15].

Furthermore, some outcomes of studies that analyzed the difference of entrepreneurship within territories of distinct dimensions showed that external and local access to the GRP (Gross Regional Product) (sometimes known as the accessibility to markets) has an important impact on an innovative company's entry and exit and consequently on all the regional economic development [16–22]. However, such results could be understood as losses for the primary and secondary sectors, while this influence is positive for the services sector [16, 23].

In this regard, studies that intercross and investigate regional planning, strategic planning, and other integral planning methods and their connection with tourism are vital to proceed with these regions' sustainable development.

Bearing in mind these premises, this preliminary exploratory study sought to answer the following research question: "*What is the opinion of entrepreneurs about the potential for development of rural tourism in the Azores Autonomous Region*?".

In order to answer this question, the research team used tools to test the perception of entrepreneurs in the Azores Autonomous Region about the potential for the development of rural tourism in this outermost region.

23.2 Methodology

Consequently, to answer the research problem above-mentioned, we used testing methods about Azores entrepreneurs' opinions about the potential of rural tourism development in this Autonomous Region.

Moreover, similar to a research conducted by this team focused on the Azores decision-makers perceptions about the potential of the rural tourism development in the Region, it was not only possible to obtain prior knowledge about this territorial reality, but also to use the same methodology—just differing the focus group, in this study we investigate the entrepreneurs opinions.

Contextually, the methodological structure was divided into four main stages: (i) interviews design; (ii) data collection; (iii) site analysis; and (iv) description of the outcomes—which consequently closes with brief discussion and conclusions.

So, the last step focalizes of entrepreneurs' leading opinions about the potential of rural tourism development in the Azores Archipelago.

The sample group consisted of some of the Azorean entrepreneurs, which we admit that are the most suitable participants for this study. Therefore, web interviews were used and implemented during the Spring and Autumn months of 2020 and the Winter of 2021.

Considering the research's purpose, the authors decided to use short and direct questions regarding the potential of rural tourism development's perceptions in the Azores Region by the entrepreneurs.

23.3 Preliminary Outcomes

Contextually, the current section presents the outcomes acquired from the performed interviews.

So, based on the questionnaires applied to the study participants (entrepreneurs in the rural tourism sector of the Azores Autonomous Region) and a non-probabilistic sampling (based on the knowledge that the researchers previously obtained of the object under investigation), they were applied by the research team. Thus, the results obtained are presented and analyzed throughout this document.

Through Tables 23.1 and 23.2, it is possible to verify the profile of the rural tourism entrepreneur in the Azores. The majority (more than 50%) of the inquired

Table 23.1 Gender of the entrepreneurs who carry out the rural tourism activity in the Azores autonomous region

		Frequency	%	Valid %	Cumulative %
Valid	Female	9	40.9	40.9	40.9
	Male	13	59.1	59.1	100.0
	Total	22	100.0	100.0	–

Table 23.2 Age groups of entrepreneurs who carry out the rural tourism activity in the Azores autonomous region

		Frequency	%	Valid %	Cumulative %
Valid	18–35	4	18.2	18.2	18.2
	36–50	7	31.8	31.8	50.0
	51–65	9	40.9	40.9	90.9
	65	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

entrepreneurs are male, and the age group with the highest rate is between 51 and 65 years old.

Table 23.3 shows that of the 21 entrepreneurs interviewed who indicated the island(s) where they carry out their activity related to Rural Tourism, it is as follows: São Miguel: 42.9%; Faial: 38.1%; Pico: 28.6%; Terceira: 23.8%; Santa Maria: 19.0%; Corvo: 14.3%; São Jorge: 14.3%; Flores: 9.5%; Graciosa: 9.5%.

Regarding the type of Rural Tourism to which their activity is associated, it should be noted that the majority (68.2%) of the 22 entrepreneurs surveyed said that their activity is associated with "Nature Tourism," and a half (50.0%) mentioned that this activity falls under "Ecotourism" (Table 23.4).

About the reasons that led entrepreneurs to choose the Azores to carry out their activity related to Rural Tourism, most of the study participants pointed out the

Table 23.3 Islands of the Azores Archipelago where entrepreneurs carry out their rural tourism activity

		Answers		Cases %
		N	%	
Islands	Corvo	3	7.1	14.3
	Faial	8	19.0	38.1
	Flores	2	4.8	9.5
	Graciosa	2	4.8	9.5
	Pico	6	14.3	28.6
	São Jorge	3	7.1	14.3
	São Miguel	9	21.4	42.9
	Santa Maria	4	9.5	19.0
	Terceira	5	11.9	23.8
Total		42	100.0	200.0

Table 23.4 Type of rural tourism to which the activity is associated

		Answers		Cases %
		N	%	
Typology	Agrotourism	3	5.8	13.6
	Aventura	7	13.5	31.8
	Sport	8	15.4	36.4
	Ecotourism	11	21.2	50.0
	Gastronomy	2	3.8	9.1
	Cultural tourism	2	3.8	9.1
	Nature-based tourism	15	28.8	68.2
	Other	4	7.7	18.2
Total		52	100.0	236.4

Table 23.5 Reasons for carrying out the activity related to rural tourism in the Azores autonomous region

	n	%	% of cases
Good monetary remuneration for activity in the region	6	5.7	27.3
Weather	14	13.2	63.6
Culture	16	15.1	72.7
Gastronomy	9	8.5	40.9
Landscape	19	17.9	86.4
Destination prestige	15	14.2	68.2
Being a resident/is located in the region	18	17.0	81.8
Other	9	8.5	40.9
Total	106	100.0	–

Table 23.6 Time dedicated to entrepreneurship in the field of rural tourism—in years

Years	Frequency	%	Valid %
5 or less years	3	13.636	13.636
6–10 years	12	54.545	54.545
11 or more years	7	31.818	31.818
Total	22	100.000	100.0

following reasons: landscape (86.4%); being a resident/is located in the region (81.8%); culture (72.7%); prestige of the destination (68.2%); and the weather (63.6%) (Table 23.5).

With regard to the time dedicated to entrepreneurship in the area of Rural Tourism (years), the majority (54.5%) indicated 6–10 years in the activity (Table 23.6).

23.4 Discussion and Conclusions

Through this exploratory investigation, it was possible to analyze the perceptions of entrepreneurs with businesses in the rural tourism sector in the Azores Autonomous Region, with an emphasis on the potential for the development of rural tourism in this island region.

In this regard, it was possible to verify, through the evaluation of the entrepreneurs, that the following reasons for the potential development of rural tourism in the Azores Archipelago, as well as for carrying out their professional activity in the Azores Region, are the most relevant, from their perspective: (i) landscape (86.4%); (ii) being a resident/being located in the region (81.8%); (iii) culture (72.7%); (iv) prestige of the destination (68.2%); and (v) weather (63.6%).

Likewise, it is possible to show that the profile of the rural tourism entrepreneur in the Azores is that of a middle-aged businessman (51–65 years old) male (more than 50%). It was also possible to demonstrate that of the total number of inquired entrepreneurs, and they carry out their Rural Tourism related activity mainly on the islands of: São Miguel (42.9%); Faial (38.1%); Pico (28.6%); Terceira (23.8%); Santa Maria (19.0%); Corvo (14.3)%; São Jorge (14.3%); Flores (9.5%); and Graciosa (9.5%).

Regarding the typology of Rural Tourism to which the activity of these entrepreneurs is associated, it is mainly related to "Nature Tourism" (68.2%), and approximately half of the respondents mentioned that their activity falls under "Ecotourism."

It was also possible to recognize that the average time dedicated to entrepreneurship in Rural Tourism was mainly 6–10 years.

To entirely understand this problem, we should examine what occurred in the Azores Autonomous Region reality in retrospect. Thus, by the time Portugal entered the EU (European Union), the Azores Region was recognized as the less developed Region of Portuguese territory.

Contextually, by the end of the late '90s and in the first years of the twenty-first century, there was an effective merging of the Azores' regional economy related to Portugal and the EU.

In fact, in that period, the growth models and patterns direct the Azores to a near resemblance to the values of creating national and community wealth. However, this impulse has decreased. Following relating Portugal's mainland (from 2010 to 2018), economic stagnation was evidenced—even presenting a delay regarding the EU's patterns. Besides, in the 2000s, the regional GDP reproduced less than 2.0% of the Portuguese wealth—wherein 2018, this rate touched 2.1%.

In this sense, the Azores Region's economic patterns directly influence the labor market in terms of possibilities regarding the quality of the employment generated. Also, in 2010, there was a significant reduction in this indicator due to the actual impacts of the regional economic and business crisis, causing the number of people employed closer to the values registered in the early 2000s.

Notwithstanding the substantial quantity of active people in 2019, unemployment predominates as a critical challenge for the regional economy.

In fact, and corroborating, once more, previous studies (see: [8, 9, 24–26]), the present investigation highlights, once again, the potential of growth of this type of tourism in the Azores Autonomous Region.

Contextually, there have been efforts and incentives at European, national, and regional levels to invest in these types of activities, which in some way are connoted with a status of the greater agreement with the principles of sustainable development.

Here, tourism arises as a sector with broad potential, given the demonstrated capacity and the existing natural potential in this ultra-peripheral region [27–29].

Although, it will be essential to strengthen the focus on qualifying the destination, which includes train the sector's community and their associated specialists.

Therefore, the efforts of all the actors involved must follow this path. Nevertheless, the COVID-19 pandemic crisis is an obvious obstacle or a "break" to many of the previously initiated strategies; even so, the same health crisis can be used as a catalyst to promote this type of tourism more comprehensive way.

As closing remarks, even this study gives us interesting new insights about this issue, additional studies should be carried out to understand the problem from different perspectives—i.e., analyzing the local population and tourists' opinions.

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Chapter 24
Microservices Architecture for Efficient eHealth Service Generation in the Cloud

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Abstract For the realization of this architecture, we have chosen the paradigm of cloud computing (SaaS), oriented to the implementation of microservices, whose purpose is to provide access to a series of small services for the management and consolidation of clinical information of patients and not only what is necessary for the generation of a standard report, but also influences the interoperability and data structure with other medical information systems. Therefore, the hierarchization of information and its data should be considered as a whole that flows into the organization and without bias between departments of the organization, with the aim of supporting decision-making with parameterized, consistent and accurate indicators of the data collected. Therefore, based on various investigations, it was identified that the SaaS model has a series of characteristics, in comparison with the IaaS, PaaS and SaaS models, that make it particularly interesting for the ehealth context.

24.1 Introduction

This paper presents a software architecture based on layers and microservices as software strategies in the context of ehealth. These strategies should promote and facilitate substantial improvements in the quality of ICT services in health; reducing costs, improving equality in access to clinical information via the Internet, and

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in the autonomy of clinical care professionals (doctors, nurses and nursing assistants). Section 24.2 addresses the background of the research and the reasons for its study. In addition, the layers of SaaS architecture that support the scientific project (Design and implementation of a low-cost smart system for prediagnosis and telecare of infectious diseases in elderly people) SPIDEP are presented. In Sect. 24.3, the use of microservices in the context of eHealth is examined through an experiment; Sect. 24.4, presents the requirements of the distributed database implemented in SPIDEP; Sect. 24.5, discussion software Architecture SPIDEP and Sect. 24.6, we share the conclusion and expose the contribution of this research.

24.2 Background

The software is implemented in a layered architecture of microservices [1, 2] and Cloud SaaS [3, 4]. Significant research articles support the selection of Cloud SaaS [1, 5, 6]. The main arguments for this approach are the following [5, 7]:

- The low-cost implementation.
- Several options to develop different levels of software quality.
- Scalable and adaptable resource configuration on demand, as each component can be individually duplicated.
- Compatible with several smart devices.
- Compatible with several communication protocols.
- Users run their applications disregard the control of the host.

The architecture uses REST API for integrating, transferring and storing the data [8]. Microservices software applications are split up in small services, interconnected throughout the Infrastructure Layer [1], and performing well in Cloud environments [3], Fig. 24.1 shows the architecture layers and how the components interact varying with the user's requirements [1, 2, 9, 10].

Microservices are small distributed purpose-specific programs with user interfaces for different domains or APIs to interconnect with third-party applications [11]. The architecture can be seen separated in 5 functional layers:

- **Things Layer** interacts with Processing Layer and Network Layer, connects the hardware and validates the signals.
- **Network Layer** sets up connections with each APP for the asynchronous medical data upload [1, 12].
- **Processing Layer** microservices use the Representational State Transfer (REST) protocol to communicate with each other [13]. For example: Smartphones and Tablets will enter via an API Gateway, and computers will enter via user interfaces (UI), namely Admin UI for administrator or Nurse/Doctor UI for medical work unit. Each access will be associated with some microservices.
- **Microservices Layer** contains microservices for the end users, like medical personnel and nursing home administrative staff with their respective profiles.

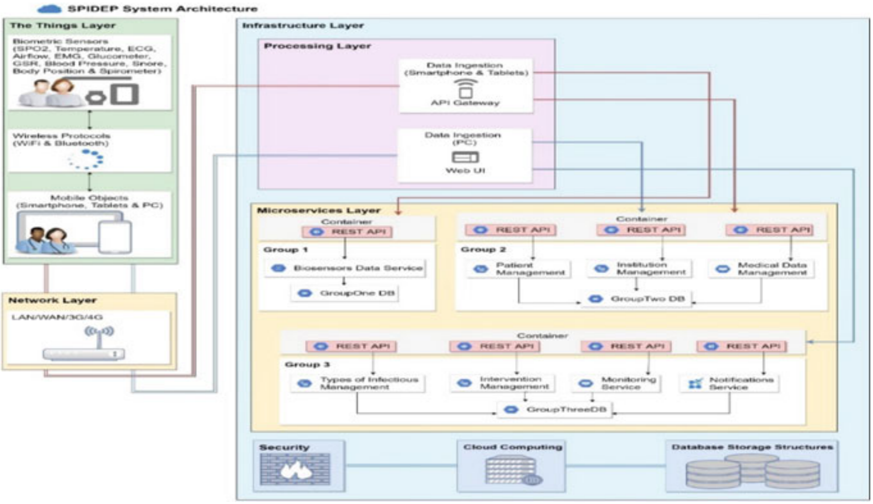


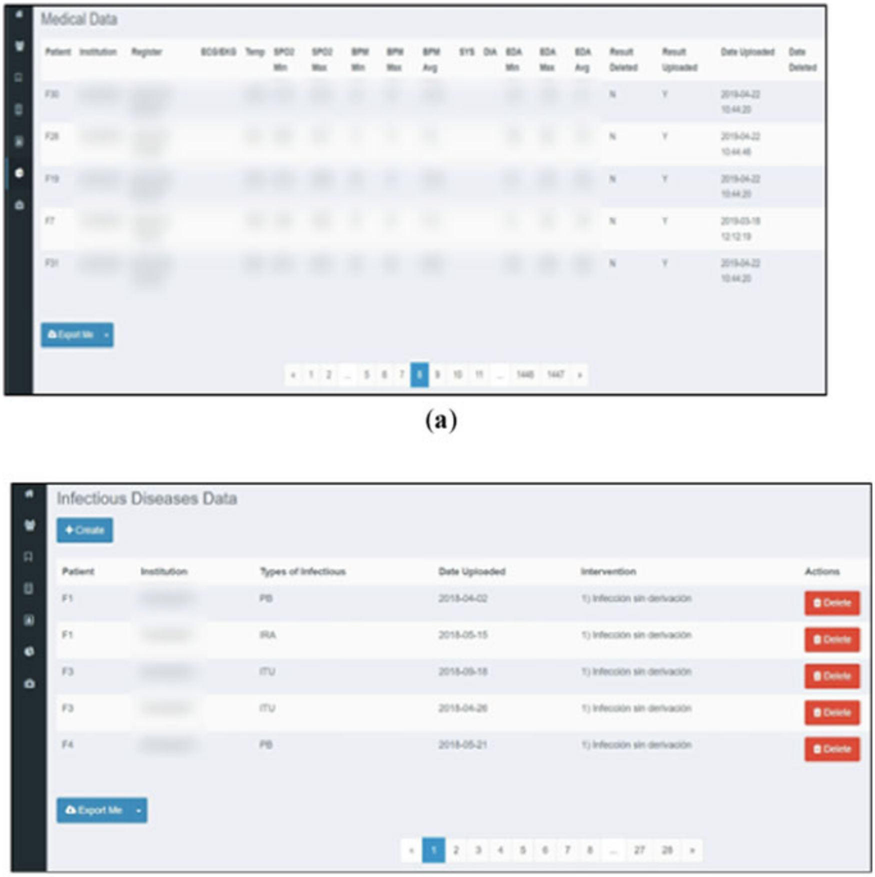
Fig. 24.1 Microservices software architecture, SPIDEP

Users can look up historical records, add new biomedical data, manage user profiles and roles, access to pre-diagnosis service. Each group of microservices has a unique database for independent operation, although each database is intercommunicated via JSON Request/Response HTTP, either asynchronously or synchronously depending on the case. Figure 24.2 shows two examples of this service.

- **The Infrastructure Layer** supports communications, scalability, availability and data integrity of the upper layers. It provides network, server and storage resources for external clients that connect to each microservice [14], which is intended to achieve greater error tolerance in the cloud environment, such as: MapReduce used to manage data in distributed processing [15], and Apache Hadoop used to store data for each group of microservices within a NoSQL (Cassandra) database storage structure [16]. This layer also processes complex computation tasks of the higher layers, such as authentication or interoperability, alleviating the burden on public or private cloud resources for other primary functions [17–19] and runs under the containers on the dock [8, 20].

24.3 Experimentation: Architecture for Future Evolution SPIDEP

The efficiency of the software architecture is assessed with tests of integration, compatibility and performance, resulting in the final release candidate (RC). The goal is to identify the operational profile for services hosting. These tests allow the



(a)

(b)

Fig. 24.2 Screenshots of two microservices: **a** table grouping records received from several APPs; **b** medical form for prescribing an infectious disease and its intervention

identification of errors when the components interact and not directly from themselves [21]. The test is configured with two docker containers with the same specifications of virtual private servers (VPS) environments with 1 × vCPUs, Memory 4 GB, 1 × 120 GB Disk and Ubuntu 18.04 LTS maximizing the overall performance of the application and its analysis. Apache is used for the endpoint and Nginx as Frontend Proxy and Software Load Balancer. Nginx receives first requests from the users and sends them to the corresponding microservice as per the solicited URI. Apache JMeter scripts meters the workload of the virtual users and their behaviors with microservice performance and BlazeMeter (US East—Virginia, AWS) servers simulate the workload for the microservices [22, 23]. The testbed also includes:

- No-admin role session access.

- To look up over 6297 records of the Medical Data Management (group 2 of microservices) for residents affiliated to the same institution than the user. This corresponds to Microservice #1 (MS1).
- To enumerate 138 records of infectious diseases in the same institution (group 3 of microservices), corresponding to Microservice #2 (MS2), increasing linearly the load, and simulating 20 and 50 concurrent virtual users, according to the VPS specifications.

The test starts with several requests per second and steadily grows every minute for 20 min with an average rate of 12 requests per second in both microservices, reaching a maximum of 14,602 on average. The first environment is a *backend-frontend platform* (EIM-1-FB) and the other one is a *frontend-only platform* (EIM-2-F). There are two workload tests of 20 min each with 20 and 50 virtual users (threads) respectively. Tables 24.1 and 24.2 show the results of each test.

MS1 and MS2 identify the microservice and ALL depicts the sum of variables of both microservices. The variables are the number of samples, the response time, the processed request rate in hits/sec, the 90th, 95th, 99th percentiles, the count of failed requests and its percentage, the latency and the number of concurrent users.

24.4 Requires to Assess Certain Considerations: Cloud DB

The cloud DB requires to assess certain considerations [24, 25]:

- **Security**. The user interface is accessible via WEB with the user ID and password granted by the Administrator. Authorized SaaS consumers are not granted for manipulating or deleting any data. Every record attaches the values of the biosensors to the correspondent patient id code, the institution id, the date and time of the sample and two flags, one indicating that the data was uploaded and another if the operator had deleted the record in the tablet. The permit to get access to the DB and consumption is granted by the Administrator. Even in the case that any user login was hacked, the access to the DB would be read-only and no personal information be available.
- **Availability and Continuity**. eHealth SaaS is available for consumption 24 h a day, 7 days a week, accessible via WEB. The online DB is continuously being updated with the records uploaded from the in-field mobile devices. Cloud lower levels reliability will be guaranteed by the service level agreement (SLA) offered by the Cloud provider. Any event at higher level is attended by the service support team in labor hours.
- **Functionality**. The online DB fulfils all the design requirements.
- **Maintainability**. There is no maintenance policy at this stage. The future implementation of the scenarios will raise the requirements to set an efficient maintenance policy.
- **Legislation and Regulations**. Personal data protection compliance is a key objective, as health data is classified with top level protection. The SaaS DB

Table 24.1 Workload testing report for EIM-1-FB 20/50

Label	Samples	Resp. time	Avg. hits/s	90% line	95% line	99% line	Errors count	Errors %	Avg. latency	Concurrency
ALL	29,939	782.06	24.96	755	923	5247	0	0	251.45	EIM-1-FB-20
MS1	14,977	811.89	12.49	767	951	5151	0	0	279.70	EIM-1-FB-20
MS2	14,962	752.21	12.48	719	903	5311	0	0	223.19	EIM-1-FB-20
ALL	29,227	2003.84	24.35	1863	1951	13,759	0	0	582.44	EIM-1-FB-50
MS1	14,625	1991.34	12.18	1863	1927	13,439	0	0	627.11	EIM-1-FB-50
MS2	14,602	2016.37	12.17	1871	1975	14,079	0	0	537.86	EIM-1-FB-50

Time measurement is average in ms

Table 24.2 Workload testing report for EIM-2-F 20/50

Label	Samples	Resp. time	Avg. hits/s	90% line	95% line	99% line	Errors count	Errors %	Avg. latency	Concurrency
ALL	3456	6785.73	2.88	15,487	21,631	38,911	6	0.17	3519.57	EIM-2-F-20
MS1	1733	6777.12	1.44	15,295	21,759	37,375	5	0.28	3644.56	EIM-2-F-20
MS2	1723	6794.43	1.43	15,487	21,631	40,703	1	0.058	3582.25	EIM-2-F-20
ALL	215,825	164.83	179.85	53	60	1047	79,944	37.04	84.57	EIM-2-F-50
MS1	107,925	147.24	89.93	56	64	1047	39,973	37.03	90.12	EIM-2-F-50
MS2	107,900	182.45	89.99	49	49	1047	39,971	37.04	79.02	EIM-2-F-50

Time measurement is average in ms

is constructed with dissociated information from personal data. Resident identification is encrypted by the nurse before uploading the record and only the nurse and the granted service know how to map the code with the id. The use of residents' data on the applications that run on the top of the service has been previously authorized by the residents' irrefutable consent.

24.5 Discussion Software: SPIDEP Software Architecture Cloud, SaaS

Microservices for Cloud DB show the following strengths:

- The system software is split in autonomous, loose-coupled, replaceable services, each implementing discrete work units with a small subset of functions [24].
- Microservices can be scaled individually when running a heavy workload just by replicating them on several containers without and not replicating the others underutilized.
- The infrastructure is automated so that building, deploying and operating microservices requires less manual intervention and service delivery is not disrupted [26].
- Microservices rely on lightweight communication protocols, requiring different interfaces to the standard [24, 25, 27, 28].
- The approach is language-agnostic and allows the use of libraries that fit best to provide their functionality [29, 30].

However, the following drawbacks balance the suitability and require attention:

- Necessity for having a clear and exhaustive picture of the data structure as well as the business processes applied in the organization [30].
- Each request calls the Application Layer, transferring data between services, leading to be more redundant, and thus reducing integrity. This architecture is recommendable only when the data is updated at service's request [24, 25, 31, 32].

It is required a distributed, low latency, reliable and fault tolerant architecture capable of organizing complex services, data consistency, transactions management, load balance, justifying the Cloud infrastructure supporting that microservices complexity [24].

Now the software architecture validation is done choosing the average response time and the average 90th percentile (user side) and their correlation with the failed request percentage (system side). According to the research of Abdullah [23] and Khan [29], two criteria are set for validation. Criterium A for the acceptable limit of the average response time at 90th percentile must be below 5000 ms (5 s) and Criterium B for the failed requests must be below 5%.

Table 24.1 (EIM-1-FB) shows that the implementation is acceptable for both 20 and 50 concurrent users, while Table 24.2 (EIM-2-F) shows that the first test with

20 users Criterium A is exceeded (RT > 5000) and also the second test with 50 users does not meet Criterium B (EP > 5%), thus being not acceptable for any of them.

As a consequence of these results, manually generated microservices that have not been implemented in a full backend–frontend environment, neither taking the performance as a deciding factor when splitting them nor considering the cloud factor [9, 10, 22, 23, 33] lead to a significant network traffic growth between the services and the APIs of HTTP resources, giving negative correlation with the rise of latency and the degradation of general performance until collaps [34–36].

24.6 Conclusion

This research focuses on proposing three layers for the development and implementation of a scalable infrastructure SaaS in the context of ehealth, as shown in Sects. 24.2 and 24.3.

The results demonstrate the efficiency of this software architecture proposal in the SaaS. This research shows that the development based on microservices is timely and efficient for the scientific project SPIDEP. Similarly, this proposal allows for future research to design a framework that promotes a layered scheme that facilitates the integration of new medical devices and above all a software that links and collects information based on microservices.

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Chapter 25
Gamification: Preserving Cultural Heritage Through Immersive Scenarios and Second Language Strengthening

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Abstract This article introduces an immersive scenario based on gamification, seeking to contribute to the preservation of cultural heritage in Colombia by displaying different places, contexts, and their corresponding description; it also allows participants to strengthen a second language mastery through the reading and listening practice. Finally, the possibility of getting information access on massive attractive Colombian touristic places is offered to native English speakers.

25.1 Introduction

Cultural tourism turns out to be one of the most representative areas of tourism [1], which is focused on the dissemination of historical, cultural, and artistic heritage. With it said, tourism is at the service of the population's welfare; for this article, it is important to highlight heritage as the first level touristic resource, more specifically, cultural heritage: which is made up of natural, intangible, and material heritage; the latter in turn is subdivided into real estate and movable heritage [2].

Intending to care for and maintain its cultural heritage, Colombia has a public policy of Cultural Tourism where Tourism is considered the fastest growing industry and which in turn can make environmental conservation profitable, taking into account elements like sustainability and natural conservation. According to Bravo

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Roman [3], there is a necessity to invest more economic resources in research, development, innovation, and new technologies; because technology has become an important resource, on which immersive scenarios are supported through virtual reality, which in turn is defined as the "set of tools and techniques for the representation and manipulation of objects to make the user believe that he is living a reality that is not a reality" [4]; additionally, systems based on virtual reality compared to traditional systems are more effective [5] in improving satisfaction and motivation in the learning process. This article aims to show the proposal of an immersive scenario, with proposed software architecture, and subsequently be evaluated under the System Usability Scale (SUS) to state a solution to preserve cultural heritage.

25.2 Background

Immersive scenarios have been significant contributors to different areas of knowledge such as journalism [6], radiology [7], language learning [8], tourism [9–11], among others; These scenarios; built through virtual reality implementation, are prevalent in the tourism sector in areas such as planning, management, marketing, entertainment, accessibility, education, and heritage preservation [12]. These last two should be seen as essential items considering that virtual reality allows access to large amounts of information; taking advantage of spatial perception and the perspective that virtual reality does not have the problem of abandonment and degradation due to physical impacts, or natural disasters and erosion.

When referring to heritage preservation, it is important to highlight tourism, which influences social and cultural aspects [13] as part of economic development; Likewise, according to CITUR [14] tourism contributed an average of 3.78% of the total gross domestic product in Colombia during the last five years until the arrival of the pandemic produced by the SARS-CoV-2 coronavirus, where it became contribute 2.54% as can be seen in Fig. 25.1 works.

25.3 Methodology

The scenario implementation begins with the inquiry of the dimensions taken into account during the learning process, to preserve cultural heritage and improve tourism.

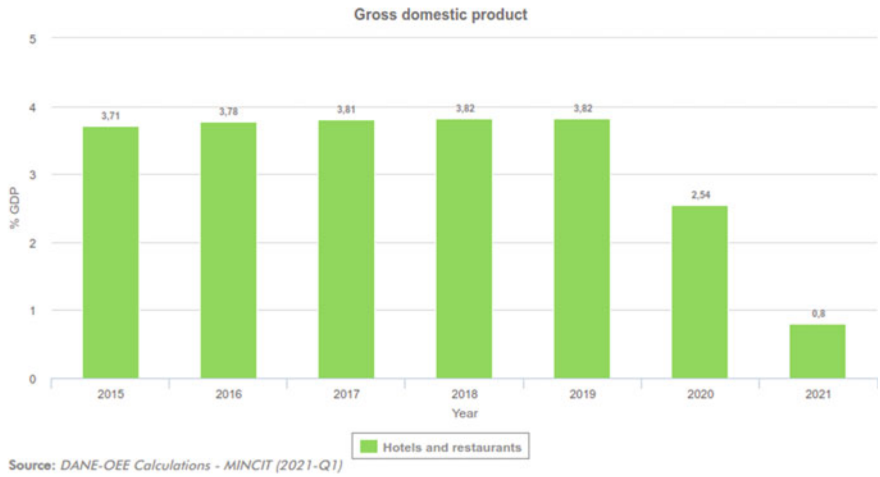


Fig. 25.1 Percentage of tourism contributions to the gross domestic product in Colombia for the last 5 years, consulted from Ref. [14]

25.3.1 Analysis

According to De Freitas et al. [15] there is a four-dimensional framework to take into account for learning using immersive scenarios: representation, context, pedagogy, and learner, as can be seen in Fig. 25.2. An immersive scenario within the representation of the information to be shown, giving a current context within the different tourist places that can be found in Colombia. In the pedagogical dimension, access to information by English-speaking users and the need to practice English language skills for the general Spanish-American-speaking public are taken into account, considering the information that is presented to the learner.

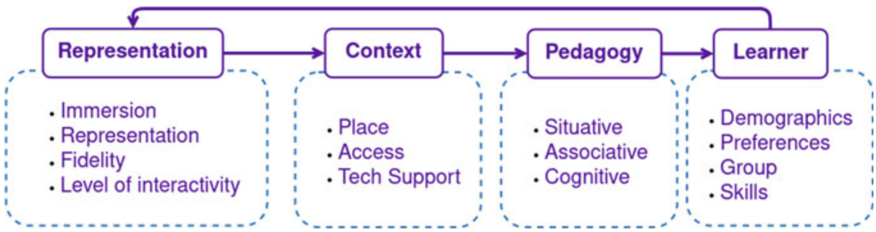


Fig. 25.2 Dimensions to take into account in learning processes. *Source* Adapted from Ref. [15]

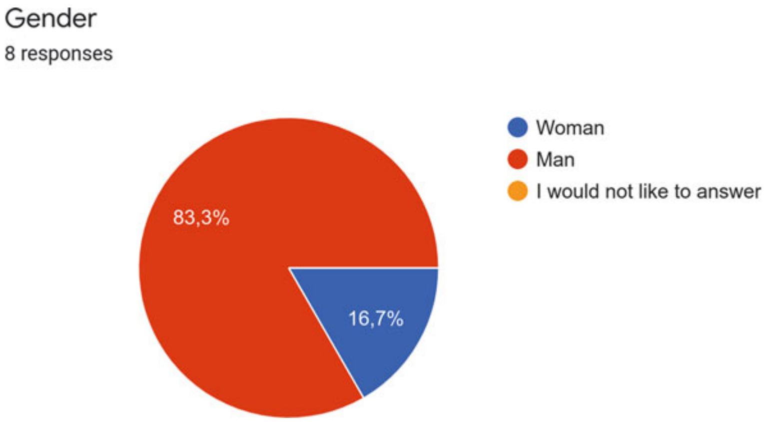


Fig. 25.3 Characterization of the surveyed population

25.3.2 *Implementation*

An immersive scenario is designed using open source software to show tourist places in Colombia, with a brief description in text and audio of each one. Then it unfolds on a GNU Linux server with 4 GB of ram, 2 Intel Xeon model processors using Docker technology.

25.3.3 *Participants*

The participants vary between 18 and 39 years of age, who answered the questions in Spanish; with 83.3% men and 16.7% women (Fig. 25.3), without neglecting the confidentiality, integrity, and authenticity of the data provided during the survey.

25.3.4 *Evaluation Method*

Based on the evaluation methodology proposed by Garcia Gaona et al. [16], the System Usability Scale (SUS) is used, which consists of a questionnaire of ten (10) items mentioned below (Table 25.1) with five (5) response options, evaluating whether it is in progress: strongly disagree (1) or agree (5).

In addition, five conceptual questions are added to evaluate the effectiveness of learning in the participants.

11. What did the immersive scenario show?
12. How many places were visualized?
13. What was the name of the tourist place in Cartagena?

Table 25.1 System usability scale (SUS) 10 item questionnaire

Id	Question	Mean	SD
1	I think that I would like to use this system frequently	4.12	0.35
2	I found the system unnecessarily complex	1.62	0.74
3	I thought the system was easy to use	3.50	1.51
4	I think that I would need the support of a technical person to be able to use this system	3.00	1.31
5	I found the various functions in this system were well-integrated	4.12	0.83
6	I thought there was too much inconsistency in this system	2.00	1.07
7	I would imagine that most people would learn to use this system very quickly	4.50	0.53
8	I found the system very cumbersome to use	2.37	1.68
9	I felt very confident using the system	4.37	0.52
10	I needed to learn a lot of things before I could get going with this system	1.62	1.06

14. Did you feel dizzy?
15. Do you have any comments to add to the scenario?
16. What is your age?
17. What is your gender?

25.4 Proposed Model for the Immersive Scenario

Based on four (4) pedagogical dimensions illustrated in Fig. 25.2, the software architecture model, view, controller is used for the operation of the immersive scenario as observed in Fig. 25.4.

The subdivision of this architecture allows to visualize how the user accesses the immersive scenario using a web browser, starting with the module of tourist places in Colombia; subsequently, the controller allows the management of the information received by using libraries, and finally, the model guarantees persistence through a relational database.

25.4.1 Adaptation of the Scenario Based on Gamification

As gamification elements, a guide element is established (Fig. 25.5), points are given per level when listening to the short description of historical spaces and contexts in the English language, and feedback messages are presented in advance between levels. These elements are based on the definition of [17], where gamification is defined as the application of game elements to activities to increase motivation and thus obtain

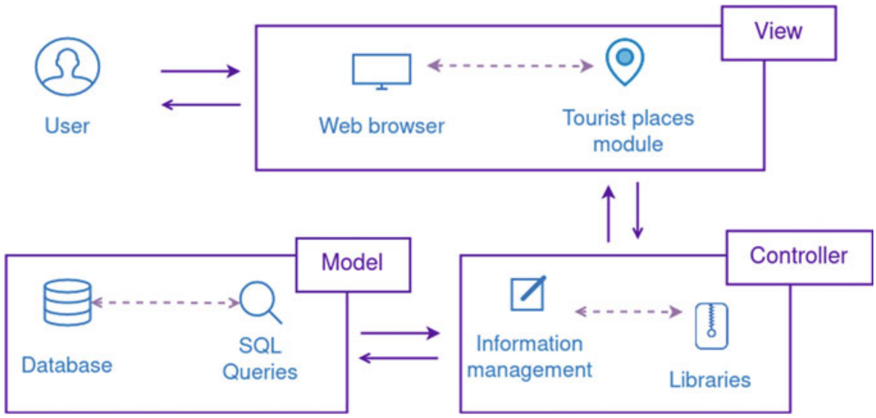
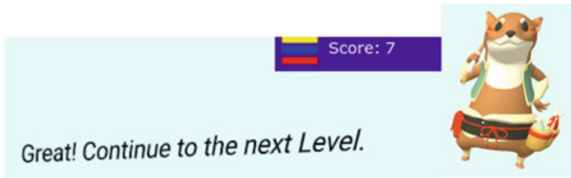


Fig. 25.4 Architecture planned for the immersive scenario. Own source

Fig. 25.5 Gamification elements. Own source



better results in the learning process. These elements, work in turn, can be subdivided into several aspects: dynamics (such as limitations, emotions, and narration), mechanics (such as challenges, rewards, and competition) plus components (such as levels, points, and achievements) according to elements defined by Revythi and Tselios [18].

25.5 Preliminary Results

The scenario shows a contextualized scenario in Colombia (Figs. 25.6, 25.7, and 25.8), where three-dimensional objects show different tourist sites and a short description, which is available in text and audio format. Therefore, the ability to read in a foreign language and the ability to listen are strengthened, by relating the audio with the description that is displayed.

Fig. 25.6 An immersive scenario designed to show different tourist places in Colombia. Own source

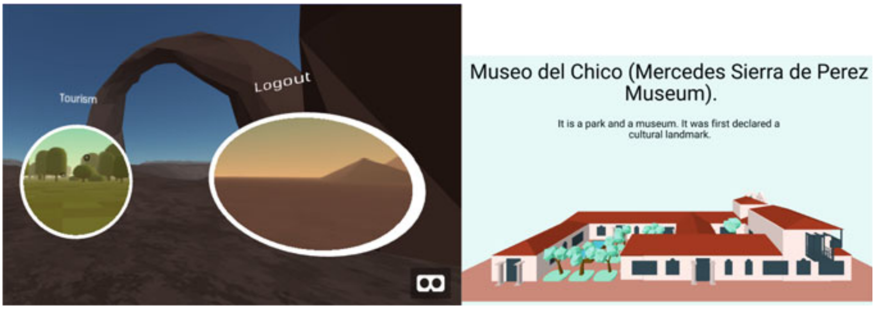


Fig. 25.7 Login and other tourist places. Own source

Fig. 25.8 Touristic town of Colombia, which is shown within the stage. Own source

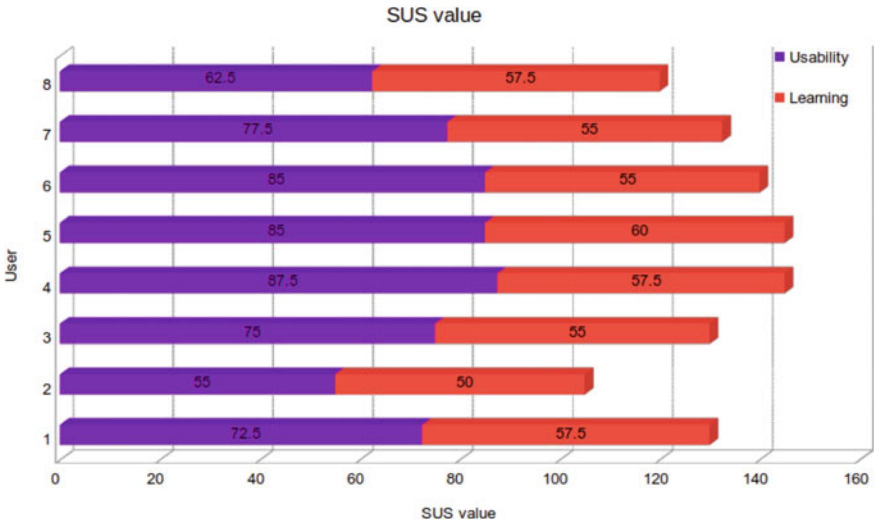


Fig. 25.9 System usability scale measurement (SUS)

25.6 Preliminary Evaluation Results

25.6.1 Quantitative Results

According to Hernández-García et al. [19] the System Usability Scale (SUS) questionnaire is considered one of the most valid and reliable to measure the usability perceived by users. Thus, using questions 1–10 of Sect. 3.2, usability is measured, questions 11–14 are used to measure the learning obtained, question number 15 to obtain additional opinions that contribute to the improvement of the scenario, and questions 16 and 17 are used to characterize the surveyed population. The results graphed in Fig. 25.9 are, obtained, where an average of 75 usabilities is seen (SD = 11.49). Consequently, the average of 75 is above the average established as acceptable within the system usability scale (SUS) which must be greater than 68, according to Garcia Gaona et al. [16].

Figure 25.10 shows that none of the participants felt dizzy during the interaction with the stage, taking into account the perception test proposed by Ortiz-Colón et al. [20], additionally, 87.5% of them remember exactly what they saw after finishing the interaction with the stage; and that 50% remember and write the name of a certain tourist place in the English language, as it was presented, while the other half prefers to express the name of the tourist place in Spanish.

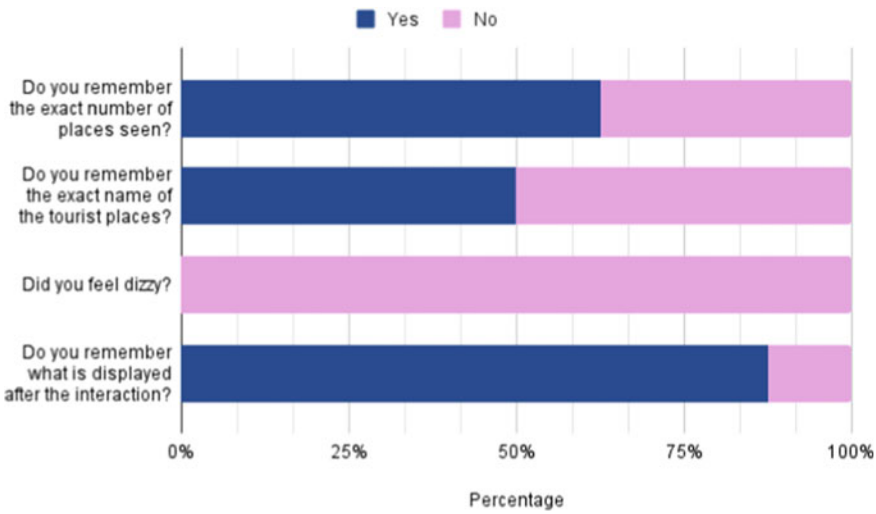


Fig. 25.10 Retention of information by the participants regarding the scenario

25.7 Conclusions

The implemented model and its components allow the information to be modularized, to facilitate the creation, modification of the scenario and the addition of elements based on gamification, which works to guide, motivate and attract the attention of the user, thus contributing significantly to what is perceived and the user learns about tourism, as recommendations that can be taken into account when traveling through the Colombian territory; thus contributing to preserve the memory of the existing heritage in the country, to improve the perception that other countries may have and thus promote tourism, benefiting the different actors who make a living from hotels, restaurants, the sale of items such as reminders, tickets and in general items that contribute to the gross domestic product that influences the life of each person living in the territory.

Based on the results in the evaluation section provided by the System Usability Scale (SUS), it can be observed that the proposed immersive scenario allows the deployment of a viable solution to positively influence the preservation of the cultural heritage of Colombia and the learning of the English language, where the majority of participants remember the tourist contexts presented; without leaving aside the usability aspects to be improved and the comments received from each of the participants who contributed to the evaluation of the scenario.

Thus, integrated learning analytics is contemplated, with all that it entails, such as collecting the information, reporting it, evaluating it, and adapting the scenario according to the actions carried out by the user to have a more complete and dynamic learning process. Additionally, this type of proposal is complemented with different technologies based on hardware to increase the level of immersion experienced by the user, the interest that participants experience in the existing cultural heritage in Colombia, and the motivation to practice a second language; the latter also adding the elements provided by gamification to carry out proper training of heritage and cultural knowledge entertainingly and dynamically, avoiding the user being confused about the navigation carried out within the different scenarios.

As future work, the continuation of this proposal is proposed, adding another scenario as a continuation of the level and thus adding more information; taking into account the gamification elements necessary to support the learning process. Thus, this first proposed scenario contributes to the cultural heritage showing the tourist places of Colombia and in the next level it is proposed to show the typical Colombian gastronomy and the recommendations for lodging, recreation, and leisure; thus increasing the level of interest, which gives way to more elements in the compilation of information and thus to further detail the results obtained in the investigative process.

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Chapter 26
Senior Travel Behavior Before and After Retirement

Ana Pacheco, Ana Isabel Moniz, and Osvaldo Silva

Abstract The aging trend of modern society makes senior population and retirees an increasingly attractive tourist market with more available time, less work, and less responsibilities. The purpose of this research is to understand the travel behavior, that is, the habits, preferences, and motivations of seniors, and to study whether, and in what way, retirement influences them. Using the Categorical Principal Components Analysis, it was possible to identify 3 factors related to tourist motivations: To have new experiences; To socialize and do physical exercise activities; To relax and spend time with family and friends. We intent to explore the existence of statistically significant differences between travel motivations and socioeconomic factors. Using non-parametric tests (Mann–Whitney U test and Kruskal–Wallis test), it was concluded that seniors' motivations depend on sociodemographic variables. The motivation "To have new experiences" differs according to the gender and level of education. The motivation "To socialize and do physical exercise activities" differs according to the gender, and the motivation "To relax and spend time with family and friends" differs according to the age group, gender and whether the senior is retired or not.

26.1 Introduction

Senior tourism is generally defined as a segment of tourists over the age of 55. More specifically senior tourism covers the activities developed by the elderly, retired, non-retired, over 55 years old, with different levels of income, schooling, among others

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[1]. Factors such as increased average life expectancy, improved health conditions, higher income, and more available time have contributed to the increase of this type of tourism, making seniors an increasingly attractive target for the sector. These factors are also observed in Portugal. According to national statistics [2] the aging process of the Portuguese population will be accentuated due to the reduction of young people in the total population, and due to the increase in the population aged 65 years or more (estimates of 2018 and projections for 2080). In addition, the aging rate could double between 2018 and 2080, from 159.4 to 291.0 per 100 young people. Retired seniors (the retirement age in Portugal in 2020 is 66 years and 5 months old) should also be a major target because when they stop working, they have more time available, less work and less responsibilities.

Senior tourists have preferences and motivations, influenced by their age, distinct from other market segments. According to Moschis and Ünal [3], there is a need to analyze seniors' traits in diverse aspects for effective segmentation since research has shown that the senior market is not homogeneous. Considering the trends observed, it is important to study and understand the aspects that differentiate seniors from other tourists, so that a tourist destination is well-prepared to meet their needs and expectations. Faced with this reality, this study sought to understand the travel behavior, that is, the habits, preferences, and motivations of seniors, and to study whether, and in what way, retirement influences them.

26.2 Literature Review

According to Juvan et al. [4] "tourist behavior is the context of consumer behavior in the purchase, uptake and abandonment of tourist services" and it helps us to predict future tourist behavior and, consequently, prepare to offer products and services that best meet their needs and preferences. For this reason, it is important to comprehend what influences this behavior, hence the need to understand the concept of motivations, push and pull factors, and to study them in the field of senior tourism. Also, according to Silva et al. [5] it is crucial to understand which activities are chosen and frequently practiced by senior tourists so that it is possible to develop products and services that consider their needs and expectations. The literature review also allows us to understand how this tourist behavior was changed with the Covid-19 pandemic and what will be future trends in tourism activity (e.g., [6]).

26.2.1 Senior Tourism

The aging trend of modern society makes senior population an increasingly attractive tourist market. The level of wealth, higher discretionary income, lower indebtedness, greater availability of free time to travel, and its tendency to travel longer distances and for long periods of time are some of the factors that contribute to the importance of senior travelers. Moreover, in most developed countries, the senior market is growing at an accelerated pace and will soon become one of the largest market segments for the tourism industry [7]. It is not only the volume that makes the senior market significant, but rather their unique patterns of behavior as consumers. Contrary to the stereotype that seniors are poor, weak, and isolated, this segment is increasingly prepared to spend their income on leisure consumption and tourist experiences, becoming more complex consumers [7].

26.2.2 Motivation

Motivation is understood as a set of needs that lead the person to travel and participate in a tourist activity [8]. Because it influences the consumption habits of tourists, motivation is particularly relevant when analyzing the highly complex behavior of individuals who decide to go on vacation [9]. It helps to find answers to the following questions: Why do you want to travel? Why do you travel to certain destinations? Why do you carry out such activities? [10]. In addition, many studies have identified connections between tourist motivations and behaviors such as information research and experience expectations. Horneman et al. [11] identified the following travel motivations as the most mentioned by senior tourists: education/learning, rest/relaxation, exercise and visit friends and family. The authors also found a shift from passive vacations to more active activities, focusing on health and exercise. Patuelli and Nijkamp [12] defined and focused on five main dimensions as senior's motivations: culture and nature; experience and adventure; relax, well-being and escape; self-esteem and ego-enhancement; socialization. According to several authors [13, 14] there is a relationship between sociodemographic characteristics, motivation, and characteristics that lead seniors to travel, taking into account the different factors that affect senior tourist's life and determine the degree of motivation to undertake a trip.

26.2.3 Push and Pull Factors

The Push and Pull model is a theory, described by Dann and Crompton, related to tourist motivations and widely discussed in the field of tourism [15, 16]. It represents a simple and effective approach to analyze tourist motivations and behaviors [17, 18] and one of the most accepted theories in the literature of tourist motivations [19]. This model presents two motivational factors that influence traveler choices: individuals are pushed to make travel decisions by internal forces and are pulled by external forces, which include destination's attributes. The common push factors found in most studies include the search for knowledge, relaxation, and family union, while the most frequent attraction factors are the natural and historical environment, cost, facilities, security, and accessibility [20]. Push factors tend to precede pull factors despite the two types of factors are not fully independent but are interrelated.

26.2.4 Activities

Trips are composed of a variety of physical, social, and cognitive activities that impact the global experiences of tourists [21]. Participation in holiday activities has a positive impact on the physical and psychological well-being of travelers, including senior travelers who, compared to non-travelers, feel better about themselves and their lives as they enjoy a wide range of leisure activities [15, 21]. A high proportion of seniors perform activities other than those included in the travel packages, showing their interest in being active during their holidays [22, 23]. Shopping, walking, getting to know local culture and traditions, and sightseeing were the most mentioned. Other activities also carried out are talking to the local population, resting, and visiting monuments and museums. Shoemaker [24] identified the main activities in which seniors engage when traveling. Activities mentioned by more than 50% of respondents include "visiting local attractions" and "visiting historical sites". The less mentioned activities include "sleep more than usual", "practice physical activities", and "play in the casino".

26.2.5 Impact of the Covid-19 Pandemic

Security is crucial for travelers [25] and a destination is only attractive if it offers conditions favorable to the safety of tourists [26], especially in times of crisis such as Covid-19. Furthermore, risk and safety perception affects consumer behavior and consequently the tourism decision-making process [27]. Faced with this reality, Chebli and Said [6] conducted an empirical study to understand the sensitivity of tourists to the risks associated with Covid-19 and to identify possible changes in their consumption. In general, the authors found that the pandemic had no impact on people's desire to travel far from home or continue to explore across borders. However, many tourists agree that due to anxiety and fear of being contaminated, they will choose a less popular destination on their next trip and will avoid travel during high season. The authors also found that the Covid-19 crisis will impact tourists' propensity to travel in groups. In addition, hygiene, the quality of public care, and the cleanliness of spaces have become very important requirements. Another likely behavior is the decrease in disposable income attributed to leisure activities, including travel. Thus, tourists will opt for more affordable destinations. Furthermore, the awareness of tourists toward the environment is growing, which will translate into a greater demand for outdoor activities and ecotourism. Lastly, travelers expressed a willingness to follow current destination information before making a final decision on their next trip.

26.3 Methodology

The survey instrument employed in this study was a structured questionnaire. The questions were based on a comprehensive literature review. The questionnaire was divided into four sections. The first part focuses on the sociodemographic characterization and travel habits of the respondents. The second part analyzes the degree of importance given to 15 travel motivations including, for example, "To seek intellectual enrichment", "To escape daily routine", and "To spend time with family", assessed with a 5-point Likert scale: 1 (not at all important), 2 (low importance), 3 (neutral), 4 (important), and 5 (very important). It also analyzes 18 push factors, that include "I like to talk about my trip when I get home", "The type of accommodation is important to me", and "I like to visit foreign cultures", assessed with a 5-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). Additionally, in the second part of the instrument 20 pull factors are also analyzed with a 5-point scale: 1 (not at all important), 2 (low importance), 3 (neutral), 4 (important), and 5 (very important). The pull factors include, among others, "Standards of hygiene and cleanliness", "Special events and attractions", and "Price of accommodation". The third part of the questionnaire analyzes 11 travel activities, including "Sightseeing", "Visit theme parks", and "Visit top attractions", assessed with a 5-point Likert scale, ranging from 1 (never do), 2 (rarely do), 3 (sometimes do), 4 (frequently do), and 5 (always do). Finally, the fourth part relates to the impact of the Covid-19 pandemic in respondent's travel behavior.

The target population of this study was defined as seniors 55 years-old or older from Portugal and a sample was selected between March and May 2021. The data were analyzed using several statistical methods, including descriptive statistics, Categorical Principal Components Analysis (CATPCA), and some non-parametric tests. Categorical Principal Components Analysis reduces the dimensionality of the original data so that the first few (uncorrelated) components (dimensions) account for as much of the available information found in the original categorical variables [28]. Thus, due to the ordinal nature of the items used in the present study, CATPCA was applied to determine the principal components that best present the travel motivations from the senior tourists' perspective. CATPCA was applied to the 15 items of the questionnaire considering the Varimax rotation with Kaiser normalization. Non-parametric tests (Mann–Whitney U test and Kruskal–Wallis test) were used in order to test the existence of statistically significant differences in relation to the travel motivation factors, according to sociodemographic characteristics of the senior tourists.

26.4 Results and Discussion

A total of 286 valid surveys were collected in the Azores, Madeira, and Portugal Mainland. Most of the respondents were female (64.3%), married (60.5%), and retired (52.8%). In terms of age groups, 50% were 64 older or less, 38.1% were 65–74 years older and 11.9% were 75 years or older. It prevails as a level of education, the higher education (55.9%). Most respondents live accompanied (73.1%), their disposable income allows them to live comfortably (56.6%), and their health status is good (53.1%). Regarding travel habits (Fig. 26.1), respondents usually stay in hotels (57.3%) and in family/friends' home (21.3%). Besides that, they usually travel with their spouse (32%) and with their family (28.9%). Respondents mainly use the internet to organize their trip (33.9%), but they also resort to travel agencies (27.3%) and their adult children (27.3%). Moreover, the majority of the respondents use the internet frequently as support in travel planning and promotion (40.6%) and 35.3% use it with some frequency.

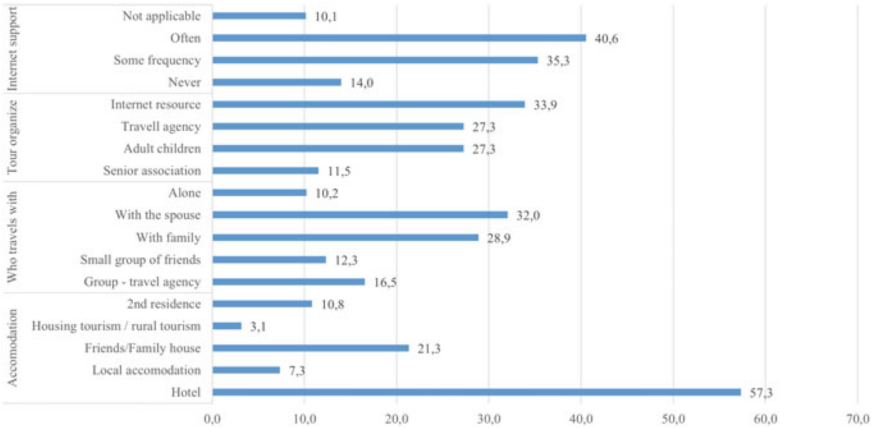

Fig. 26.1 Travel habits (%)

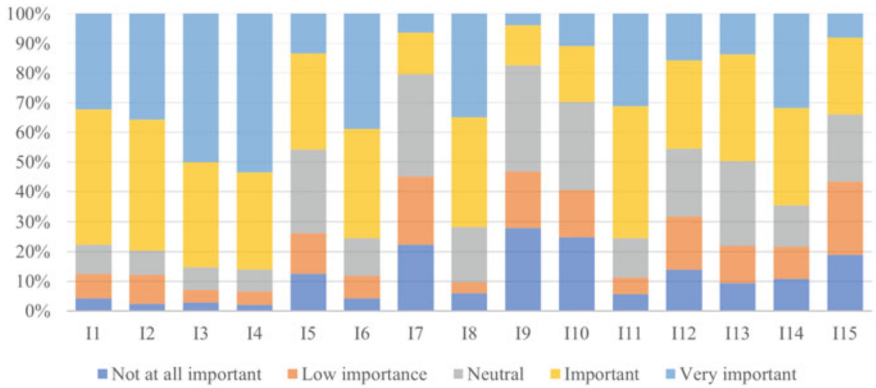

Fig. 26.2 Travel motivations (%)

Regarding the motivations (Fig. 26.2), respondents travel "I4—To visit new places" (53.5%), "I3—To enjoy life" (50%), and "I6—To rest and relax" (38.8%). They give less importance to the motivation "I9—To have new things to tell friends" (28%), "I10—To reduce loneliness" (24.8%), and "I7—To engage in physical exercise" (22.4%).

They were motivated to travel by the push factor "There are places I've always wanted to visit" (45.8%), "I want to see things I don't normally see" (33.6%), and "I like to visit foreign cultures" (32.5%). On the contrary, the push factors "It is important to go to a place that is fashionable" (32.5%), "A trip means being able to do nothing" (19.6%), and "When I travel, I like luxury, good food and a comfortable place to stay" (10.8%) were the least driving factors. Respondents were attracted to a destination by the pull factors "Security" (70%), "Standards of hygiene and cleanliness" (61.2%), and "Public transportation such as airlines, train service, and others" (46.9%). They were less attracted to the "Existence of friends in the destination" (18.5%), "Availability of facilities for physical activities" (17.8%), and "Availability of shopping facilities" (13.6%).

When traveling, they visit museums and monuments (25.2%), top attractions (19.2%) and participate in outdoor activities/nature tourism with frequency (15%). Respondents do not attend sport events (36.4%), never participate in spiritual or religious activities (34.6%) or visit bars and nightclubs (32.2%).

Regarding the impact of Covid 19, 92% of the respondents said that they stopped traveling due to the pandemic while 8% did not stop traveling. The main reason pointed out by the respondents was the fear of being contaminated (54.2%), followed by the fact that there were too many restrictions, especially at airports (30.4%), flight cancellations (7.6%), health reasons (7.2%) and, finally, their yield was no longer sufficient (0.8%). However, 70.3% of the respondents are thinking of traveling for leisure reasons in the next 12 months. The pandemic will have a lot of influence on the choice of tourist destination to travel (63.3%).

The results of CATPCA enabled the retention of three principal components. All of these factors have eigenvalues higher than 1, and the values of the Cronbach's alpha coefficient reveal good internal consistency (values above 0.75). The first component comprises the items: I1, I2, I4, and I11 and it was called "To have new experiences". The second component was named "To socialize and do physical exercise activities" and covers the items I5, I7, I9, I10, I13, and I15. In the third component, defined as "To relax and spend time with family and friends", the most important items are I3, I6, I8, I12, and I14 (Table 26.1). They were labeled according to the literature review [29]. The three components explain 62% of the variance observed (see Table 26.1).

It is sought to know if the motivations of the seniors, grouped in the 3 motivation factors identified, vary according to the sociodemographic factors. For this, the Mann–Whitney and Kruskal–Wallis tests were applied since the scores in each of the factors under analysis do not follow a normal distribution.

According to the tests, there are significant differences between younger individuals (<= 64 years) and older individuals (75 years and older) in terms of scores obtained in factor 3 ($H = 20.774$; $p = 0.000$), which were higher in the case of younger individuals (MR = 165.17 versus MR = 109.75 in older individuals). The

Table 26.1 CATPCA results (matrix of rotated components) about tourists' motivations

Tourist motivations	Factor loading	Eigenvalue	Cronbach's Alpha
Factor 1: To have new experiences (28.6% of the variance)		4.288	0.859
I1—To seek intellectual enrichment	0.810		
I2—To visit historical sites	0.861		
I4—To visit new places	0.892		
I11—To experience new things	0.69		
Factor 2: To socialize and do physical exercise activities (28.6% of the variance)		2.720	0.804
I5—To seek spiritual enrichment	0.606		
I7—To engage in physical exercise	0.72		
I9—To have new things to tell friends about	0.766		
I10—To reduce loneliness	0.616		
I13—To meet people and socialize	0.454		
I15—To go to festivals/special events	0.574		
Factor 3: To relax and spend time with family and friends (15.4% of the variance)		2.320	0.781
I3—To enjoy life	0.785		
I6—To rest and relax	0.527		
I8—To escape the daily routine	0.549		
I12—To visit old friends	0.763		
I14—To spend time with the family	0.807		

results also indicate significant differences between retired and non-retired individuals at the level of scores obtained in factor 3 ($U = 7121.000$; $p = 0.000$), which are higher in the case of non-retired individuals (MR = 166.25 versus MR = 123.16 in retired individuals). In addition, there are significant differences between females and males at the level of the scores obtained in the 3 factors. In factor 1 ($U = 7935.000$; $p = 0.029$), scores are higher in the case of females (MR = 151.38 versus MR = 129.29 in males). The same happens in factor 2 ($U = 7605.000$; $p = 0.008$; MR = 153.17 in females versus MR = 126.06 in males) and factor 3 ($U = 7584.000$; $p = 0.007$; MR = 153.28 in females versus MR = 125.85 in males). Finally, the results indicate significant differences between individuals with different levels of education, at the level of scores obtained in factor 1 ($H = 20.776$; $p = 0.000$), which are higher in the case of individuals with higher education (MR = 161.94 versus MR = 104.26 in individuals with 9th year of schooling).

26.5 Conclusions and Implications

The present study concludes that seniors travel to visit new locations. Although it does not appear as the main one, the motivation "To visit new locations" is also recognized by Chen and Gassner [30] as important for senior tourists. With a different perspective, Horneman et al. [11] highlight "travel while the health is good" and "spend time with family and friends" as seniors' main motivations. In this study it was also concluded that the least important motivation is "To have new things to tell friends". Besides that, it was found that seniors are driven to travel by the push factor "There are some places I've always wanted to visit". In contrast, the push factor "It's important to go to a place that's fashionable" is what least drives seniors. Both conclusions are also observable in Jang and Wu's [20] investigation.

In addition, it is concluded that, as noted again by Jang and Wu [20], seniors attach great importance to the pull factor "Safety". On the contrary, they are less attracted to the "Existence of friends in the destination" factor. The most practiced activity was to visit museums and monuments and the least practiced was to attend sporting events, supporting the findings of Shoemaker [24]. In contrast, Patterson and Pan [31] noted that seniors are increasingly likely to participate in physically challenging and adrenalin-driven activities rather than passive ones such as sightseeing tours, museum visits, and shopping. Finally, as observed in other studies such as Moniz et al. [32] some motivations differ according to the sociodemographic characteristics of senior tourists. Those who are 64 and under years old and non-retired travel to relax and spend time with their family, female seniors are more motivated by the 3 motivational factors and seniors with higher education are more motivated by factor 1: To have new experiences.

The results help to understand senior's travel habits, their main motivations, push and pull factors and which activities they usually do. Also, the research helps to understand which factors influence senior's motivations and whether there is any difference between retired and non-retired (difference found in factor 3).

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Chapter 27
Tourists' Behaviour in a Post-pandemic Context: The Consumption Variables—A Meta-Analysis

Pedro Vaz Serra and Cláudia Seabra

Abstract Although tourism, as a system, develops risk prevention and mitigation strategies, the direct, indirect, and induced generated shock by the Covid-19 pandemic is different when compared to previous high-impact events. This pandemic is more intense and conducive to structural changes. In this context, tourists' perceptions affect their behaviour and decisions, with adverse results in Tourism consumption, and the safety, protection, and health risks generate a cause-effect relationship on the specificities of destinations, the valences of infrastructure, compliance with protocols, and the adoption of good practices (Seabra et al. in Int J Tour Cities 7:463–491, [1]). The prevailing opinion amongst specialists is that Tourism will only reach pre-Covid levels between 2023 and 2024 whereby the proposed approach and methodology prove to be opportune because they allow a more detailed knowledge of the characterization of demand and constitute a relevant information base for structuring the offer. Thus, through the systematic review of the literature, it is relevant to approach the behaviour of tourists in a post-pandemic context, through the meta-analysis of studies carried out in 2020 and 2021, emphasizing the conclusions obtained, the dynamics of their comparison, and their potential impact. The results achieved suggest the need to readjust models, methods, and processes, as well as to reconfigure means and interactions, in order to add value in the design of instruments, in the implementation of solutions and, in the management of expectations.

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27.1 Introduction

In Tourism, extreme events causing severe crises are regular such as cyclones, forest fires, terrorist attacks or earthquakes. To face those crises, the tourism system has developed, over the years, risk prevention, mitigation strategies, and resilience capacity [2]. The direct, indirect, and induced generated shock by Covid-19 pandemic is very striking, as: (i) it is global [3]; (ii) it is more intense, when compared to previous events of great impact, being able to generate a −4.5% regression on the world Gross Domestic Product (GDP) in 2020 [4]; (iii) potentiates structural changes [5].

In 2020 and compared to 2019, in addition to the 69.4% decrease in spending on international travel, more than 62 million jobs were lost in Tourism, with its contribution to the world GDP regressed 49.1% in the same period [6]. In 2021, comparing January with the same month in 2020, registers an 87% reduction in the international tourists' arrivals [7], with the Asia–Pacific region—which have the greatest restrictions on travel—registering the biggest reduction (−96%), followed by Europe and Africa (−85%), Middle East (−84%), and the Americas (−77%).

In this context, the tourists' perceived risk, a multidimensional construct, with heterogeneous implications in the decision-making process raises changes in the destination evaluation and in the travel intention [8]. In fact, this pandemic is generating a general anxiety state in consumers [9], affecting their behaviour, with adverse results in several consumption variables [10]. Recent research proves the correlation between health-related risks and tourist flows [11], with safety, health, and hygiene issues negatively affecting the tourist's perception [12], and generating a greater desire for choosing destinations identified with good practices, good infrastructures, and a health system that complies with the recommended protocols.

To contain the pandemic, most of the countries implemented a set of measures, such as mandatory confinement, social distancing, and the use of masks, taken as critical in prevention and mitigation [13], and being its effectiveness proven in multiple contexts [14]. Also, given the significant advances that Science has achieved, which allowed the start of the vaccination process, there is the prospect that the pandemic can be controlled, in the short term, and ended, in the medium period. Although, 45% of experts do not expect international tourism to return to pre-Covid levels before 2023 and 41% say that this will only happen in 2024, or even later [15].

Therefore, the pandemic is a serious threat to public health—understood as the safeguarding of the health and well-being of individuals and communities—with consequences, also, in the countries' economic and social dimensions [5], are predictable that there are changes in the tourists' behavioural consumption intentions, as happened in previous epidemic and pandemic situations [16].

The present research has the main goal to obtain a more detailed knowledge of the demand characterization, and a relevant information base for offer structuring.

Thus, it is pertinent to approach the tourists' consumption behaviour in a post-Covid-19 context, highlighting the selected variables, through the literature systematic review, and the meta-analysis of studies carried out in 2020 and 2021, emphasizing the obtained responses, the dynamics of their comparison, and their potential impact.

27.2 Methodology

The selection strategy (see Fig. 27.1) was based on Prisma guidelines [17], and we use Scopus, Web of Science, Science Direct, Google Scholar, and scientific repositories from various Universities, as database search tools, in addition to generic search, via Chrome, which was important in obtaining further records.

We directed our research to those records considered most relevant, having as criteria the coverage in terms of geographic location and the number of participants. It should be noted that there is a greater prevalence of studies carried out by international consultants, compared to those obtained by the Academia, which is justifiable given the time that necessarily involves the publication in a journal.

We used the content analysis technique to describe the results.

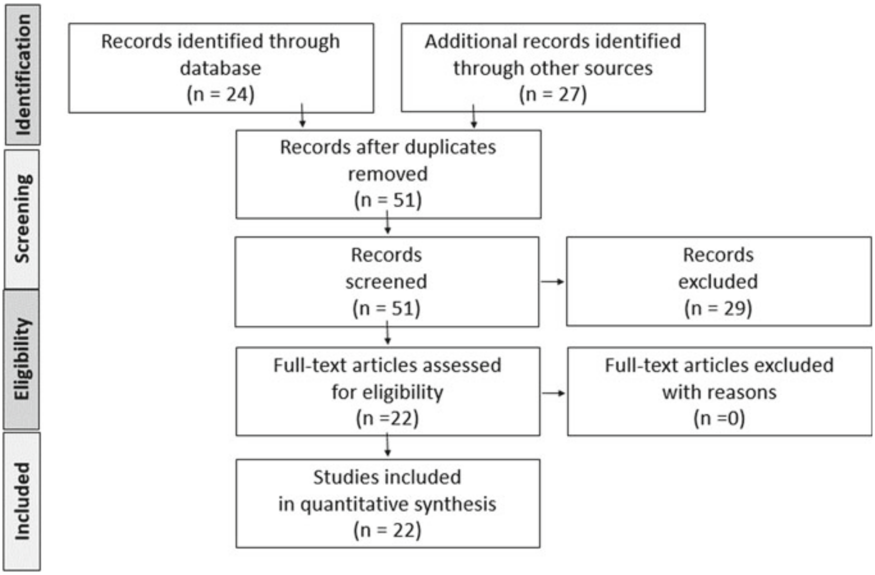

Fig. 27.1 Selection strategy. *Source* The authors

27.3 Results

The impact that the pandemic has on Tourism is very significant, however we found in our data selection that more studies focus on the tourism offer perspective than those that focus on demand, namely on tourists' behavioural intentions.

Then, the data systematization (see Table 27.1)—by variable, questionnaire date, number of participants, geographic location, results, and research reference.

Globally, the referenced questionnaires originate from 22 investigations, which include 19 variables, 193,309 participants and covered between 1 and 140 countries.

The impact that the pandemic has is unequivocal, with the estimated period for recovery from shocks of this nature, on average, corresponds to 19.4 months [38].

Referring to the evidenced results, tourist activities are valued, which is to be expected, as they satisfy physiological, safety, self-esteem, and self-fulfilment needs [39]. The majority of respondents reveal an opinion that oscillates between *wanting* and *being able* to travel again, with motivation to do so, but, at the same time, with cautious expectations regarding future consumption of international travel.

By age group, the motivation to travel is more expressive amongst young people, from 18 to 34 years old, who demonstrate greater resilience to the pandemic effects and, therefore, greater predisposition, and a fast recovery in this segment is expected. On the contrary, those over 55 years show a more prudent and conservative posture.

The destination image, which aggregates possible previous experiences in the same destination [40], conditions the tourist's behaviour [41]. Additionally, generational differences between tourists influence the way the destination image is constructed [42], having the affective component, supported by feelings and emotions, the greatest impact on behavioural intention [43].

The participants internalized the pandemic constraints, accepting and trust in prevention and mitigation measures, given the increased risk perception—there is a clear desire for flexible reservation, cancellation, and reimbursement policies, as well as for the subscription of travel insurance—being particularly demanding regarding compliance with health, hygiene, and safety protocols, as well as by the identification of a good health system, and infrastructures, at the destination. All of this occurs even experiencing, frequently, the contextual effects, such as stress, confusion, anger, frustration, and boredom, in addition to income loss in many cases [44].

There is a non-uniform trend towards domestic tourism, with short trips, which prevails in Spain, France, Portugal, the US, and China, although the results show, in some countries, a change in this behaviour once the vaccination process is concluded. In this context, Germany and China are most benefited, as they are currently the largest net tourism exporters, and with the international travel largest base [45], just like the UK, although, in this case, the option for international travel is expressive.

In China, independent and luxury travel emerges, focused on the areas of health and well-being tourism, with the growing use of technology, adopting the concepts of *slow-tourism* and *smart-tourism*, indicating expressive market niches, also in the international sphere, given the potential number of tourists from this issuing country. It should be noted that the luxury segment—where six European destinations, as well

Table 27.1 Tourists' behavioural intentions

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Risk perception	Mar 27–Apr 06, 2020 632	5 European Union (EU) countries, Switzerland	• 64% admit cancelling future trips to countries affected by the pandemic, 46% even to unaffected countries • For 64%, the decision to travel depends on whether there is an alert issued for that country	[18]
Destination	Mar 30–May 2, 2020 4,000	140 countries	• 53% value a good health system at the destination • 39% value destinations with little demand	[19]
Expenses	Apr 15–17, 2020 2,106	Spain	• 42% expect to spend less, much less or nothing (30% reduce on restaurants and bars); 70% are available to pay for flexibility in cancellation and booking changes	[20]
Vaccine	Apr 17–24, 2020 3,500	United States of America (US)	• 36% (with an international flight), 30% (with a domestic flight), 26% (with a hotel stay), 41% (who went to a concert), in 2019, wait for the vaccine before the next	[21]
Destination Expenses	Apr 20–29, 2020 4,000	France	• 88% plan to stay in the country on vacation, 41% prefer beach/sea, 43% prefer mountain/nature; 16% plan to reduce expenses; 15% plan to take a shorter vacation	[22]

(continued)

Table 27.1 (continued)

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Motivation Destination	Apr 23–27, 2020 1,028	Spain	• 60% are eager, and 21% have moderate desire to travel; 78% prefer domestic destinations; 53% do not expect to change, and 32% opt for shorter vacation periods	[23]
Destination	Apr 30–May 10, 2020 390	France	• 58% already change their destinations; 66% are looking for different experiences, 44% prefer nature, and 27% activities, 21% go discovery; 53% admit changing fate in the future	[24]
Vaccine Expectation	Apr 30–May 24, 2020 14,164	7 EU countries, India, Indonesia, South Korea, Canada, United Kingdom (UK), US, Switzerland, United Arab Emirates	• Participants, between 10% in Switzerland and 17% in the US, are awaiting the vaccine to resume non-essential activities outside the home • Expectations regarding the consumption of international travel, comparing pre- and post-pandemic behaviour, and for all countries, show negative values, between -55% in India and -8% in the United Arab Emirates • The European countries oscillating between -38% in Spain, and -9% in Germany	[25]

(continued)

Table 27.1 (continued)

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Trends	Content analysis	China	• Increase: independent and luxury travel; health and wellness tourism; new concepts: *slow tourism* and *smart tourism*	[12]
Destination	May, 2020 1,100	4 EU countries	• Safety, hygiene, cancellation, and refund are the main criteria; 76% prefer domestic travel, and 73% nature destination	[26]
Risk perception	May 01–07, 2020 785	US	• 60% will wait, at least, 3 to 6 months to travel • Health and hygiene measures are the most important	[27]
Risk perception	May 13–24, 2020 658	Portugal	• More than 60% do not believe can travel safely in 2021, 54.4% will be more careful to schedule vacations; • To 58.4%, the risk perception with international travel increased; 71.6% consider cities as high-risk destinations, and 43.7% to avoid vacations in periods of high demand	[28]
Risk perception	May 17, 2020 583	US	• 31.2% wait (to travel) between 3 and 6 months, 28.3% wait 2 years or more, 27.9% within 1 year, 12.5%, immediately • About 48% are willing to pay more to have the middle seat vacant on the plane	[29]

(continued)

Table 27.1 (continued)

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Risk perception	May 27–Jun 07, 2020 634	South Korea	• Most residents (on Jeju Island), see tourists as a risk that affects their physical and mental well-being	[30]
Virtual reality	Jun, 2020 174	US	• Social distancing increases the intention to use virtual reality when visiting tourist sites	[31]
Motivation Expenses Destination Risk perception Sustainable tourism Technology	Jul, 2020 20,934	28ountries	• 65% are willing to travel, 42% want to travel more (51% in *Generation Z*, 49% in *Millennials*); 62% will be more attentive to prices, and 74% to cancellation and travel insurance • 36% choose their destination with friends and family, 32% recalling vacations, 16% through digital influencers • 75% favours hygiene conditions, 70% security measures, 59% will avoid certain destinations (67% in *Baby-boomers*) • 38% advocate an incentive for eco-travel, 35% want rewards on booking sites for sustainable options • Use of technology: 53% to manage *last-minute* bookings (56% of women and 50% of men), 63% to make guests feel safer	[32]

(continued)

Table 27.1 (continued)

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Destination Risk Perception Technology	Feb 28–Apr 01, 2021 8,770	5 EU countries, UK, US	• 49% of Europeans and 71% of Americans plan domestic trips; 71% admit a leisure trip in 18 months, 22% admitting traveling only in 2022 • 78% intend to rent an accommodation through *Booking.com* or *Airbnb* platforms; 70% of Europeans and 64% of Americans admit to take out travel insurance	[33]
Expenses	Mar 03, 2021 18,000	18 countries on 5 Continents	• In 16 countries, expect to reduce expenditures, by between -50% in South Africa and -6% in the US, in India they increase, + 5%, and in China plan to keep	[34]

(continued)

Table 27.1 (continued)

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Age group	Mar 03, 2021 4,000	UK, Spain, US, China	• Between the ages of 18 and 34 are, in all countries, the most likely to travel, over 55 years show less desire; Spain, US, and China, favour domestic travel, in the UK, favour international travel, in all age groups • In all age groups, car rental is more evident in Spain, US and China, and train travel in China, than in other countries; Hotel accommodation prevails over private accommodation, for all age groups and in all countries	[35]
Luxury segment	Jan 19–Feb 01, 2021 95,000	Several	• UK, Italy, Spain, France, Greece, US, Caribbean, and Portugal: the 8 favourite destinations; September, July, and May, are the most selected months, for stays of 14, 10, or 7 days • Service, gastronomy, cancellation, hygiene, and safety, are critical factors; it favours sustainable options: recycling, maintaining gardens, reusable bottles, organic products	[36]

(continued)

Table 27.1 (continued)

Variable	Quiz (date) Sample (no.)	Geographic location	Results	Source
Motivation	Mar 03–05, 2021 2,006	UK	• 38% planning a holiday abroad (60% are under 44 years) in 2021, 40% in the UK, and 21% are not taking a holiday • Under 25 years, prefer a tour package (46% of women, 35% of men), and over 55 prefer independent travel	[37]

as the US and the Caribbean, are amongst the eight favourites—it is generally in line with the priorities expressed by the other approach segments.

A note to the perception incidence—expressed by residents of Jeju, the largest and most touristic island in South Korea—of increased risk caused by tourist flows in this context, with physical and psychological well-being effects on the community.

Tourists' decisions are also influenced by their loyalty, in a triple aspect: vertical, to the destination; experimental, to experience; and horizontal, to accommodation [46, 47]. In addition to personal motivation, a variable that induces a positive attitude to react and meet the tourists´ needs [48]. By analysing the data, we found that loyalty in Tourism is, totally or partially, suspended, being very expressive the openness shown by the participants to change destinations, experiences, and accommodations.

It is worth highlighting the ascendant, in the decision-making process, of family and friends, memories, and digital influencers, in this order of relevance, not being evident the direct effect of operators and corresponding promotional actions.

Open spaces, in contact with nature, closer to rural tourism than to the urban environment, are highlighted options, and exemplified by the growth of online searches in the US [49], under the terms *weekend trips*, between April 5, 2020 and April 3, 2021, and *camping*, between April 5 and September 19, 2020.

The use of online transactions is also expressive, with sales and services increasing significantly in this way [50], showing, once again, information and communication technologies relevance. With digital channels prevailing in terms of optimizing conditions—there are many who expect to spend less, or much less, in the future—young people show a greater disposition for the tourist packages consumption, compared to independent travel, preferred by those over 55 years old.

The *last-minute* concept that, before the pandemic, was an offer characteristic, has now become a common demand practice, for different reasons—even though the price and promotion factors are highly valued—as tourists give less time to trips advance scheduling, reducing the space for unforeseen events and restrictions in a scenario that, being unstable, favours *on-time* decisions.

A concern with sustainable tourism was evidenced, asking respondents to pay greater attention from reservation platforms, and operators, to the existence of incentives and rewards, whenever travel is in line with this objective. The sustainability identification, defence, and promotion, where prevail the experiences' authenticity, respect for local communities, and the thoughtful use of resources, in interdependence, suggest greater responsibility attitudes, with desirable multi-scale impact, and with an increasingly intense appeal to technology.

This indicates that, sometimes, sustainable products are forgotten, or unrecognized [51], being desirable a greater balance between offer and demand, highlighting that the greater is the tourists' sensitivity towards this design, more available they are to consume—and pay for—sustainable tourism products, or even taxes, as long as these are allocated to public investments in favour of local sustainability [52].

It is noting the importance of the vaccination process, as a relevant factor for the Tourism recovery, and for the tourists' behavioural intentions, in particular.

27.4 Conclusions

The carried out meta-analysis suggests that a new paradigm may be emerging, with the appeal to new models, methods, and processes, with repercussions in the demand configuration and in the offer structuring, with the underlying reformulation of means and interactions in the instruments design, in the solutions implementation, and in the expectations management.

Systematizing the main similarities between the analyses, the results establish: (i) the existence of adequate infrastructure, and compliance with hygiene, health, and safety protocols, as priority factors; (ii) flexible and transparent reservation, cancellation, and refund policies, as highly valued; (iii) the openness to change the destination, experience, and accommodation, prevail, with loyalty suspended; (iv) destinations with lower demand, and outdoor activities, more in rural than urban areas, as privileged options; (v) the procedures dematerialization, using technology, as a requirement; (vi) the vaccination process, as very important for recovery.

Regarding the differences, less visible, the following should be mentioned: (i) the motivations for travelling again, in the short term, are not uniform, namely in terms of age groups; (ii) the options for domestic destinations, compared to international travel, are oscillating; (iii) the duration of trips is a volatile criterion; (iv) the willingness to plan an independent trip, as an alternative to a package tour, is unclear.

With regard to the studies' required variables, the *risk perception* and *destination* are the most recurrent, reflecting the concern about the impact that this pandemic causes, based on these core variables. It should also be noted that all other variables are, directly or indirectly, included in the literature review carried out.

In line with the objectives, the opportunity of this meta-analysis is confirmed, which, through the interaction of lines of investigation, proves to be of wide reach, in a context where doubts regarding certainties, prevail.

Given what was mentioned, but recognizing that, because we are faced with behavioural intentions, they are susceptible to change in the near future, what is a limitation of this approach.

It is important to know, therefore, and as a challenge for future investigations, if all these findings are a reflection of facts, and conjunctural circumstances or if, on the contrary, they reflect the first sign of structural changes.

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Chapter 28
The Influence of Web Design on Customer Engagement with an Online Travel Agency

Sergio Dominique-Ferreira, Marta Viana, Catherine Prentice, and Nuno Martins

Abstract Web design, user experience, and information architecture play an important role in improving consumer trust and customer engagement. This study examines whether an updated web design of a Portuguese travel agency may increase leads, and customer engagement based on the best practices. The empirical study was based on a quantitative approach. To analyse the impact of the new version, a Wilcoxon signed rank test was applied. The results show that the updated version has a positive impact on consumers' intention to visit the travel agency's webpage, brand trust, and purchase intention.

28.1 Introduction

The tourism industry has become one of the major contributors to the economy in Portugal, over last decades. According to Portuguese Institute of Statistics [1], in 2019 the Portuguese tourism activities increased by approximately 8% when compared to 2018. Although the pandemic has changed the trend, tourism will play a major role in economic recovery [2]. Given the impact of COVID-19, tourist companies must adapt to new market conditions [3].

Customer engagement enables companies to attract more customers (e.g.: [4–6]). In online scenarios, (e-) customer engagement depends on specific determinants, such

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as web design, user experience (UX), user interface (UI), and information architecture (IA). The better a company's website is designed, the more trust consumers will have in the brand. Several studies showed the relationship between trust and customer engagement [7, 8]. The current study is intended to examine the impact of an updated web design with the best practices of UX, UI, and IA on customer engagement.

The following section presents a literature review based on web design constructs and e-customer engagement strategies. The case study was conducted to highlight the weaknesses of the website. The methodology of this paper is outlined, followed by data analysis and presentation of results.

28.2 Literature Review

28.2.1 Web Design and e-customer Engagement Strategies

The online travel booking market has grown significantly over the years as a result of the increase in the number of digital platforms. The number of online travel agencies (OTA) users will continue to increase in the coming years [9]. Following this growth, for most businesses and organizations, websites have become the key promotional channel [10]. Since most interactions between companies and users occur online, the design of a website is key to engage users. Poorly designed websites may frustrate users, leading to high bounce rates, and consequently company discredit [10, 11]. Companies must ensure a well-designed e-platform in order to maximize consumer trust and, visitor retention and purchasing behaviour [12, 13]. Developing a co-creation business strategy is considered an important step to achieve higher rates of customer engagement and loyalty [14]. This type of strategy allows companies to increase sales, enabling product, and service customization, leading to greater consumer satisfaction [14].

User Experience. UX Design is a field that focuses on the relationship between human interaction and computer-based products, such as websites and applications. It is a process centred on improving the user experience, creating a useful and accessible product [15]. The main purpose of UX designers is to consider every stage of users' interaction and ensure that it performs as smoothly as possible. Thus, the main task of a digital designer is to investigate, create wireframes/workflows, and run usability tests to ensure maximum positive impact on users (for more details, see the honeycomb proposed by Morville [16]).

Information Architecture. Information architecture (IA) can be described as the process of organizing content in a structured and effective approach for the purpose of supporting user to navigate complex and massive amounts of data. The main purpose of the design of a website, is to create a structure that allocates the user to comprehend where the contents are located and to help them to understand the path to take in order to get the information required. A clear IA increases the likelihood that users will re-visit the webpage and will also increase customer engagement [17].

Given time has become a major constraint for consumers, it is crucial to engage customers by finding contents valued by customers. Whilst IA has origins in numerous fields and approaches, there are two key methodologies: library sciences, and cognitive psychology. Gestalt principles, mental models, cognitive load, recognition patterns, and visual hierarchy are some key elements of cognitive psychology most valuable for IA [17]. The eight principles of IA presented by Dan Brown are also considered of great importance to develop a well-planned website with a well-structured content. These principles have a particular importance when promoting specific last minute campaigning (e.g.: price discounts) in order to arouse customer interest. A well-placed and developed advertisement will certainly generate more clicks, increasing user involvement and interest for the time-sensitive offer.

User Interface and Usability. Interface represents everything the consumer interacts with in order to reach a certain product. Visual design with functional, intuitive, and interactive interfaces is not only a set of subjective choices but rather the best combination of project objectives, user perspective, and informed decision-making [18].

To maximize the sales potential of products and services, visual design should not be an afterthought. UI is an essential tool to satisfy both users and companies. To develop an engaging and effective UI, designers have to understand the main foundations, such as colour, typography, composition, and how to combine them to communicate efficiently and trigger consumer interest [19]. UI can also be described as the application of usability principles and design standards to create an easy and pleasant understanding and navigation environment. Nielsen [20] refers to usability as a prerequisite for internet survival. An appropriate website with good levels of usability increases customer engagement and revisited rates, vital to e-business success [12]. Lee and Kozar [12] studied the relationships between website usability constructs and online purchase intention, concluding that there are 10 website usability factors that directly and indirectly affect the user purchase intention: (1) telepresence; (2) navigability; (3) interactivity; (4) learnability; (5) readability; (6) content relevance; (7) supportability; (8) simplicity; (9) consistency; (10) credibility.

Trust and E-customer Engagement. Customer engagement and trust have been widely discussed as an antecedent of customer purchase and loyalty. Companies need to understand users' needs and preferences so they can generate trust. TripAdvisor's business model proves to be a successful example of a strong and trustworthy community. TripAdvisor is a user-generated travel review website that has seen a remarkable growth over the years and, according to Egger and Buhalis [21], its consumers' reviews are becoming more important than the hotel official star rank.

Consumers identify themselves more easily with other consumers than with companies. Even so, there are several elements that contribute to building trust online, boosting online presence, and buying habits. By offering competing prices and convenience, online businesses attract thousands of new users year after year

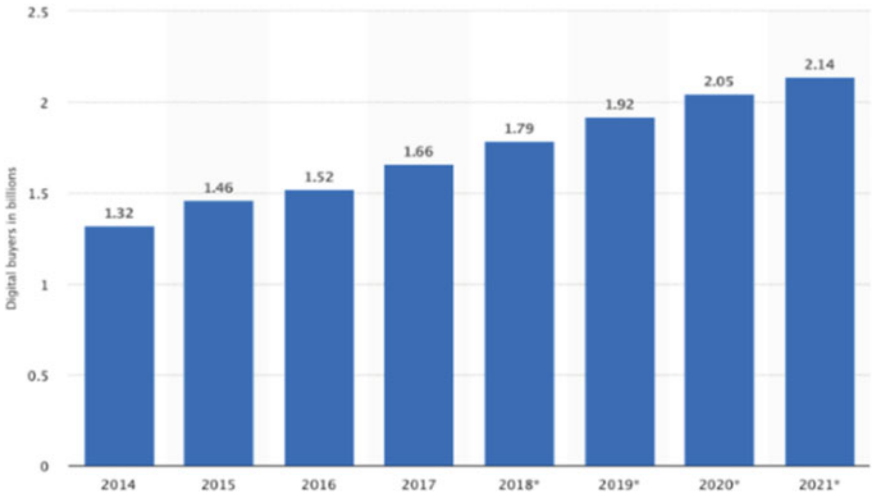

Fig. 28.1 Number of digital buyers worldwide from 2014 to 2021

(see Fig. 28.1). The current pandemic situation boosted and reinforced this trend and forced the tourism industry to quickly adapt to users' needs [22].

However, despite this data, a considerable number of users are still steadfast on online shopping. Wolfe et al. [23] conclude that the reasons why consumers do not purchase travel products online are lack of personal service, security concerns, lack of experience, and lack of time. Now being forced to sell and promote their products online in order to adapt to this new market demand, companies must tackle these impediments to online shopping and elaborate strategies to provide their growth and market share [24]. In a saturated market, companies must develop consumer engagement strategies, alongside with their core services and products in order to attract and retain users.

Nevertheless, according to Kazak et al. [25], technology's role in customer engagement does not end with the "acquisition" of a customer, but rather presents itself as an initial step in a continuous service delivery process. In order to be successful, brands must not only attract new customers but also find ways to retain them and gain their trust. This can be achieved by developing additional advantages and a clear, constant, and relevant typo of communication. The use of AI tools and chatbots enhances the development of personalized micro-targeted marketing campaigns, improving customer's loyalty [25]. The authors also report that 75% of Booking.com users prefer to search and book travel services according to individual parameters. In terms of personalization, co-creation strategies prove to be a successful approach to increase customer retention. Kwon and Kim [26] report that personalized services enhance customer satisfaction and loyalty by decreasing content overload. As a result, satisfaction can affect customers' retention, encourage positive word-of-mouth, and increase customer loyalty which can lead to a greater competitiveness. These tailor-made

Fig. 28.2 Inbound marketing strategy

solutions help the travelling process to be more cost effective, ensuring that reservations are made regarding user's personal preferences, and enabling the company to present the "perfect trip" based on the customer's demands, rather than the actions of competitors.

Whilst travel companies know about the market as a whole, AI technology allows knowing individual preferences, demands, influencing consumer decision process [27]. The use of the inbound marketing methodology (see Fig. 28.2) alongside the use of AI technology will also help to attract visitors, increasing leads [28].

By providing products and services based on consumer needs whilst delivering an optimized visual platform (in line with UX guidelines), the chances of the brand successfully engage users increase. A well-design website with good usability constructs has a beneficial impact on visitor retention and purchase behaviour. Garett et al. [10] and Flavian et al. [13] conclude that web design is key to achieve positive outcomes on users online shopping behaviour as the design of a website acts like a framework for companies to generate greater users' satisfaction and trust levels. Users are more prone to visit and shop in well-designed websites and that the visual interface of it has the power to determinate the relationship between the offer and demand parts.

28.3 Case Study

28.3.1 The Case of Solawest

As presented previously, this paper focuses on a case study, specifically, a Portuguese travel agency (Solawest) that has had problems in achieving a competitive online performance. Solawest is a local and online travel agency based in the north of Portugal. Established in 2001, Solawest is integrated in one of the major travel agency groups in Portugal, the GEA—"Independent Travel Agency". In 2005, Solawest

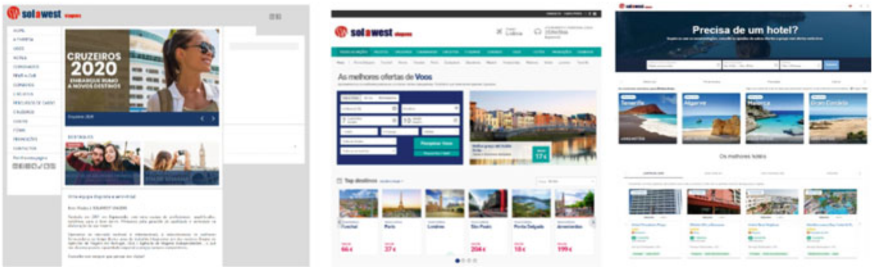

Fig. 28.3 Solawest home page, flights and hotels respective pages

launched a website to increase sales. However, the lack of an integrated marketing strategy has a negative effect on companies' online performance.

Despite this information, users' flow in 2020 was interesting, as several visitors visited the website of the company. These results are especially encouraging considering the current pandemic. However, despite the "initial interest", Solawest bounce rate is extremely high (76.62%) showing that a considerable number of users visit but do not stay or explore the website.

A major reason for the online booking being very low and the rejection rate be so high may be related to the fact that the current version of the website does not inspire trust to users. With a non-responsive homepage and the lack of coherence between the several pages presented (see Fig. 28.3), users can not enjoy a smooth navigation or fully understand how the website and content are organized. In addition, since most primary research is conducted through mobile devices, and the first contact has some limitations, the chances of users continuing to explore the rest of the website are low (average of current number of pages per session: 1.53).

In a non-structured interview conducted, the CEO of Solawest was aware that the website was outdated, basic, and confusing. The current version of the web design does not please consumers. As a result, the priority was to develop an updated version of the website based on consumers' preferences, and design and marketing best practices.

28.4 Methodology

28.4.1 Sample

To understand how and at what level web design affected consumer engagement and user's online behaviour, the study was conducted on social media and open to all public of legal age interested in participating. Data was collected from a total of 23 participants. The sample consisted of designers, students, dentists, lawyers, e-commerce specialists. 34.8% of the respondents were male, and 65.2% were female.

The age of participants ranged from 18 to 59 years old. 79.3% were between 18 and 29 years old, and 21.7% between 46 and 59. The majority (69.6%) had higher education qualifications.

28.4.2 *Instruments and Procedure*

To evaluate the web design of the two web pages versions (original version and the updated version), an adaptation of the scale of Tangchaiburana and Techametheekul [14] was applied. The main purpose was to analyse the impact of web design on online purchase intention, comparing the original and the updated version. For this purpose, Wilcoxon signed-rank test was used. The questionnaire was developed using Google Forms (online).

28.5 Results

28.5.1 *Customers' Online Behaviour*

Six questions were asked for this purpose, using a five-point Likert scale. To the question "Do you usually buy products online?" 13% of the subjects responded rarely, 39.1% occasionally, 30.4% frequently, and 17.4% very frequently. Regarding the second question, "How often do you buy tourist products online?", 17.4% of the respondents mentioned "never", 47.8% "once a year", 17.4% "two to three times a year". Only 4.3% responded "four to five times a year", and 13% "more than five times a year". 60.8% of the respondents reported that price discounts and other pricing strategies played an important role in booking repetition. 47.8% reported that it would be highly likely to share online feedback and reviews in exchange to points (gamification strategies). They also reported that it was also more likely for them to subscribe to a newsletter if this would mean future price discounts and other gratifications.

28.5.2 *Comparison of the Web Design Evaluation (Version 1 vs. Version 2)*

On a posterior phase on the questionnaire, users were presented with the two versions of the website: version 1 corresponded to the actual platform and version 2 to the proposed solution. The Wilcoxon signed rank test was used to compare both versions. The comparative analysis focused on 8 web design items: (1) visual design; (2) information architecture; (3) coherence; (4) intuitiveness; (5) comprehension; (6)

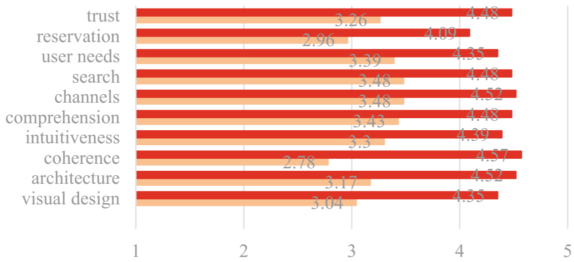

Fig. 28.4 Wilcoxon signed rank test results

communication channels; (7) search parameters; and (8) user needs. The level of probability to make a reservation and the level of trust was also measured. Results show that the updated version (version 2) presents a much more positive outcome (see Fig. 28.4). Statistical differences were found across all items.

28.5.3 Web Design, Trust, and Customer Engagement

All subjects reported that an adequate web design provides greater confidence when shopping online. Furthermore, 95.6% agrees that the webpage design has a positive impact on the brand image and positioning of the brand. 69.5% also refer that they would abandon an online purchase if the website's visual interface does not convey confidence. When asked directly which version they prefer, 87% responded the updated version. These results are consistent with the previous ones.

28.6 Discussion and Implications

The results are in line with the literature showing that web design positively affects customer online behaviour and is a key factor to e-business success [10, 12, 13]. The importance of User Experience (UX) and Information Architecture (IA) has been held at the vanguard to ensure that customers value positively products and services, improving UX within the platform (in line with Morville [16]). The practical approach of this paper has reenforced that users are more prone to shop in well-designed websites, and that the correct application of usability constructs and a clear IA has a positive impact on visitor retention and purchase behavior [10, 13, 17]. In further developments, marketing strategies like the gamification theory and the use of co-creation should be considered to develop more personalized services, as well as a more engaging, satisfied, and loyal community [26]. In line with the results presented in this paper, users are more predisposed to share personal information and engage with brands when presented with rewards for their online actions. The study and application of gamified systems will help create more rewarding experiences alongside with higher satisfaction rates, improving brand awareness, loyalty, and profitability [29, 30].

Based on the results obtained in this study, brands' online presence must be developed strategically and based on market research. Thus, the authors recommend a follow-up 2–3 months after launching the updated version of the website, based on: (a) consumer perception; (b) number of visits; and (c) sales volume. Nevertheless, it is important to understand that the current pandemic context might limit the positive impact of the updated version.

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Chapter 29
Accessible Surf Destinations: The Case of Viana do Castelo, Portugal

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Abstract In recent years, there has been a growth in the travel of people with disabilities (PwD), which has led to an increase in demand for an accessible environment (infrastructure, transport, and services), and, thus, a growing recognition of the value of the accessible tourism segment. This study aims to explore the accessibility of the supply structures in a tourist destination through the analysis of the first European Adaptive Surfing Championship, held in the city of Viana do Castelo, in littoral northwest of Portugal. This study adopted a case-study approach by combining exploratory semi-structured interviews, direct observation (employing visual methods—photography), and face-to-face questionnaires applied to adaptive surf athletes. The case-study results showed that despite the efforts implemented by the adaptive event organizers, some constraints remained in the supply structures of the hosting seaside destination of Viana do Caste-lo. Particularly built infrastructures displayed some physical accessibility barriers in the parking lots and the absence of automatic and lifting equipments. By inquiring adaptive surf athletes and their technical teams, and despite overall satisfaction with the event, attributes such as walkways and information in accessible format were predominantly less satisfactory. The study presents managerial implications for the improvement of accessible nautical tourism destinations.

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29.1 Introduction

As the tourism industry expands, a growth in travel for people with disabilities (PwD) can also be observed and, thus, the need to adapt the tourism supply to this segment. Accessible tourism is conceptualized as regardless of travelers' disabilities, allowing the acquirement of a wide range of services and tourism products prepared under the "universal design" guidelines, allowing an autonomous travel [1–3]. In 2016, the United Nations World Tourism Organization (UNWTO) has launched the manual entitled "Good practices in the accessible tourism supply chain", and partnered, among others, with the European Network for Accessible Tourism (ENAT) emphasizing the importance of facilitating travel for people with disabilities [4]. According to the World Health Organization, in 2011 there were around 1 billion people with disabilities in the world, equivalent to about 15% of the world population, and by the year 2050, the number of people over 60 years of age will increase to 20% of the world population [5, 6]. Seventy percent of people with disabilities in the European Union (EU) have financial capabilities to travel, and the main accessible tourism markets within the EU are France, the United Kingdom, and Germany [7]. For these reasons, accessible tourism constitutes a current social priority for the UNWTO and the ENAT [8]. Portugal has joined this effort toward universal accessibility, being awarded in 2019 by the UNWTO, in its first edition competition, as an "Accessible Tourist Destination" [9].

However, in general, tourism destination managers are frequently confronted with infrastructural barriers, financial constraints, and the lack of knowledge and information [10]. Tourist-related infrastructures are determinants for competitiveness in the accessible tourism market [11], as is the case of accessibility to beaches for leisure purposes. In relation to this, Portugal has been recognized as example of international good practices in beach accessibility "the Accessible Beach—Beach for All" (Praia Acessível—Praia para Todos) [8]. In 2018, 603 bathing waters were identified, and from these, 214 were classified as accessible areas, and certified with "Blue Flag".

Moreover, opportunities can be streamed from the organization of disability sports events, particularly for the host communities [12]. As attested by the authors Dickson et al. [12], by hosting a disability sports event there is a great gain in terms of social development by increasing accessibility and by generating a greater understanding of disability-related issues. Additionally, sports events such as the Paralympics games involve an amount of participants, particularly, athletes, officials, volunteers, spectators, and tourists [13], which may overall represent significant tourism flows, with positive impacts in terms of revenues.

As a leisure activity, adaptive surfing exists for over 20 years, but as a competition, it is still relatively recent being the "1st European Adaptive Surfing Championship" held in 2019, in the city of Viana do Castelo, Portugal. It was the first surfing event in Europe certified by the Sustainable Tourism and Outdoors Kit for Evaluation (STOKE) [14], acknowledging the city as an accessible tourism destination. This coastal city has a High-Performance Surf Center (HPSC), being a hub for surfing activities and surfing tourism reinforcing Viana do Castelo's position as a city where the sea is a strategic resource.

As argued by Dickson et al. [12], there is scarce research concerning adaptive sport events and, particularly, limited literature has addressed the outcomes of small-medium scale adaptive events [15]. Therefore, this research aims to explore the city of Viana do Castelo, Portugal, as an accessible surf destination, based on the analysis of the existing conditions and perception of participants to the first European Adaptive Surfing Championship.

29.2 Literature Review

29.2.1 Accessible Tourism in the Context of Outdoor Events

Accessible tourism is commonly described as it enables people with access requirements, including mobility, vision, hearing, and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services, and environments. This definition is inclusive of all people including those traveling with children in prams, people with disabilities, and seniors [1] (p. 34). Accessible tourism thus encompasses a wide range of impairments as well as aging people, temporary disabilities, and families with young children as they have similar accessibility needs [1, 12, 16, 17]. In addition, accessible tourism is a process that should ensure the accessibility to the entire tourism system, from accommodation to transport and destinations attractions, meeting the needs of PwD [11].

Thus, supplying overall destination accessible conditions for PwD enables them to be more autonomous during their travels, providing them independent decisions and actions [17]. So, accessible tourism can be understood as accessible services and products in every part of the tourism value chain. Connected with the concept of accessibility emerges the principle of design for all, which aims to achieve universal accessibility from the (re)design of the built environment and products and/or services so that all people can enjoy and participate in life in community, in safety and with autonomy [15].

It is possible to identify in the literature four dimensions of the accessibility: (i) physical, (ii) communicational, (iii) economical, and (iv) social. Regarding the physical accessibility, there are various constraints in the built environment of the tourism destinations, both natural and cultural, that should be overcome by using solutions such as access ramps, adapted walkways, relocation of urban furniture, among other issues [18, 19].

Alongside physical barriers, a central aspect of accessibility is how services communicate to PwD. Audio guides, video guides, tactile footpaths for blind impairment, braille publications, subtitling, and 3D are examples of good practice in communicational accessibility [18, 20, 21]. In turn, economic accessibility reflects the afford-ability of the tourism experiences available at the destinations [12, 17]. This means that, regardless of the support structures needed for different types of disabilities, tourist services should be affordable to people from different economic backgrounds.

Lastly, the social dimension refers to human resources (tourism staff, other tourists, and locals) knowledge on dealing with PwD [12, 18, 22]. Negative social attitudes toward PwD are still frequent, but these can be reduced by raising social awareness, and through educational programs targeted at tourism stakeholders.

One of the major legacies of adaptive sports events is the impact on the social sustainability of hosting destinations. By promoting volunteer programs and developing awareness-raising initiatives during adaptive sports events, it is generating, at the same time, a greater understanding of disability issues among the event staff and the local stakeholders [12]. In addition, adaptive sports events can generate physical accessibility legacies by the development of built structures capable to meet the needs of PwD and, therefore, the local community [12].

However, as argued by Misener [15] existing literature is mainly related to the economic and physical/infrastructural outcomes of hosting mega-events such as the Paralympic Games, and there is clearly scarce research focusing on destination marketing and development [12]. Destination planning must comprehend the infrastructure and equipment of the tourism value chain. In the case of coastal destinations, transportation and physical accessibility to the beaches is crucial [19]. Moreover, access to tourists services including restaurants and cultural attractions [2, 10, 13], and the existence of suitable accommodation are critical factors in the tourism decision-making process for PwD [21]. As claimed by Özogul and Baran [21], PwD is more demanding in terms of detailed information than individuals who are not disabled. Thus, available and accessible information about the tourism destination is vital in the pre-visit decision process [20, 23]. In addition, a satisfied PwD will communicate and recommend the destination to their peers via word-of-mouth (WOM) [24], overcoming the absence of online quality information [20].

Thus, the importance of examining the infrastructure of the destination while examining the perceptions of PwD regarding the overall destination is vital in tourism planning and management.

29.3 Materials and Methods

In order to assess the conditions of Viana do Castelo, Portugal as an adaptive surf destination, the operational objectives were as follows: to evaluate accessibility level of existing infrastructures and supply structures and to assess the degree of satisfaction of adaptive surfers (athletes) with the event in terms of the accessibility in main destination supply structures.

This research adopted a case-study approach by combining different methods, quantitative and qualitative. Two exploratory semi-structured interviews were undertaken (with an organizer of the event and with a PwD surf instructor). The main goal was to produce insights regarding the specific context of the adaptive surf event by identifying key considerations in terms of logistics (sports equipment, accommodation, and food), displacement of the athletes and their technical teams to the beach, specific training of coaches and partnerships with adaptive surf monitors.

Direct observation was employed (complemented with photographic records) to generate a critical evaluation of accessibility conditions of the destination, infrastructures (parking conditions and access to the beach), and supply structures (accommodation, restaurants) were analyzed. In this sense, a diagnosis matrix was applied to assess a set of attributes (parking; path connections; automatic elements; inside building path; living areas; toilets; lifting equipment), concerning the accessibility criteria established in the Portuguese legislation, Decree-law number 163/2006. Four degrees of accessibility were defined, namely: (1) complies with the regulation—accessible; (2) partially accessible; (3) inaccessible; (4) there is no data for analysis. The direct observation, and registry of situations through photography were employed to accomplish the diagnosis of the beach where the event took place and at the HPSC, in Viana do Castelo. The input data was collected through the diagnosis matrix that was filled out by the research team.

In addition, thirty-one (31) questionnaires were collected near the all athletes involved in the competition. The scarce research concerning adaptive surf events, plus the scarcity of opportunities to conduct research of this kind, led to the selection of a case-study approach to allow a holistic understanding of a real-life event [25], as has been used extensively in sport tourism studies [13]. The questionnaire was composed of three sections. First section assessed the behavioral attitude by inquiring the respondents about their probability to return to the destination, to recommend the city of Viana do Castelo for adaptive surfing practice, and to speak positively about it, in a Likert-type scale ranging from 1 (extremely unlikely) to 5 (extremely likely). Second section assessed the degree of satisfaction with the event (accommodation, transport, beach access, organization of the event, tourist services attributes) on a Likert-type scale ranging from 1 (very dissatisfied) to 5 (very satisfied). Last section focused on the sociodemographic profile of the respondents.

Content analysis was adopted to explore the data obtained from the semi-structured interviews for relevant themes and issues related to the logistics and organization of the adaptive surf event highlighted by the interviewees. The limited literature on the issues arising from a specific event, such as the European Adaptive Surfing Championship, has led to this type of analysis for further insights [18]. The data obtained from the questionnaires during the event were also subjected to descriptive statistical analysis. Statistical Package for the Social Sciences (SPSS) software version 26 was applied.

29.3.1 Research Context

Despite the growing demand for surf tourism in Portugal, research studies are limited to the social and economic impacts in local communities focusing primarily in Central and Southern regions, such as Ericeira, Costa da Caparica, Cascais, Algarve, Nazaré, and Peniche [26–29] as they are integrated into the most significant international surfing circuits. Nevertheless, some international surfing events had taken place in Northern Portugal, namely the World Bodyboard Championship, in 2018, hosted in Praia da Arda, and has been performed for five years [30].

In 1988, Portugal made the first step to recognize the importance of adaptive sports for PwD by legally constituting the Portuguese Sports Federation for People with Disabilities (FPDD). However, adaptive surfing only started in 2009 with the project *Estado Liquido*, and the first "Surf for All" event was held in 2010 [31]. Nevertheless, adaptive surfing in Portugal is still in its infancy, considering the number of practitioners and the scarcity of related literature.

Viana do Castelo, located in the littoral northwest of Portugal, was the city selected to held the first "Eurosurf Adaptive Championship" in Europe. The "Surf Clube de Viana" was the sports association responsible for organizing the "Eurosurf Adaptive Championship". Viana do Castelo was selected based on its conditions of accessibility (structures on the beach, support for athletes), the image of the city, and the communication around the destination [32].

29.4 Results and Discussion

29.4.1 To Evaluate the Accessibility Conditions of the Supply Structures of the Event

Through the results obtained from the fieldwork (direct observation), it was possible to detect some anomalies. Only one parking space for PwD in the Cabedelo beach was observed, and the HPSC was partially accessible. Yet, the connections between parking lots and the HPSC offer optimal pedestrian connectivity following the recommendations proposed by the UNWTO [33]. Concerning the information available through alternative formats and automatic elements, particularly, large print, audio file, video, braille, easy reading, both types of equipment did not display any of these automated elements, functioning as communicational barriers to PwD, and not following the suggestions of Turismo de Portugal [10]. Fieldwork observation reveals that the inside connection paths and living areas of the HPSC complied the regulation, and few anomalies were detected (i.e., lack of chairs with armrests). Armrests, as well as handrails, are critical in mobility ensuring PwD safety as suggested by Darcy [3].

The HPSC complies with the accessibility regulation by providing adapted bathroom facilities as would be expected considering to be a recently built equipment. Yet, it lacked mechanical lifting equipments. As recommended by UNWTO [33] having lifting equipment for people with severe disabilities is extremely useful and of paramount importance to encompassing all types of impairments [34].

Fig. 29.1 Transport and beach access

29.4.2 To Assess the Degree of Satisfaction of Adaptive Surfers in Terms of the Accessibility in Main Destination Supply Structures

The European Adaptive Surfing Championship had the presence of six federated teams, namely from Portugal, France, Wales, Germany, Italy, and Spain totalizing 29 athletes and 19 members of the technical team. Between athletes and their technical teams, the number of participants was as follows: (16—France; 12—Spain; 9—Italy; 8—Portugal; 2—Germany; and 1—Wales) that participated in the event.

The variables assessing the dimensions of transport and beach access are displayed in Fig. 29.1. It is possible to evaluate that the majority of respondents (58.1%) were very satisfied regarding the "parking conditions" available at the destination event. However, the remaining variables did not gather the same agreement. While 45.2% of the respondents were very satisfied with the "adapted transportation during the event", the percentage dropped concerning the "pedestrian access/walkways" with only 32.2% of respondents indicating they were very satisfied and, also 32.2% indicating they were neither satisfied nor dissatisfied. A significant part of respondents (41.9%) stated being neither satisfied nor dissatisfied with "public information in accessible format" and, over 30% were very satisfied with the "mobility at the beach".

Developing accessibility for all at tourism destinations should be based on a systemic perspective, involving all components of the tourism product, from accessibility, transportation, accommodation to accessible activities and sports events, but also the availability of adequate information [16], before the event/travel (for planning purposes) and during the stay of this tourist market segment [1, 6]. In spite of

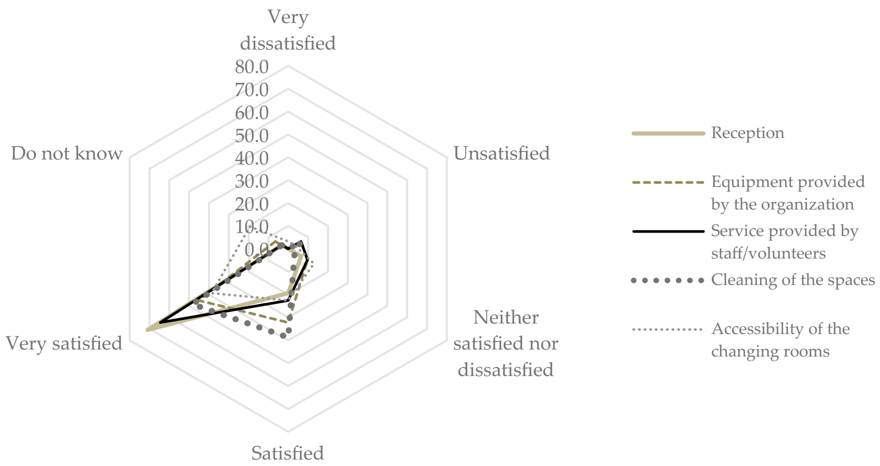

Fig. 29.2 Event organization

the efforts implemented by the organizers, "public information in accessible format" maybe considered an issue to be improved in future events.

To evaluate respondents' satisfaction with the organization of the event, five variables were employed. The large majority of respondents (71.0%) stated they were very satisfied with the event "reception", along with the service provided by the staff and volunteers of the organization of the event (64.5%). Around 45% of all respondents agreed about the equipment provided by the organization being very satisfying, as well as accessibility of the changing rooms (38%), and with the cleaning of the spaces (48.4%). Overall, these types of events clearly contribute to raising awareness among staff and volunteers, helping them to be better prepared in welcoming PwD aligning with Dickson et al. [12] and Devile [22] perspectives, acknowledging the social legacy of adaptive sports events (Fig. 29.2).

In assessing the degree of satisfaction with the tourist services available at the destination—Fig. 29.3—where the event was held, four variables were applied. Surveyed participants pointed out that were very satisfied with "adapted bathrooms" (45.2%) and further indicated they were very satisfied with the "restaurants with adapted facilities near the event" (38.7%) as well as with "adapted restaurants in the municipality" (32.1%). Only 29.6% considered very satisfied when assessing the "accessibility to monuments and points of interest" and, at the same time, around 29% stated not knowing, as they have not experienced any.

Despite national regulation, issues on physical accessibility and discriminatory practices remain. Thus, this research argues, in comparison with already existing studies on accessible services at destinations [2, 10, 13, 19] that access barriers in built environments, e.g., visitor attractions as well as in tourism supply structures such as restaurants, must be improved by increasing social awareness among local stakeholders. These improvements should be accompanied by communicational

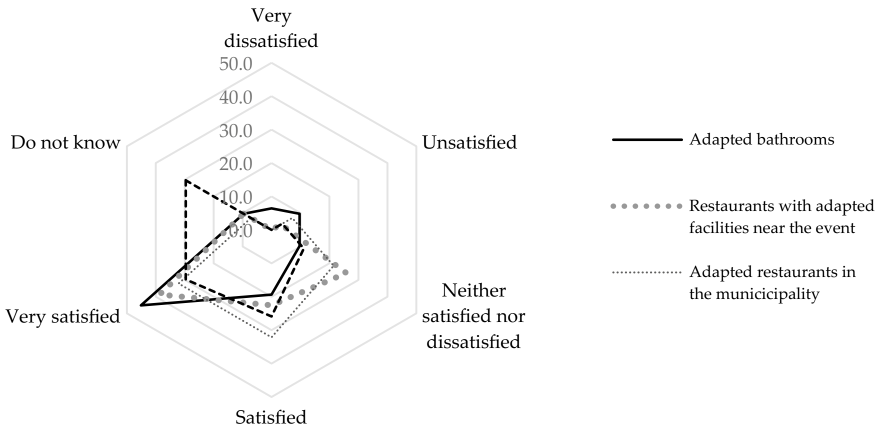

Fig. 29.3 Tourist services

strategies providing PwD with pre-travel information considering different types of impairments [20].

To evaluate respondents' satisfaction with the accommodation facilities, six variables were employed, as displayed in Fig. 29.4. The majority of surveyed participants (53.3%) were very satisfied with "complementary support facilities" (e.g., elevators and ramps) as well as with the "mobility in common areas" (53.3%). In terms of "mobility in the room", 46.7% were very satisfied and, 50.0% considered very satisfied with "mobility in the restaurant/bar" as well as with "guidance/information elements" (50.0%). Regarding the "quality of service" 56.7% of all respondents were very satisfied.

Overall, respondents were very satisfied with the accommodation facilities during the Eurosurf Adaptive Championship event, contributing positively to the tourist

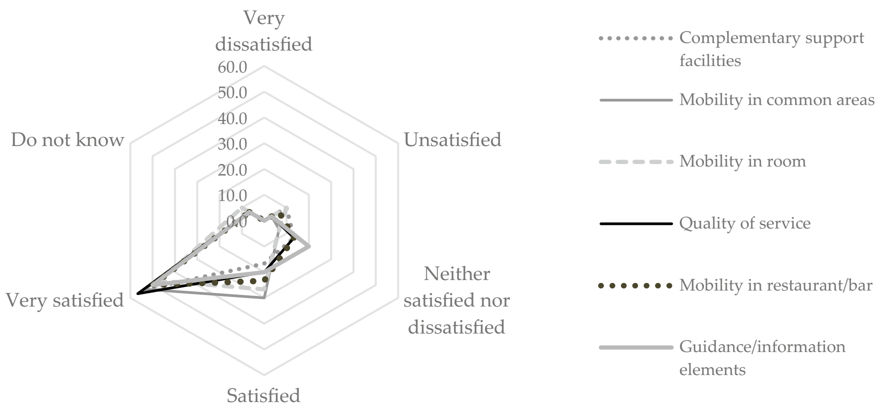

Fig. 29.4 Accommodation

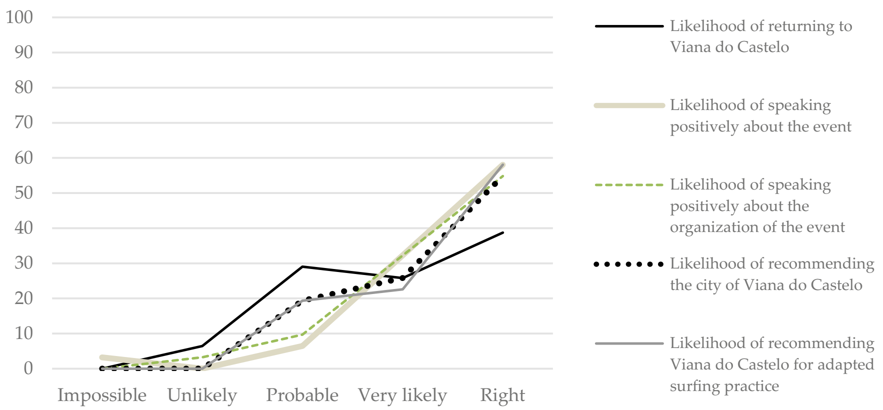

Fig. 29.5 Behavioral attitude toward Viana do Castelo as an adaptive surfing city

experience since the main obstacle encountered at destinations is, usually, to found adapted accommodation as claimed by Devile [22]. In the same way that accessibility to information in the pre-travel stage is crucial in the tourism decision-making process, adequate accommodation is a critical factor in purchasing behavior [21]. The data obtained reflects the work carried out by the organization of the event, in the search for accommodation that would allow to host PwD, ensuring the feasibility of the event.

Figure 29.5 illustrates that over 50% of all respondents displayed a high likelihood of speaking positively about the event as well as about its organization, of recommending the city of Viana do Castelo, and, most importantly, a high likelihood of recommending Viana do Castelo for adapted surfing practice. However, only 38.7% indicated a high likelihood of returning to Viana do Castelo.

Through positive word-of-mouth (WOM) among PwD, destinations can gain a competitive advantage and continue to develop and marketing their adapted services and sport-related activities [21]. As claimed by Özogul and Baran [21], PwD question in greater detail than individuals who are not disabled, thus, accessible information and positive WOM are significant factors in their travel decision-making and buying processes. Aligned with online communicational strategies by increasing the eWOM, people with disabilities will acquire more detailed information and of higher quality, for future travel purchases [24], increasing the likelihood of repeating tourism destinations.

29.5 Conclusions, Limitations, and Future Research

This exploratory research showed that despite the efforts implemented by the event organizers, some constraints remained in supply structures at the seaside destination (Viana do Castelo), which hosted the first European Adaptive Surfing Championship.

The High-Performance Surf Center has some accessibility barriers considering the parking lots, absence of automatic and lifting equipments, and some issues were also identified in the living areas (lack of armrests). Despite overall adequacy of the built environment, communicational and social accessibility there is room for improvements.

By integrating a cross-border cooperation project "Ecodestin_3IN" (Interreg Espa-ña-Portugal), Viana do Castelo is committed to the planning and development of recreational nautical sports for PwD, and in the creation of accessible tourist itineraries, adding a differentiating competitive dimension to its tourism offers.

This study displays some limitations that future research should address. The study would benefit from the insights of different international technical teams. Thus, next studies should encompass a bigger sample in the exploratory phase providing wider and deeper knowledge on accessible tourism destinations for nautical activities. Nautical tourism covering adaptive surfing activities is still in its infancy, but considering the potential of accessible tourism market, more research, and more focused research, are needed.

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Chapter 30
Exploratory Data Analysis of the Tourist Profile: Case Study in Loja-Ecuador

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Abstract The determination of the profile of the tourist who visits the destinations arises as a proposal for the improvement of the competitiveness of the territories; data collected is to know the characteristics of the tourists who arrive at the destination, the type of accommodation used, the way of traveling and the main motivation for the trip, the most visited tourist attractions, the tourist expenditure, and the overall rating of the destination. The main aim of this study is to apply a non-traditional methodology composed of data mining methods such as: DEA (Data Envelopment Analysis) and PCA (Principal Component Analysis) to investigate past statistics. Based on these results, the sustainable operation strategies are made to prepare the destination and diversify the offer, to it can be used by the most important managers in the tourism industry to reactivate the economy after the COVID-19 pandemic.

30.1 Introduction

Tourism provides livelihoods to many people and thus their families, as well as allowing travelers knows the culture and natural wonders that different destinations possess; before the COVID-19 it represented more than 20% of the gross domestic product (GDP) in some countries. In 2019, the international tourism arrivals grew up by 4%, i.e., 1461 million of tourist arrivals, generating an evolution of domestic

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tourism in the world of USD 5.85 billion [1], becoming a true generator of the dynamization of the economy [2].

Ecuador in 2019 had a positive tourism balance, with the 637 million dollars of income, evidenced in the arrival of 2,107,692 international travelers considered of relative importance for the Ecuadorian economy [3]. Furthermore, according to the technical report published by researchers in Loja-Ecuador indicate that in Ecuador, more than 600 thousand people, are employed in Tourism industry and more than 495 thousand householders depend on this sector [4].

In Loja, tourist profile was developed, it showed that travelers have an average age of 40 years, higher level education, travel alone to the city and their main purpose are business and professional reasons [5].

There are many studies using unstructured data such as social media [6–8] and structured data with past statistics to evaluate and generate tourism strategies [9]. The main aim of this study is using the tourist profile data collected in 2018 and 2019 to find patterns and create strategies to improve the tourism in Loja after the pandemic is under control. Instead of using traditional methods to analyze data from surveys, we use data mining methods such as: Principal Component Analysis (PCA) which is a method of dimensionality reduction and Data Envelopment Analysis (DEA) that is used to measure the efficiency of tourism actors (hotels, restaurants, etc.) according with the traveler's consumption patterns.

The paper is divided into five sections. Section 30.1 presents an introduction about the Tourism perspectives after COVID-19 and methods about exploratory data analysis. Section 30.2 presents a theoretical background about the tourism profile and methods to analyze this data. Section 30.3 presents the research methodology. Section 30.4 discusses the findings, and the final section summarizes and share the conclusions and future work.

30.2 Literature Review

The National Tourism Plan 2030 was developed at the end of 2019 with the contribution of government authorities, academy, and industry. The main aim is to formulate guidelines to promote the tourism sector in the country with a vision of inclusion, accessibility, sustainability, and innovation, through the five strategic axes: (i) destinations and quality, (ii) connectivity, (iii) tourist security, (iv) marketing and (v) investment. With the pandemic situation, the challenge is reactivating the tourism industry based on the domestic tourism and the improvement of competitiveness based on nature and culture to develop a competitive and sustainable destination [10]

Thus, is important to analyze the tourism demand, to find the aspects that have change with the pandemic. The interest is knowing the type of travelers that visits Ecuador, which cities or places are more visited, what type of services are required, this allows to destinations be better prepared to accomplish the expectations that tourists have in relation to their visit.

Researchers in Ecuador have developed tourist profile in different places. In the Santay Island [11] the author makes an analysis about community tourism with a traditional statistic technique. On the other hand, in [12] the authors work with Cuenca (an important Ecuador's city) and its influence as a World Heritage city, with an analysis of the psychographic, socioeconomic, and demographic characteristics. While in another analysis [13] presents an analysis of the national tourism who visited Quito (capital of Ecuador) through a bibliographic research to know the behavior of the national tourist and evaluate the behavior and motivation of the travelers to improve the marketing campaigns. Mora and Ochoa [14] study the tourist profile of "Mancomunidad Bosque Seco" (a little town in the Loja province) they applied a descriptive analysis to know the behavior of tourism in the regions, finally the government authorities have applied surveys in the Pichincha province (principal province in Ecuador) to find the motivations, degree satisfaction, mobility, food, accommodation, and level of information of the tourist destination.

Considering data analysis and methodologies, [15] the authors used the declared preference (the decision-making of the survey's respondents when posing hypothetical situations through the mixture of attributes, which are generated from an experimental design) and the revealed preference (uses techniques where observations are made on real choices that some people made to measure their preferences) to evaluate the tourism demand; the strengths and weakness of both methods are balanced to provide robust and optimal results. On the other hand, [16] the authors used statistical techniques to process the information to evaluate the reliability and validity (Cronbach's alpha) and the similarities between survey' respondents using k-means clustering and, to evaluate the hypothesis the post-hoc single-variate ANONVA was used. In [17], the authors analyzed the oleoturism (tourism specialized in the production of olive oil) using sociodemographic characteristics, motivations, and the assessment of related variables with the destination, the also used Cronbach's alpha. Finally, the authors in [18] developed and exploratory study using seasonality of tourism demand in Spain, they used multiple factor analysis and classification analysis to deal with time series.

30.3 Methodology

The COVID-19 pandemic has severely affected the global economy. One of the most affected industries is tourism, thus it is important to generate strategies and identify resources that allow both practitioners and managers using innovative concepts to promote the economic reactivation of the tourism industry.

A methodology was proposed by Gallego and Font [19] for the early detection of tourism markets after COVID-19, the authors used Skyscanner data on air passenger searches and used two datasets then, the variables identification was performed later, the data extraction was performed identifying the territorial and temporal units of analysis. In that paper uses advantages of Big Data considering the granularity of information. Another interesting study extract the image monitoring information of

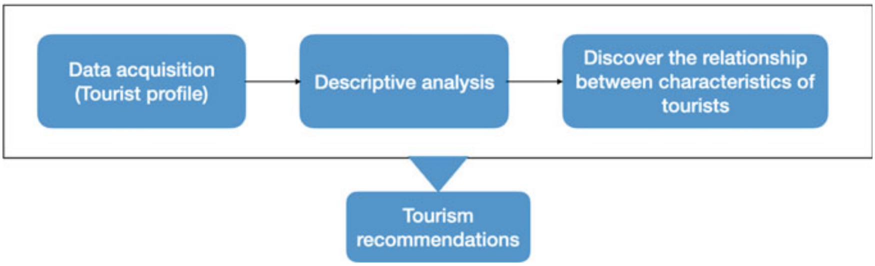

Fig. 30.1 Research process

tourism destinations, generate the tourism routes by using all the candidate destination sets, generate destinations formed by the destination sets, and return the recommendations to the tourist, the authors used data mining architecture [20]. In this way, this work proposes an approach that uses data mining techniques to analyze the tourist profile to generate recommendations that allow a quick and efficient reactivation of the tourist destination. The research process for this work is shown in Fig. 30.1.

Figure 30.1 shows the phases that allow obtaining, processing, and generating recommendations to promote and improve strategies in the tourism sector through the tourist profile. First, (i) the data acquisition is about obtaining data through the tourist profile, information obtained in 2018 [21] and 2019 using surveys both at the airport and at the bus station of the tourism destination. Subsequently, a (ii) descriptive analysis of the most visited places, origin of tourists, travel purpose, etc. is performed. Then, we try to (iii) discover the relationship between characteristics of tourists; to this end we focus on the following variables: accommodation, transport, restaurants, tourist-places and souvenirs. This paper proposes the use of two techniques for data analysis used in different domains, one of them is the Data Envelopment Analysis (DEA) an operation research method that is used to measure productive efficiency through the use of decision making units (DMUs); this research use DEA to obtain suggestions for Loja's tourism industry in terms of tourism purpose of traveler, thus we identify the following DMUs: "Vacations/Holidays", "Visits", "Education", "Health", "Religion", "Shopping", "Business" and "Others". Therefore, we use DEA to analyze the expenditure of tourist with different purposes to calculate the overall benefits to Loja' tourism industry. This data analysis tool requires input and output data; in this case we used the money spent in each selected variable as output factor, a dataset with the same size of the output factor composed by unit values, are treated as input factor and the efficiency values can be treated as contribution to the tourism industry; thus, higher value means that the tourist spent more money. The second tool used in this study is the Principal Component Analysis (PCA), this multivariate technique is used to describe a dataset as new variables or "components" uncorrelated, usually two or three components are sufficient which are ordered according to their original variance, this reduces the dimensionality of a dataset increasing interpretability and minimizing information loss. This tool allows us to extract the dominant patterns in the matrix and find the variables that stand out to Loja's tourism industry.

30.4 Results

In this section we apply our approach, this work uses data from the tourist profile captured both at the bus station and at the airport. The surveys were conducted in 2018 and 2019. In total, 1178 surveys were conducted, 396 people in 2018 and 782 in 2019.

30.4.1 Descriptive Analysis

Descriptive analysis is the first step in the exploratory data analysis, for this study the variable "purpose" has been chosen. Other variables are very important to have in mind such as the "nationality" variable because this is appropriate in this type of analysis to be able to extract patterns from foreigners and focus our marketing strategies. In the Fig. 30.2 we can show the distribution of the "purpose" variable.

From Fig. 30.2 we see that tourists to Loja-Ecuador with different objectives. Business is the mainly purpose maintaining the trend in recent years despite the

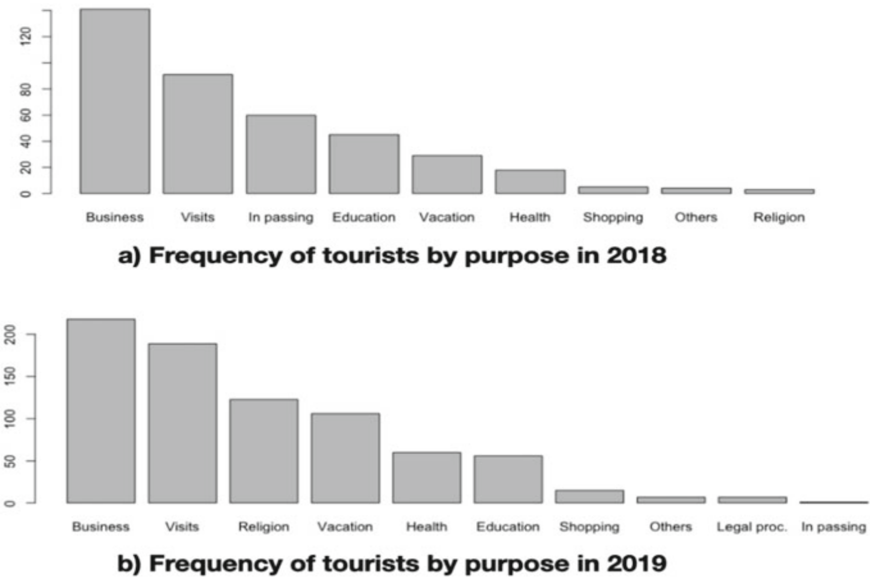

Fig. 30.2 The number of tourists by purpose to Loja-Ecuador

Table 30.1 Average expenditure of travelers according to the purpose of travel in Loja-Ecuador

	Accommodation	Transportation	Restaurants	Places	Souvenirs	Others
Vacations	34.32	120.62	61.31	1.11	16.56	1.85
Visits	6.49	123.34	68.59	1.45	24.15	2.77
Education	34.10	60.35	29.43	0.38	4.33	8.42
Health	7.77	31.95	14.14	0.30	1.47	8.92
Religion	25.41	68.65	28.17	0.51	9.1	0.36
Shopping	5.75	12.90	11.70	0.25	5.25	53.50
Business	79.60	136.43	46.39	0.33	6.16	4.22
Others	6.01	48.67	11.30	0.03	4.78	1.03

COVID-19 pandemic. Visiting relatives and friends is the second main objective and religion in third place.

Later the next step is verifying how much money tourists spend on average according to the purpose or DMU's and the variables accommodation, transportation, restaurants, places or touristic complexes, souvenirs, and others. The results are show in the next table.

From Table 30.1 we show that the travelers with business purpose spends more in transportation, this means that they prefer to come to the city by plane and at the same time they prefer to spend more in accommodation. On the other hand, travelers whose objective is to vacation spend more money on transportation, restaurants, and hotels respectively. In third place is religious tourism, considering that travelers with this purpose spend more on transport, restaurants, and hotels. Based on this information; in this study focuses in this kind of travelers, discusses their consumption trends and recommends some specific suggestions to improve the tourism industry operations.

To discover the relationship between the tourist characteristics we propose the use of data envelopment analysis this is an optimization technique thus, it can be applied to improve the efficiency in processes in different companies and therefore it can be applied in different domains and principal component analysis, it is a multivariate technique that allows to apply the dimensionality(variables) reduction. Following we show how to apply these techniques in tourism domain.

30.4.2 Data Envelopment Analysis

DEA is an operation research method used to measure productive efficiency of decision-making units (DMU's). Using data collected from Loja-Ecuador Tourism, the average consumption of tourists was used to compare their contribution to the tourism industry. Using R software with the package "rDEA" to compute the score, this can be used as their contribution to the industry. The results are summarized in the Table 30.2.

Table 30.2 Data envelopment analysis results by purpose

	Accommodation	Transportation	Restaurants	Places	Souvenirs	Others	Efficiency
Vacations 2018	*48.10*	101.10	*74.93*	**2.14**	**21.66**	8.62	1.00
Vacations 2019	30.55	125.26	57.58	0.84	*15.17*	0.00	0.93
Family visits 2018	13.51	114.05	42.73	*1.64*	9.19	4.73	0.97
Family visits 2019	3.12	*127.81*	**81.04**	1.37	31.35	1.83	1.00
Education 2018	41.33	107.93	46.38	0.51	8.67	*18.11*	0.93
Education 2019	28.29	22.11	15.81	0.27	0.84	0.63	0.34
Health 2018	15.83	29.06	24.22	0.67	2.94	8.00	0.38
Health 2019	5.35	32.82	11.12	0.19	1.03	9.20	0.32
Religion 2018	0.00	66.33	20.00	1.33	1.66	0.00	0.64
Religion 2019	26.02	68.71	28.37	0.49	9.28	0.37	0.51
Shopping 2018	0.00	20.00	12.00	1.00	0.00	90.00	1.00
Shopping 2019	7.67	10.53	11.60	0.00	7.00	**41.33**	0.71
Business 2018	51.25	121.16	37.55	0.39	4.29	10.46	0.93
Business 2019	**97.93**	**146.30**	52.11	0.29	7.36	0.18	1.00
Others 2018	4.92	46.67	10.67	0.03	4.19	0.88	0.34
Others 2019	10.67	57.20	14.00	0.00	7.33	1.67	0.43

Values in bold are the greatest value in each column and values in italic are the second greatest value in each column (purpose)

From Table 30.2 we see that tourists who travel by business purpose spent more money on “Accommodation” and “transportation” with an efficiency score of 0.93 and 1.00 in 2018 and 2018 respectively. Also, we see that people who travel by “Family Visits” purpose have an important contribution to the industry with 0.97 and 1.00 as efficiency score in 2018 and 2019 respectively. Furthermore, we see that “Vacations” also have an important contribution with 1.00 and 0.93 as efficiency score in both years. On the other hand, purposes such as “Education”, “Health”,

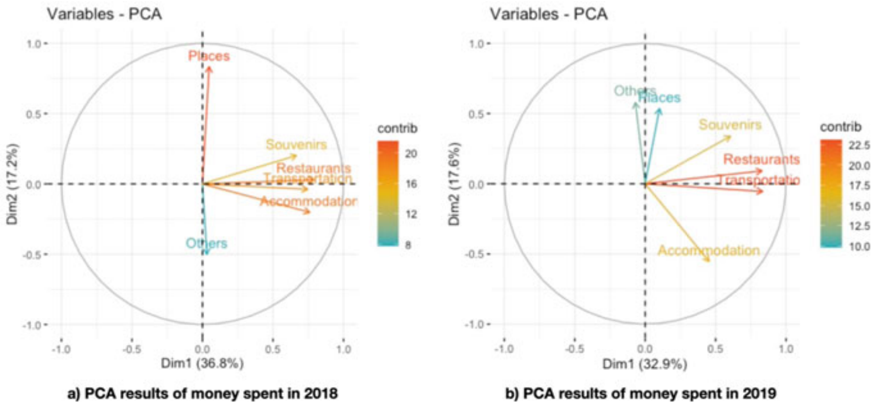

Fig. 30.3 The PCA results of money spent in Loja -Ecuador

"Religion" and "Others" are inefficient according to the score. "Shopping" has an score of 1.00 in 2018 but 0.73 in 2019. We should improve marketing strategies for tourists who come to Loja, thus this industry can reactivate the economy once the pandemic is under control, mainly focusing on religious tourism because Loja has an important potential.

30.4.3 Principal Component Analysis

To understand the relationship between profile variables on which tourists spent their money, we performed the analysis on tourists who visit Loja-Ecuador, and two main components were extracted. In the Fig. 30.3 we show the PCA results of 2018 and 2019.

From Fig. 30.3, in the 2018, the first component is composed by restaurants, accommodation, transportation, and souvenirs with 0.79, 0.76, 0.75 and 0.67 respectively as a factor loading; these results show that there was a high correlation between that variables; and travelers who spent money in restaurants, also spent more in accommodation, transportation and souvenirs. Meanwhile the second component is composed by places and other expenses (hairdressing, laundry, etc.) with 0.83 and −0.50 respectively as factor loading; it means that travelers who spent money in places or touristic complexes spent less in other things related to the trip. In the 2019, the first component is composed by transportation, restaurants, and Souvenirs expenses with 0.84, 0.83 and 0.61 respectively, this means that there was a high relationship between that variables; travelers who spent more on transportation spent more on restaurants and souvenirs. While the second component is composed by other expenses, places, and accommodation with 0.58, 0.53 and −0.55 as factor loading, this means that travelers who spent more on other expenses spent more on places or touristic places but spent less on accommodation.

30.5 Conclusions

COVID-19 has caused global damage, tourism has been one of the most affected sectors. This work tries to find a strategy for the tourism industry in Loja-Ecuador. Using data envelopment analysis and principal component analysis, this study analyzes tourist profile data collected in the years 2018 and 2019 to investigate the tourism environment in this city. It was found that business travelers spent more money on accommodation and transportation, being the visitors by business the ones that most contribute to the economy of the city, this data were taken from two segments: tourists that travel by bus station and by airport which are the main entry and exit points to Loja city. According to the data analysis, it is possible to show that tourists spending has a marked difference between travelers who use the bus station versus who use the airport, the latter being the most important, this is due to the cost of the flights and complementary services that this kind of travelers uses. In addition, the segment that is mobilized by bus station represents the largest number of arrivals to the city. On the other hand, this work makes use of DEA and PCA as an alternative to traditional methods in qualitative research. In addition, this methodology allows finding consumption patterns of tourists in the city, allowing cooperation between different businesses involved, to increase the sales. However, it is possible to obtain better results if we have much more data. In the future, it is planned to complement this analysis with correspondence analysis (CA) and make predictions about the arrival of tourists to a destination, increasing the data collection in three stages, the same ones that allow gathering information regarding the visitor's profile.

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Chapter 31
Religious Tourism Interfaces: Celebration of "Senhor dos Passos" in São Cristóvão, Sergipe

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Abstract Traveling for religious reasons has been happening since ancient times, taking place all over the world. According to the Brazilian Ministry of Tourism, religious tourism is responsible for about 20 million trips per year, with a great impact on the country's economy. This article aims to present reflections on the Feast and Procession of Senhor dos Passos, in São Cristóvão/Sergipe (Brazil) and its relationship with religion and tourism. Highlighting the potential of religious tourism and its interface with popular culture, human and symbolic value. Following a qualitative approach, based on a phenomenological study, some techniques were applied, namely literature review, document analysis, and survey application. The results show that the "Senhor dos Passos" Feast and Procession in São Cristóvão is an excellent experience in the context of religious tourism. Providing the pleasure of traveling and escaping from everyday life to absorb values of a spiritual order.

31.1 Introduction

The municipality of São Cristóvão, located in the state of Sergipe, one of the 09 states in the Northeast region of Brazil, was founded in 1590. The headquarters is located 26 km from Aracaju, capital of the state, and has some peculiarities, namely: pastorals and bucolic landscapes, imperial mansions, old churches, as well as local cultural and religious movements and manifestations, which are capable of attracting and pleasing visitors, consequently awakening the desire to visit them, beyond the period of religious festivals.

The Feast and Procession of Senhor dos Passos, original from Iberian Peninsula, arrived in Brazil by the Portuguese crown, in the sixteenth century, and the oldest record referred to the city of Florianópolis, in the south of the country, which

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organizes, since 1766, the mentioned Procession [1]. It is important to consider that the worship of Senhor dos Passos in any city that celebrates it begins long before the so-called Encounter Procession, the culmination of all celebrations that involve reverence for the event. In Sergipe, the event arose in 1855 and since the beginning, it was organized by the Parish Council of Nossa Senhora da Vitória and Irmandade do Carmo, linked to the Order of Discalced Carmelites. The Feast of Senhor dos Passos takes place during Lent and comprises a set of rituals: eucharistic celebrations, processions, and veneration to sacred images [1].

During the festive period, the city is transformed into a true open-air temple. The streets followed to lead the crowd through the old buildings that marked the time of the empire when São Cristóvão was the capital of the state. The religious procession moves to view the Praça de São Francisco, awarded with the seal of Intangible Cultural Heritage of Humanity by UNESCO [2], the former Chamber House and Prison, the former Government Palace, the Church of São Francisco, and other permanent references of the processional territory that fit into an outstanding architectural ensemble of expressive historical value and true witness material to the longevity of the Procession of Senhor dos Passos, recognized as cultural heritage of the state of Sergipe [3].

It is noteworthy that, in parallel with the celebrations, there are cultural actions, exhibitions, and/or sales of local gastronomy and popular events that expand and enrich the main religious event in the region. This overlap is part of the originality of the event, as this interaction does not compromise the intentions and functions of the various social actors identified there. Conversely, integration adds value and synergy to the landscape of devotees and tourists who celebrate the Senhor dos Passos.

The interest of this article is justified for several reasons. Firstly, due to the importance of the Procession of Senhor dos Passos, which currently has the presence of about 50 thousand participants, according to the City Council and the Archdiocese of Aracaju, but which, over the three days that the festival takes place, gathers more than 80 thousand visitors among devotees, tourists and curious. Added to this is the fact that it is celebrated throughout the national territory and recognized as a Cultural Heritage of Brazil [1] Secondly, for a historical issue, rescuing as roots and religious influences of the Iberian population, in particular, the installation of the Portuguese crown in Brazil.

In this context, some questions arise as an object of the study: What is religious tourism really? Who are the practitioners and what motivations do they have? Is it possible to classify, in general, the tourist who practices religious tourism? How to analyze the Feast and the Procession of Senhor dos Passos in light of tourist offers and offers?

31.2 Methodology

To answer the questions presented, it was necessary to use a descriptive and qualitative methodology based on several techniques, namely: bibliographic analysis, through scientific publications, such as theses, dissertations, and books. The internet was used to access some of these materials; Some contacts have been established with the promoting entities of Feast do Senhor dos Passos, in São Cristóvão/Sergipe, at a distance, through google forms and the google meet platform, due to the biosafety measures imposed by the Covid-19 pandemic. The surveys were applied to the Department of Culture and Tourism Foundation of the City Council of São Cristóvão, arrangers and religious leaders promoting the liturgical act and responsible for the administration and maintenance of the temple as Pastor of the Parish of Nossa Senhora da Vitória, responsible for the religious conduction of the festival and the mentioned procession. Finally, the analysis of statistical documents resorted to platforms such as Technical Instruction and Dossier Preparation for Registration of Senhor dos Passos Procession as Intangible Heritage of the state of Sergipe [4], and also Technical Instruction and Dossier Preparation for Registration of Procession of Senhor dos Passos, in Florianópolis, Brazil, declared by National Historic and Artistic Heritage Institute (IPHAN), in 2018.

31.3 Religious Tourism

It must be admitted that the phenomenon of religious tourism has existed for many centuries, since antiquity. In this context, [5] clarifies that “at some point during the trip […] these pilgrims assume a tourist consumption behavior, as they use equipment and services with an expense structure similar to the real one’s tourists.” It should be noted that, in Brazil, official organizations, such as the Ministry of Tourism, classify religious tourism as a “segment of cultural tourism” [6]. According to the ministry, religious tourism moves around 20 million trips a year and is responsible for injecting R$ 15 billion into the Brazilian economy, boosting trade and service activities, generating employment and income. Also, in the understanding of the Department of Studies and Research of the MTur, 8.1 million national trips are made annually based on faith (not counting the tourists who travel for a day) [6].

Even so, adding to the excursionists, it reaches 18 million trips with this motivation. When it comes to foreign tourists arriving in Brazil for religious purposes, it rises to around 30,000 per year. This typology of tourism is configured by tourist activities resulting from the spiritual search and religious practice in spaces and events linked to institutionalized religions […] such as those of Eastern origin, Afro-Brazilians, Spiritists, Protestants, Catholics, composed of doctrines, hierarchies, structures, temples, rituals, and priesthood, however, here we focus on the Catholic nuance.

There are two types of tourists [7]: the pure pilgrim, whose motivation is only religious and organizes their journey with a single objective, and the other type of visitor, who by expansion, adds a series of motivations for the trip and is characterized as multifunctional. For the Brazilian situation, it is possible to systematize and classify the tourist and religious attractions in six points, considering: the destination area, the final objective, and the motivation of the trip [7]. They are: “(a) Pilgrimage shrines; (b) Religious spaces of great historical and cultural significance;

(c) Religious meetings and celebrations; (d) Feasts and celebrations on specific days (Patron-Saint Feasts); (e) Artistic shows of a religious nature; (f) Ways of faith". It is noteworthy that this classification typology considers several elements, namely: the traveler's religious and spiritual sense, historical, cultural, heritage, artistic and natural knowledge, corroborating the thesis of multifunctionality involving religious tourism. And, in this sense, the Senhor dos Passos Festival and Procession in São Cristóvão certainly engender an expressive part of these dimensions under study. It should be noted that the possibilities of religious tourism, as we are dealing with, are everywhere, just to name a few examples within the European Catholic "world". We have St. Peter's Basilica in the Vatican, the main pilgrimage center for Catholics; the Basilica of "Nossa Senhora of Guadalupe", Mexico; the Sanctuary of "Nossa Senhora of Lourdes", located in southwestern France; the Sanctuary of Fátima, in Portugal; the Cathedral of Santiago de Compostela, Spain, leaving aside the other continents, based only on the most recognized destinations in Catholic Europe.

Nationally, among Catholic shrines, the Sanctuary of the Basilica of "Nossa Senhora Aparecida", in São Paulo, the Complex for Religious Events, in "Cachoeira Paulista—Canção Nova"; Sanctuary of "Divino pai Eterno", in Anápolis de Goiás, among others. In the Northeast region, pilgrimages, from the twentieth century, were strongly promoted, that is, religious tourism stood out widely in destinations such as Sanctuary of "Santa Cruz dos Milagres" (Piauí), recognized by the Vatican, "Juazeiro do Norte", the land of Padre Cícero (Ceará), and the Sanctuary of "Bom Jesus da Lapa" (Baía).

In the state of Sergipe, stands out the pilgrimage of the "Divina Pastora", which takes place on the third Sunday of October, where around 150 thousand faithful travel from different locations; Holy Week, in the city of "Laranjeiras", which gathers about 50 thousand faithful every year, and the Feast and Procession of Senhor dos Passos, in São Cristóvão, the main focus of this analysis [8].

As already pointed out, it must be admitted that trips made for religious reasons are not from today, conversely, they go back to earlier times [9]. What we currently call religious tourism is a growing segment of cultural tourism, which makes it difficult to define [10]. However, tourists that choose pilgrimage as a leisure trip, today form a new category of pilgrims, that goes to the sanctuary for reasons that should be more associated with a structure of meaning characteristic of secular universe of nineteenth-century travel than to the mystical universe of pilgrimages [11]. Thus, "[…] the analysis of behaviors or motivations, sometimes does not provide us indicators capable of demarcating a border between tourists and pilgrims" [12].

31.4 Worship to the Senhor dos Passos in Sergipe: Origins and Context

To understand the development of festive practices that occur in Brazil, specifically in Sergipe, it is necessary to understand the origin and dynamics of the festival in some Iberian countries, from where, in a way, we import devotion and, consequently, we carry out the various cultural adaptations.

The festival under analysis is based on the Via-Cross rituals in sixteenth century, in Sevilha, Spain. The implementation of the “Via Crucis a la Cruz del Campo” has as its starting point the year 1521, at the initiative of the first Marquis of Tarifa, on his return from a trip to the Holy Land [13]. Sevilha hosts an effervescence of brotherhoods or confraternities dedicated to reflection on the Passion and the practice of penance [13].

In Portugal, as in the whole of Europe, compassion for the underprivileged embodied the religious imagination, giving rise to the emergence of the brotherhood of Misericórdia, in 1498, with diffusion in all Portuguese spaces, from the Metropolis to the Colonies [14]. Thus, it should be remembered that, in the sixteenth century, also in Portugal, they were erected as the first brotherhoods dedicated to Senhor dos Passos. The procession of Senhor Jesus dos Passos da Graça, the oldest in the country, dating from 1587, in the city of Lisbon, promoted thanks to the actions of the Royal Brotherhood of Santa Cruz and Passos da Graça, and is celebrated on the fifth sunday of Lent and is the precursor of the Passos processions spread by Portugal in the Catholic “world” between the continents [13]. The Royal Brotherhood of Passos da Graça is dressed in purple Opa, to which are added the Banner of the Procession, children dressed as angels, and Sisters of the Brotherhood dressed in black. With lanterns, you can still see Aia and Our Lady’s butler. It is also possible to verify the guaranteed presence of Andor do Senhor dos Passos, accompanied by the Police Guard of the Army, and in the Palio is the Cardinal Patriarch, who presides over the liturgy. There are always two bands that accompany the procession as it crosses the heart of Lisbon.

In the city of Braga, 360 km from Lisbon, Portugal capital, also celebrate the Passos do Senhor Bom Jesus, during Holy Week, with the Brotherhoods being responsible for organizing the festive rituals.

The celebrations of the Procession of Senhor dos Passos, in Portugal, are also held in Coimbra; in Ovar, and in the region of Alentejo, in Alpalhão [14].

In the insular region of Portugal, Madeira Island, and the Azores archipelago, the continental tradition is reproduced with typical spiritual walks from the Lenten season. Of the eleven municipalities that compose the island, it is possible to map the occurrence of this procession in various parishes of Funchal, Machico, Ribeira Brava, Câmara dos Lobos, and Porto Moniz. Although we do not have many details about the processions, it is known that they take place on the third Sunday of Lent, they are organized by the Confraternity and the highlight is the meeting between the image of “Nossa Senhora” and Senhor dos Passos.

In our Portuguese America, Senhor dos Passos added many other Catholic devotions. In this sense, as already mentioned, “Brazil exuberantly promotes countless processions of Senhor dos Passos in all regions of the country, it is worth mentioning: São Cristóvão (Sergipe), Lençóis (Bahia), Florianópolis (Santa Catarina), Oeiras (Piauí), Pirenópolis (Goiás), Tiradentes and Belo Horizonte (Minas Gerais)” [15].

The Passos Pilgrimage as it is modernly recognized in São Cristóvão [2], implies a very peculiar ritualization, that is: the Catholic ritual begins on Friday night, where the faithful recite the Office of the Passion of Jesus Christ, followed by a Mass. The sequence of acts dictates that: "[…] the festival takes place with two processions: the first is at night and takes place with the transfer of the veiled image of Senhor dos Passos between the Church of the Third Order of Carmo and the Church of Our Lady of Victory. The second is called Procession of the Meeting, with the images of Senhor dos Passos and "Nossa Senhora da Soledade". In addition to these two parades, there is delivery of "ex-votos", confessions, and open-air mass, on Saturday and Sunday, marking the end of the event. It is considered intangible heritage of the state and, similarly, like Florianópolis, there is a mythical narrative in relation to the image of Senhor dos Passos; they were found by fishermen, but "some say it was the Image that found them". The procession has a touristic character and is part of the Cultural Route of the Easter Festivities in the state [1].

31.5 Tourist Perspective of the Pilgrimage and Feast of Senhor dos Passos

The Ministry of Tourism, as mentioned above, has dedicated full effort to segmenting tourism. The objective is to develop a solid strategy for planning, management, and supply. In this sense, Brazilian Catholicism with its solemnities, processions, and parish events enters the segment of religious tourism and for Catholic leaders, this adds inestimable value for highlighting and affirming Christianity, even more.

The celebration of the Pilgrimage and Feast of Senhor dos Passos must be understood in the context of the Catholic religious festivals of patron saint, as occurs throughout the country. In this context, planning for the promotion and image of the receptive city and the use of mechanisms to attract devotees and their satisfaction are expressly significant, a fact that directly implies their organization.

The President of the Culture and Tourism Foundation of São Cristóvão (2021) stated, in an interview, that "the City Council prepares the tourist planning month by month and when it focuses on periods of religious manifestations", in this case, the "Feast and Procession of the Steps", takes place in partnership with the Archdiocese, which forwards the demands to a secretariat of the Foundation. All events that involve the general public and go beyond church boundaries, the local administration provides the necessary infrastructure. Regarding social organization and commercialization of various types, "the municipality enters into agreements with the State Secretariat for Social Assistance and SEBRAE. Thus, [7] complements, highlighting that: "[…] it is necessary to work on the city's image and, in this sense, planning is fundamental. Marketing actions aimed at developing a favorable image, which direct considerations to a particular location, are the objective of institutional marketing".

As a strategy to attract and offer the event to the general public, the interviewed religious leaders highlighted that, throughout the festivities, they are also remembered through four slogans: the city of São Cristóvão is the "Fourth Oldest City in Brazil", "Berço de Sergipe" and "Cultural Heritage of Humanity", which has the

"Second Largest Pilgrimage in the Northeast of Brazil during the Lenten Period". These reinforce the appeal and awaken the collective religious imagination, which certainly finds an echo in the memory of promise-payers/devotees/pilgrims/faithful and tourists who, year after year, attend religious celebrations.

The slogans present metaphors that are, in fact, communication strategies, to generate proximity and develop devices that come to manifest themselves and generate perception [16]. In this perspective, the Feast and Pilgrimage of Senhor dos Passos consolidates itself as the real possibility of fulfilling a sacro-office of the payment of promises and a privileged space for the realization of penances and spiritual retreats so urgent for the human condition and that this justifies one of the most consistent motivations for religious tourism. It must be admitted that other entities linked to services are also present. They are brands and products of private companies, municipal and state governments, and Catholic or non-Catholic organizations that market their products and offer their services.

It is important to consider that the event itself requires a relatively simple context, but encompasses several social actors: religious leaders, local community, city hall, state government, IPHAN, among others. In 2021, due to the pandemic period, the celebrations were held in virtual mode. Thus, to complement this study, we used the data provided in [8] to analyze the event. In the qualitative analysis of some interviews conducted with some of the social actors who promote the celebration, it was found that at each edition of the festival there is a joint concern of the city's social actors to satisfactorily welcome devotees and tourists in general. In the research, surveys were also applied to the faithful pilgrim and the visitor-tourist. In the quantitative analysis, it was clear that temporary places for rest and retreat, food, and spiritual support are established, directly and positively influencing the evaluation that devotees make about the city and the event itself. At this point, according to the report of the religious, "what is in evidence is the exaltation of the person of the suffering Christ and its relevance to the doctrine of the Faith". With this, for a religious institution what matters is the exchange of symbolic values with the environment, as the organization develops. It is not just about incorporating folklore values, but adaptations to the essence of practices and doctrines. The religious aspect is based on ensuring the good influence of the doctrine and bringing new believers into their community [17].

About hospitality, one of the representatives of the Carmelite Order that has organized the Feast and the Pilgrimage of Senhor dos Passos for three consecutive years, says that much of what happens at the event is a donation, of reciprocity. Thus, generosity and donation are not necessarily expecting something in return, what counts is the spontaneity and interest in the well-being of the people who attend the commemorative event.

Hospitality, as a dimension of donation, finds in the exercise of religiosity fertile ground for actions that reinforce the values of Christianity, with an emphasis on donation, sharing, gratuity, and welcoming the religious assure.

Another priest who also organized the procession recalled that, in the tradition of the faithful who go to the feast, the value of imitating the suffering of a Christ on his way to Calvary is an indispensable value and example to face the difficulties of daily life. Pilgrims arrive here immersed in the mystique of the practice of sacrifice and thanksgiving for the benefits received.

The result of the survey, in [8], regarding the modes of transport used to travel to the feast, was that 67% used buses or minibuses, 17% traveled to the city in their own vehicle and 3% traveled on foot. With that, passing to a detailed analysis that the groups that travel by bus, developed the trip in the form of an excursion, use public transport, financed by politicians and/or organized by their parishes. The remaining 13% used other means of transportation such as taxis, vans, motorcycles, trucks, kombi, and planes. These data are broadly compatible and consistent with the proximity of the distance between São Cristóvão and Aracaju, the capital of the state.

In the case under analysis, Aracaju has a hotel network and other services just 26 km away. This reinforces the fact that while it is pleasant to stay in a historic city, the capacity to provide accommodation is very limited. It is important to consider that this does not make it impactful due to its proximity to the capital's headquarters and thus these factors are favorable for the success of the event under study.

31.6 Final Considerations

According to this analysis, the Feast and Procession of Senhor dos Passos is characterized by being an excellent experience for religious tourism. Taking into account the positions of [18, 19], it must be considered that, when these Portuguese religious practices arrived in the country, they did not constitute an official Catholicism faithful to Roman traditions and supported by the code of canon law.

In this context, it is important to consider that not even the clergy experienced legitimate Catholicism, conversely, there were many variations of pastoral theology that were based on the overlapping of different cultural practices.

All of this left the mark of a *sui generis* Brazilian Roman Catholicism that combined and adapted the rituals already known by the faithful with spiritual emergencies. It is from this environment that the Brotherhoods linked to Senhor dos Passos appear and spread throughout Brazil, which will later be responsible for organizing the Procession and also for the foundation of the "Santas Casas de Misericórdia".

As we have already argued, it is important to consider that, either in São Cristóvão, as analyzed with more detail, or in Lisbon, even if analyzed in a partial way and taking into account the objectives and scope of this article, expresses a great splendor of Catholicism and its interface with religious tourism.

However, the particularity of those looking for the Feast and Pilgrimage in São Cristóvão indicates a much more suitable religious tourism, covered with spiritual needs, than a certain exclusivity for the pleasure of travel and entertainment, although this dimension cannot be totally excluded. São Cristóvão intends to be an environment where the flow of people is much more focused on sacrifice, as well as on the payment of promises, at this point, a hotel infrastructure for long stay and reception takes place in the nearest city, Aracaju, capital of State.

Interviews carried out with organizers of religious events revealed that the vast majority of pilgrims associate the difficulties of the path with a mystique of suffering, an effort to fulfill the promise made. At this time, the Church of "Nossa Senhora da Vitória" and the Brotherhood of "Nossa Senhora do Carmo", responsible for the Feast and Pilgrimage of São Cristóvão, established the "Casa do Romeiro", a welcoming place for pilgrims from various cities, where they can stay overnight and the next morning have access to breakfast through donations from city residents.

Religious tourism, like that, practiced in São Cristóvão, walks in search of values that go beyond the dimension of just traveling to rest, as a means of acquiring culture and entertainment, which implies, above all, a dense investment in the spiritual order. From this perspective, the pilgrim reveals the belief that this is a fundamental stage for his growth as a person and his interaction with the divinity and even the overcoming of human conditions or circumstances which also implies psychological and financial health. Finally, the trip to the city of São Cristóvão is filled with this symbolic richness and materializes in the culmination, in São Francisco Square, in the "Meeting" with Maria and Jesus Christ, Senhor dos Passos, apex of all celebrations and procession liturgical that surrounds this long Feast of São Cristovão.

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Chapter 32
Factors Affecting the Adventure Tourism Development Index: A Worldwide Analysis

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Abstract Adventure tourism is a rising segment of the tourism industry where tourists undertake an activity outside of their comfort zone and where some risk is an essential feature. Some consider it as a broad spectrum of outdoor tourist activities. Therefore, understanding it and how it could be influenced by economic, social, political, health, and natural factors is vital for businesses and local governments. This research identifies and analyses how a set of external factors may affect the index that measures adventure tourism development worldwide—the so-called Adventure Tourism Development Index (ATDI). The objective is to provide helpful information to stakeholders, particularly the policy-makers, on elements that should be addressed to develop this tourism segment. Considering data for 191 economies over the last decade, an Ordinary Least Squares (OLS) estimation has been performed. The results show that adventure tourism is dependent on innovation, and economies with more ability and success in innovation will have a competitive advantage in the industry. Aside from that, a higher health expenditure per capita and cultural diversity influence how appealing a destination are to adventure travelers.

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32.1 Introduction

Adventure tourism entails physically engaging in events to understand better a destination, usually in an unusual, exotic, remote, or wilderness place. There is growing popularity in this tourism segment, as it appeals to those seeking adrenaline and thrill by exposing themselves to a new culture and traditions. Many countries are now dependent on the tourism market for the economy and are actively trying to improve their industry. Countries at different economic development stages increasingly prioritize adventure tourism for market development and growth because they recognize its ecological, cultural and economic value [1].

The Global Adventure Tourism Market was valued at USD 657.8 million in 2019 and is expected to increase to USD 2.02 billion by 2030, witnessing a Compound Annual Growth Rate of 10.7% from 2020–2030. Before the Covid-19 epidemic, the worldwide adventure tourism business expanded due to globalization, global events, and concerts. This trend was halted in 2020, but with the global distribution in vaccinations, it is predicted that the tourist industry would gradually recover beginning in 2022 [2]. The Adventure Travel Trade Association (ATTA) and the George Washington University (GW) stated in the latest ATDI 2020 report, following the Covid-19 epidemic, every destination in the world will be in the same position: striving to resume tourism in a way that is safe, mindful of the new realities, and worries of travelers, while still providing jobs to their communities [3]. Competing in a post-pandemic environment will need creativity, adaptability, and tenacity.

Given the above mentioned, this research attempts to identify and measure the importance of some possible drivers of adventure tourism measured by the Adventure Tourism Development Index (ATDI). In the field of adventure tourism, the ATDI, published by The Adventure Travel Trade Association (ATTA), is a valuable source of information and a tool that allows tourism destination stakeholders to monitor their global market position and helps them to recognize strengths and disadvantages in terms of adventure tourism competitiveness. The ATDI assesses aspects of tourism growth that destination managers can influence and those beyond their control. The scores for each nation will assist tourism managers and developers narrow down where they can concentrate their efforts. Therefore, this research intends to understand which factors, external to the ATDI score, could be important to define the countries in a higher or a lower position in the adventure tourism index. Factors as economic performance, human development, political stability, natural disaster risks, innovation level, healthcare development, air pollution, or cultural diversity. These will be the variables expected to influence the ATDI score. The econometric method Ordinary Least Squares (OLS) is applied to analyse the relationship between the determinants and indicator variables.

This paper is organized into five sections. After this introduction, Sect. 32.2 presents a short literature review on adventure tourism and explains the ATDI in more depth. Section 32.3 presents eight hypotheses regarding the way the identified factors may affect the index. Moreover, it is shown the inferential statistical analysis model and the variables included in it. Section 32.4 presents and discusses the empirical results. The paper finishes with the main conclusions.

32.2 Theoretical Framework

32.2.1 Adventure Tourism: Definition, Participants and Threats

Adventure used to be associated with extreme activities that are closely related to motivation to explore something new. In the 1950s and 1960s, adventure tourism started attracting tourists to do natural and adventurous activities. From then on, the demand for adventure tourism has been growing continuously [4].

Adventure tourism started to be defined as a "broad spectrum of outdoor tourist activities often commercialized and involving an interaction with the natural environment and containing elements of risk" [5, 6]. The principal attraction is an outdoor activity that relies on natural terrain features and is exciting for the clients [7]. The literature argues that there are two different types of adventure: (1) the risk-taking adventure and the (2) knowledge-seeking adventure. The standard risk theory of adventure assumes people seek risk as a means of personal fulfillment [8]. Moreover, adventure tourism is often divided into hard adventure (e.g., bungee jumping, heli-skiing, water rafting) and soft adventure (e.g., hiking, mountain biking) [4].

Individuals, communities, and society all gain from outdoor leisure and nature-based tourism. People may learn about natural systems through being outside, participating in active leisure, and visiting natural sites. In addition, connectedness with nature has been found to have mental health benefits, as it can lead to an array of positive emotions, including joy, happiness, contentment. Nature connectedness also has been associated with significant stress reduction [9]. Some of the fundamental motivational forces for people to participate in adventure activity are pursuing goals, overcoming mental and physical challenges, and escaping from everyday problems by tackling the challenges involved in adventure activity participation. People with more experience in adventure activities tend to be more intrinsically motivated than those who just started doing it, which are more likely to be extrinsically motivated. Intrinsic motives come from the desire to fulfill internally driven needs, such as challenge, excitement, and achievement. On the other hand, extrinsic reasons come from external or environmental factors, such as the need to socialize [10].

Based on the literature, there are four purchasing motivations for people to demand nature-based tourism activity products: (1) new activity, (2) quality improvement, (3) skill development, and (4) social. The most important one is quality improvement [11]. To a certain extent, it can be a part of uncertainty reduction triggered by safety needs. The second and third most important purchase motivations were connected by the desire to learn, skill development, and new activity [11]. The level of how environmentally aware someone is also affecting the types of outdoor activities they choose [12]. Pro-environmental groups prefer non-extractive activities with minor environmental impacts (biking, birdwatching or skiing) to extractive and motorized recreation activities (motor boating or fishing). It is suggested that the choice of nature-based activities should be considered as expressions of one's value, associated with a socio-cultural context. As developed countries become more prosperous and people already possess most of the tangible products they want, they start to desire intangible products, such as experiences through leisure and recreation and pursuing extreme adrenaline sports and experiences [13]. The rise of technologies and the ease of obtaining information on the internet also contribute to the rise of tourism. It allows people to make plans about their leisure and recreation time quickly.

There are many different types of activities and places one can do adventure tourism. While most early adventure tourism literature focused on mountaineering and hard activities, the scope has widened significantly since then [14]. On the other spectrum of less risky adventure, outdoor recreation is becoming an essential element of healthy living and a remedy against the limitations of a modern life separated by nature. Urban forests and parks are important for recreational walking and cycling or enjoying the natural scenery, peace, and quiet [13].

Due to the nature of adventure tourism, climate change is one of the main factors impacting ecosystems and recreation opportunities that warrant consideration, where adaption strategies are essential to sustainable tourism. Under climate change effects, opportunities in some geographical locations may shift in activity type or predominant season of use. Shifts in seasonality, such as an extended warm season or a decreased cold-weather season, have mixed direct and indirect complex effects [9, 15]. The direct ones are those caused by changes in temperature, precipitation, and other climatic variables that directly affect the tourist's activities and experience. These changes can cause participants to alter the frequency, duration, timing, location of future activity or shift to a different activity altogether. The indirect effects can be seen in shifts in the distributions and compositions of natural resources such as flora and fauna at a location. Such changes may cause participants to alter their activities [15, 16].

32.2.2 The Adventure Tourism Development Index

The Adventure Tourism Development Index (ATDI) is a joint initiative of George Washington University (GW) and the ATTA (Table 32.1).

The ATDI is a tool to assess the potential and readiness of countries to compete in the global adventure tourism market. Countries recognized by the United Nations are benchmarked in the ATDI and divided into two groups: 28 developed countries; and 163 developing countries. ATDI uses a panel of industry experts to help determine the score for 10-specific components of the index. The ten pillars that compose the index are categorized into three categories, as presented in Table 32.1.

Table 32.1 The 10-pillars of the ADTI

I. Safe and welcoming	1. Sustainable development policy	Government policies are an important factor that can support and foster sustainable and rural tourism development, as it leads to preserving the destination's natural, heritage, and cultural resources
	2. Safety and security	Evaluates how safe it is to travel in a country
	3. Health	Evaluate the level of healthcare available in a country. Countries, where healthcare is readily available, are better able to support adventure travellers
	4. Natural resources	Destinations with unusual/rare natural resources, well-managed and not exploited, will earn more praise from adventure travelers and more likely to sustain market competitiveness
II. Adventure resources	5. Entrepreneurship	Favorable business climates for entrepreneurship make it easy for SME tourism businesses to start-up and continuously innovate their product
	6. Adventure activity resources	In this pillar, the ATDI recognizes a destination's competitiveness relative to its ability to support adventure sports, which span a range of constantly evolving outdoor, nature-based activities—from soft adventure to hard adventure
III. Readiness	7. Humanitarian	This pillar is concerned with human development in a country. It is linked to the desire for adventure travelers to enjoy authentic, unscripted experiences
	8. Tourism infrastructure	Adventure travelers are often less sensitive to flaws in hard tourism infrastructure, which may take substantial capital investment and time, but more sensitive when it comes to soft tourism infrastructure that often can be developed with comparatively little capital expense
	9. Cultural resources	Destinations that encourage local people to preserve their culture will attract adventure travelers, as many values the opportunity to interact with local culture in a meaningful way
	10. Image	A country's image for sustainability and adventure opportunities will attract travelers who value these aspects

Source Author's elaboration based on information from ATTA and GW [3]

For adventure traveler providers, this can be a benchmark to consider how the individual elements can come together to deliver an overall experience. From the traveler's perspective, adventure travel is motivated by various longings that influence how they consume and emotionally process their trips. Travelers seek mental and physical wellness, novel and unique experiences, challenge (physical or cultural), and ultimately, transformation [3].

32.3 Methodology

Countries have very different scores on Adventure Tourism explained by the various indicators that compose the ADTI's 10-pillars. However, this research work intends to identify and measure other influences, this is, which set of countries' characteristics might explain the gap differences beyond the measures integrated into the index.

Many studies indicate how macroeconomic conditions, such as GDP, plays a vital role in tourism development. Indeed, factors like income and price play a central role in determining the demand for international tourism [17–19]. A healthy and stable economy is essential for attracting tourists, and tourists are crucial for developing small economies [20]. Economic performance is not necessarily the best indicator of the quality of life. The United Nations Development Program uses the Human Development Index (HDI) as an alternative measure of progress. Research findings suggest that tourism is positively associated with human development. Foreign visitors with a high level of education, high income, and an open-minded attitude may trigger changes in residents' aspirations and life perspectives [21, 22]. Another critical factor for attracting international tourists is the country's political stability. Political instability may, directly and indirectly, affect the local economy and jobs and often have far-reaching consequences beyond the immediate location in which political instability events occur [23, 24]. Besides economic and social factors, natural ones are also important. Natural disasters and unexpected incidents are prime examples of such driving factors since they have far-reaching impacts on individuals and culture and thus have the ability to impact touristic flows significantly. Inbound tourism is adversely affected by public health and natural disasters in destinations [25]. In particular, national disasters have negative consequences for tourism arrivals, receipts, GDP, and employment [26]. Their size and features determine the magnitude and effects of such incidents [27]. In this analysis, it should also be considered that most travelers pursue new participatory opportunities through the challenges of tourism and travel. Therefore, health is just a secondary target. However, according to WHO, traveling is linked with many forms of health risks. In many cases, these health risks can be avoided by responsible behavior, adequate preventive health protection measures before traveling, staying at the destination, and returning home. All actors (travelers, health care systems, and the tourism industry) should be aware and shoulder their responsibilities toward health protection. According to previous studies, tourists were hesitant to travel to places with high crime rates, health problems, threats, and natural disasters [28].

Additionally, there seems to be a bilateral relationship between air pollution and tourism development concerning the health issues. While air pollution in destination cities can influence tourists' choices, tourists' consuming habits can also harm local air quality. It is a natural assumption that air pollution affects tourism growth. Tourism growth, on the other hand, can influence the quality of air in destination cities. As a result, there is an unmistakably negative connection between air quality and tourism growth [29, 30]. Likewise, findings indicate a relationship between climate change, air pollution, and tourism development. Still, the degree to which they affect tourism indicators varies by area [31].

Compared to the radical advances critical to manufacturing industry expansion, services and tourism developments were secondary and capital-scarce and were absent from political involvement and policy. It is worthy to note that the emergence of new information and communication technologies has been incredibly influential in the realm of tourism [32]. Innovation and new service development are critical strategic features for ensuring growth and long-term wealth in every industry, particularly when markets are saturated and clients prefer goods and services worldwide, as in tourism [33]. The tourism industry is going through a transition to a more experience-based product and exponential market growth, which will lead to a more robust demand for tourism firms to innovate [34].

Finally, cultural diversity and variety can attract tourists, which can help a country's tourism competitiveness [35]. Multiculturalism is a common tourism attraction because it provides an authentic experience for tourists of different backgrounds. Furthermore, a culturally or linguistically diverse community can have a linguistically more skilled labor force that is more receptive to tourists' needs. A region's cultural diversity has become a significant attraction for visitors and a valuable tool for tourism growth. Tourism generally positively impacts society, as the industry generates revenues and creates jobs. However, the intangible and ideological dimension of ethnic cultures might have to be drastically transformed to suit the demand of tourists [36].

The above mentioned allows formulating the following eight hypotheses that this research work will analyse:

- H_1: *Countries with higher GDP growth have a positive impact on ATDI*
- H_2: *A stable and well-rounded society has a positive impact on ATDI*
- H_3: *Stable political economies have a positive impact on ATDI*
- H_4: *High risk of natural disaster negatively influences ATDI*
- H_5: *Developments in healthcare positively influence ATDI*
- H_6: *Bad air quality negatively influences ATDI*
- H_7: *The rate of innovation is positively associated with ATDI*
- H_8: *The diversity of cultural environments has a positive impact on ATDI.*

As already mentioned, this research work aims to identify and quantify which external factors affect the ATDI. For estimating the results, the Ordinary Least Squares (OLS) method is applied. The OLS method estimates the parameter in a linear regression model by minimizing the sum of the squares of the differences between the observed dependent variable, here the explained variable is ATDI_i, the

Score of Adventure Travel Development Index in the period *i*, and the explanatory variables are as follows: $GDPPC_i$—The total of Gross Domestic Product per capita in the period *i*; HDI_i—The score of Human Development Index in the period *i*; PS_i—The score of Political Instability in the period *i*; WRI_i—The score of World Risk Index in the period *i*; GII_i—The score of Global Innovation Index in the period *i*; GHE_i—The total of Health Expenditure in the period *i*; AP_i—The mean of PM2.5 exposure in the period *i*; EF_i—The score of Ethnic Fractionalization in the period *i*; LF_i—The score of Linguistic Fractionalization in the period *i*; RF_i—The score of Religious Fractionalization in the period *i*. Table 32.2 presents the variables and their description as well as the data source.

The model used presented the following specification:

$$\begin{aligned} \mathrm{ATDI}_i = \alpha i + \beta 1\mathrm{GDPPC}_i + \beta 2\mathrm{HDI}_i + \beta 3\mathrm{PS}_i + \beta 4\mathrm{WRI}_i + \beta 5\mathrm{GII}_i \\ + \beta 6\mathrm{GHE}_i + \beta 7\mathrm{AP}_i + \beta 8\mathrm{EF}_i + \beta 9\mathrm{LF}_i + \beta 10\mathrm{RF}_i + \varepsilon i \end{aligned} \tag{32.1}$$

In the model presented in the equation above, αi is the constant term, β is the coefficient of each explanatory variable, and εi represents the error term of the stochastic relation.

Data were collected from different sources between 2009 and 2020. Specifically, the years ATDI publish its report (2009, 2010, 2011, 2015, 2016, 2018, and 2020). Were got 1336 observations from 191 countries worldwide. The existence of missing values for some variables made that only 667 observations were used in the estimation. Considering the missing values issue, in the multivariate estimation process, each variable represents a dynamic effect between a dummy variable, which refers to the existence of information for it in that country for the year under analysis, and the logarithm of the variable identifies. This procedure makes data more homogeneous so that the differences in the size of the variables' observations do not bias the analysis.

32.4 Results

Table 32.3 shows the estimated results of the OLS regression regarding Eq. (32.1).

In Table 32.3, it is possible to observe the estimated coefficients and the respective standard error. Are also presented the values of the VIF to infer potential multicollinearity problems. All the results present a value smaller than 10, so there is no multicollinearity problem among explanatory variables in the model. Additionally, it is possible to observe the results for the adjusted R-squared, the adjusted coefficient of determination used to describe how well explanatory variables explain variance in the response variable, the joint significance test (the F-test), and the sample size. The F-test indicates the explanatory variables, together, can form a good model. The R-squared indicates that changes in the explanatory variables explain 26% of the

Table 32.2 Identification and description of the explained and explanatory variables

Variable	Description	Data source
ATDI	The ATDI examines the ten pillars of Adventure Market Competitiveness	adventureindex.travel
GDPPC	GDP per capita is the gross domestic product divided by the population. Data is presented in million US dollars	data.worldbank.org
HDI	The Human Development Index (HDI) ranks countries by considering three components: life expectancy, education, and per capita income indicators. The score ranges from 0 to 1—a country scores a higher HDI when the lifespan, education level, and gross national income (GNI) is higher	hdr.undp.org
PS	The World Bank's Political Stability and Absence of Violence/Terrorism data measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. Estimate gives the country's score on the aggregate indicator ranging from approximately −2.5 to 2.5, with a positive number indicating a more stable political environment	databank.worldbank.org
WRI	The World Risk Index indicates the risk of disaster due to extreme natural events for countries in the world. The score ranges from 0 to 50, with a higher score indicating higher risk	weltrisikobericht.de
GII	The Global Innovation Index (GII) aims to provide an innovation ranking and rich analysis referencing many economies worldwide. The index is a ranking of the innovation capabilities and results of world economies	globalinnovationindex.org
GHE	The Global Health Expenditure (GHE) provides internationally comparable data on health spending for countries worldwide. The data consists of current expenditure on health per capita expressed in USD at purchasing power parity	databank.worldbank.org
AP	Air pollution is one of the most pressing environmental and health issues across OECD countries and beyond. Fine particulate matter (PM2.5) in the air pollutant poses the greatest risk to health globally, affecting more people than any other pollutant. The data variable taken is the mean population exposure to PM2.5 using the unit Micrograms per cubic meter	stats.oecd.org
EF	The ethnolinguistic fractionalization variable is computed as one minus the Herfindahl index of ethnolinguistic group shares and reflected the probability that two randomly selected individuals from a population belonged to different groups	Alesina, et al. [37]
LF	The variable "language" is based on data from *Encyclopedia Britannica* (2001), which reports the shares of a language spoken as "mother tongues", generally based on national census data	Alesina, et al. [37]

(continued)

Table 32.2 (continued)

Variable	Description	Data source
RF	A separate variable for religious fractionalization is also compiled based on the Encyclopedia Britannica (2001) data	Alesina, et al. [37]

Source Author's elaboration

Table 32.3 Results of the OLS estimation

Explanatory variables	Estimated coefficients	Standard errors	VIF
Constant	11.18***	(2.220)	–
GDPPC	0.41**	(0.168)	2.696
HDI	−0.76	(1.509)	3.873
PS	0.13	(0.153)	1.439
WRI	0.061	(0.173)	1.467
GII	0.94***	(0.097)	1.520
GHE	0.27**	(0.130)	1.941
AP	– 0.12	(0.320)	1.691
EF	– 0.35	(0.536)	1.970
LF	– 0.10	(0.150)	1.692
RF	0.40 *	(0.224)	1.163
Observations	667		
Adjusted R-squared	0.26		
F (10, 656)	24.86***		
White Test	44.80		

Note *statistically significant at 10%; **statistically significant at 5%; ***statistically significant at 1%; VIF—variance inflation factor
Source Author's elaboration

variation in the worldwide ADTI score. The model has been tested for heteroscedasticity problems. The White test was used to determine if the variance of errors in a regression model is constant, indicating homoscedasticity indicated no such problem.

Considering the results from the application of the OLS method, it is possible to summarize the results according to the hypothesis made:

- H_1: *Countries with higher GDP growth have a positive impact on ATDI*. There is evidence that a strong economy has considerable positive weight on ATDI;
- H_2: *A stable and well-rounded society positively impacts ATDI*—There is no indication that the development of a country's population influences ATDI. While foreign visitors may have a good effect on the locals, it appears that the community's health, intelligence, and standard of living do not affect ATDI;

- H_3: *Stable political economies have a positive impact on ATDI*. Despite prior studies indicating that political instability may have a detrimental influence on a country's tourist business, it appears that it has no relationship with ATDI;
- H_4: *High risk of natural disaster negatively influences ATDI*—The proof of this dependency relationship is essentially non-existent. It is possible that this is because adventure travelers intentionally seek risk to feel challenged. As a result, it is unlikely to be a decisive factor for adventure travelers unless the country is in a high-risk position;
- H_5: *Developments in healthcare positively influence ATDI*. There appears to be enough evidence to support the notion that healthcare development has a positive, beneficial impact on the index;
- H_6: *Bad air quality negatively influences ATDI*. There is no evidence that poor air quality, namely the quantity of PM 2.5, has a detrimental impact on ATDI;
- H_7: *The rate of innovation positively correlates with ATDI*. There is strong evidence to support the idea that a country's innovation performance influences ATDI. It is not surprising considering that, during this era of a digital revolution, several unique technologies are emerging that will bring new solutions that benefit both tourists and locals;
- H_8: *The diversity of cultural environments has a positive impact on ATDI.* Three factors were used to evaluate how cultural diversity may affect ATDI: cultural, language, and religious fractionalization. Among these variables, religious diversity appears to have a positive influence on ATDI.

32.5 Conclusion

This paper's results reveal that among the variables studied, we evidence that economic performance, innovation level, healthcare development, and cultural diversity positively impact the adventure tourism index. Innovation is the most influential factor associated with the fact that we live in the era of a digital revolution, where there are sweeping changes brought about by digital computer and communication technologies. In recent years, the tourist industry has seen significant changes in innovation and the adoption of new technology, and it can be enhanced over collaboration among the tourism business, the government, customers, the local population, and universities. Furthermore, with the emergence of the Covid-19 virus, which prevents people from traveling, there is a greater need for innovative travel and tourism ideas. Given the numerous ways the pandemic harmed and changed the tourism industry, there is no better moment to emphasize the importance of healthcare development for tourists. The variable global health expenditure also indicates that it has an impact on ATDI. ATTA [38] recently created the Adventure Travel COVID-19 Health and Safety Guidelines using international industry standards, public resources from the CDC, WHO, governments, and tour operators. The third aspect to consider is a country's economic performance. In this research, just GDP per capita is analyzed. Even though it is a good representation of a country's standard of living, it is not a measure of personal income. The tourism industry directly contributes to GDP and creates employment in the community. Future studies are encouraged to consider other economic measurements, such as foreign direct investment or purchasing power parity. Finally, cultural diversity, particularly religious diversity, should be acknowledged.

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Chapter 33
Stakeholders' Opinion Regarding the Role and the Importance of DMO in the Development of Tourist Destinations

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Abstract The management of tourist destinations is a major topic, owing to the complexity of establishing a destination system, which entails a diverse array of organizations, resources, and services. Successful tourist destinations are the outcome of a well-managed destination system. The destination management organization (DMO) is one of the solutions that can ensure the management of a system as complex as the one that comprises a tourist destination in terms of organizations, resources, and services. The paper aims to highlight management issues at the tourist destination level and to ascertain stakeholders' opinion regarding the role and the importance of DMO. In this respect, qualitative marketing research based on the semi-structured interview method was conducted. The study findings indicated that the DMO must as follows: to act as a coordinator, to take a sustainable strategic approach, to establish strategic goals for destination development, to achieve desired targets, to develop projects, to act as a mediator and unifier of the stakeholders' energies, and to ensure transparency and efficiency in destination management activity. The results of the study are relevant for tourism stakeholders, for responsible public authorities in the field of tourism, as well as for DMO managers.

33.1 Introduction

The hospitality and tourism business sector has undergone and continues to experience a dynamic growth as a result of growing diversity of tourist services, as well as tourist expectations and requirements. As a consequence, the incessant development of tourist destinations and new approaches is necessary, both in terms of administration and marketing. The current tourism market environment is represented by

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aspects such as rapidly changing and challenging customer requirements, as well as increased international competition [1].

Tourist destination management and destination marketing have become important topics in the tourism research literature since 2000. These two concepts are now considered to be vital in the professional practice for excellence establishment in tourist destinations. It is particularly important that destination management organizations (DMOs) fulfill all their roles with balanced intensity [2]. The notion of "tourist destination" is complex, considering that all tourist destinations are in fact a blend of products, services, and experiences, with many different stakeholders involved [3]. The development of a destination demands the management and coordination of a wide range of elements and situations within the destination's tourist system.

The paper aims to identify the aspects of the management of the Brasov tourist destination by taking into account the points of view and positions of different stakeholders on the establishment of a destination management organization (DMO).

33.2 Literature Review

33.2.1 Destination Management Organizations (DMO)

The tourist destination is a complex system consisting of a variety of organizations that offer tourist products and services (accommodation, transport, attractions, etc.), natural and anthropic resources, as well as other units providing tourists support services [4].

Some studies point out that tourism micro-enterprises have limited knowledge about the significance of the multiple connections that occur within the global value chain [5]. A well-defined destination management organization (DMO) is required to convey market-related information, understand tourist requirements, and ensure access to the latest technologies, innovative practices, and training. It also helps to improve the performance to guide and advice tourists, in order to sustainably develop tourism at the destination level [6].

DMOs are defined by the UNWTO as: "All of the factors that make up a destination, managed in a cohesive manner (attractions, access, marketing, human resources, image, and pricing). It demands a structured framework to connect heterogeneous entities for optimal destination management" [7].

The DMO is perceived as the organization responsible for strategic management, as well as for mediating the relationships between stakeholders inside and outside the destination [8]. Ritchie and Crouch consider that the DMO's duties, roles, and responsibilities must have the following fundamental characteristics: be clearly identified as an organization responsible for coordinating and directing the efforts of several parts of the tourism system, which is diverse and complex; to ask for the support of all important sectors and all major actors in the tourism system; to be able to influence the decisions and actions of many public sector agencies and departments, as well as private companies, that adversely affect the tourism system; to be able to influence the decisions and actions of many public sector agencies and departments, as well as private companies that significantly impact the system architecture; be sufficiently independent and flexible to develop innovative strategies that can be implemented in a timely manner in response to rapidly changing market and environmental conditions; have the necessary tools to stimulate and encourage the type and quota of development offer that is imposed by global tourism policy, be sufficiently independent and flexible to develop innovative strategies that can be implemented in a timely manner in response to rapidly changing market and environmental conditions [9].

Successful destinations result from successful and sustainable destination management [10], so they depend on the success of DMOs. Effective DMOs should have the following characteristics: a long-term destination development goal, the ability to clearly assign tasks to stakeholders and implement appropriate operational structures, and a transparent and inclusive decision-making process including all stakeholders [11, 12]. As a consequence, stakeholders play a vital role in the DMO's success [13].

DMO needs to create a common goal and strategy with stakeholders to try to develop the integrative destination image that will enable it to be successful in the long run [14, 15]. Stakeholders can be classified into different categories: government agencies, tourism and hospitality companies, tourists (key pieces of the tourism industry), and local residents [16]. The involvement of key stakeholders is vital to tourism development and planning [17]. Tourist destination management must be transparent and efficient in order to encourage involvement, coordination, and collaboration among stakeholders [18]. In the establishment of a destination, collaboration among stakeholder groups is the key [19].

"A DMO will be the nerve center of the destination that holds crucial information pertaining to the market; it brings about a total management system and helps in coordinating and controlling the flow of tourists, tackles present trends and challenges and is that platform on which all stakeholders come in contact with the potential tourists" [20]. Destination management organizations will soon no longer exist in their current form, and so now is an opportune time for tourism academics to engage in innovative thinking about the future of these [21]. Three intertwined areas of research gaps related to DMOs stand out: politics, performance, and paradigm [21].

33.3 Methodology of Research

The purpose of this study is to identify aspects regarding the management at the level of the tourist destination and to identify stakeholders' opinion regarding on the possibility of establishing a DMO at the level of Brasov municipality. The research objectives were set, as follows: (O1) Identifying stakeholders' perspectives on management aspects at the level of the tourist destination Brasov; (O2) Identifying stakeholders' opinion regarding the establishing a DMO in Brasov.

Romania has several unique characteristics that make it a suitable subject for investigation in terms of establishing a DMO at the level of the tourist destination Brasov. In Romania, only in 2018, article number 2 of law 275/2018 defined the DMO as a “legal person, which carries out the tourist development policy of the destination, including the marketing policy of the destination, in accordance with the legal provisions in force” [22]. “The DMO is founded by associating local public authorities from the destination’s composition with payers of a special tax for tourist marketing, respectively: (a) members of the destination’s representative employers’ confederations/federations with tourism-related activities; (b) employers’ organizations; (c) employers in the tourist destination. Other relevant entities, such as promotion associations, professional associations, administrators of protected areas, representatives from academia, research and development institutions, vocational training schools in tourism, chambers of commerce and industry, and other such entities that operate accommodations, may join the DMO as associate members with an advisory role” [22]. The methodological standards for the application of this law have not yet been developed and published in the Romanian Official Monitor. There is currently no DMO in Romania, but there are attempts to develop one at the level of tourism destinations, one of which is Brasov. Brasov is one of Romania’s most well-known mountain tourist destinations, both nationally and internationally. Known for its views, it is the ideal location for outdoor recreation. Its cultural diversity, combined with its physical location in the heart of the country, attracts visitors like a magnet.

In order to achieve the purpose of the research, qualitative marketing research was conducted based on the semi-structured interview method. The participants were chosen based on the following criteria: competence (to guarantee that multiple kinds of stakeholders from both the public and private sectors were represented) and tourism experience (see Table 33.1).

The interviews were conducted by a competent moderator, using an interview guide that included 13 questions and was designed to ensure the research’s goal. The ethical guidelines were followed when conducting the research. After the introductory conversation, some information regarding the research objectives was delivered, as well as a review of the general knowledge about DMOs.

Table 33.1 Categories of respondents in the qualitative research—specialists

The respondent’s position/Specialization	Organization	Code number
Tourism advisor	Brasov County Council	1
Director of travel agency	KT Travel agency	2
Tourism expert	Brasov City Hall	3
Tourism manager	NMF Hotel and Restaurant	4
Professor—tourism	Transilvania University of Brasov	5
Councilor—representative of the Brasov area	Ministry of Tourism	6
Travel guide	HTR Group	7

33.4 Results and Discussion

The research results are structured taking into account the objectives, based on the answers to the research questions.

(O1) In response to the moderator's request for respondents to provide an example of an initiative undertaken or recently launched at the level of their company that contributes to the development of tourism in the Brasov area, respondents provided a variety of responses: tourism promotion of Brasov county, Brasov Tourism app (# 1); Brasov Tourism House (# 2); "I rely on Trip Advisor to discover our guests and bring them to us" (# 3). "We contacted apartment owners via Airbnb to direct guests to us" (# 4); "Everything that entails cultural life, via events hosted at the Lecture Hall that boost a destination's desirability." (# 5); "Law establishing the DMOs" (# 6); "Introduction to the fortified Church of Mesendorf and Cristian on our organized tours." (# 7). Thus, based on the majority of responses, it is clear that the majority of these activities involve information and communication technology (ICT).

When respondents were asked to identify the most significant threats to the tourism sector in the Brasov area, the majority identified a lack of a sustainable development strategy that could be developed collaboratively with stakeholders and a lack of an integrated vision that would allow Brasov to develop as an integrative destination: "lack of integrated vision of tourism promotion" (# 1); "The lack of a coherent strategy that can be monitored. There are strategies, but none that bring stakeholders from all sectors of the tourism business together." (# 5); "Lack of a DMO-like structure for collaboration between the associative environment, the private sector, and local public authorities" (# 6); "Lack of a sustainable development strategy" (# 7). The findings revealed that the DMO must collaborate with stakeholders to produce a unified approach that will allow for the creation of an integrative destination, confirm the results of other studies [14, 15]. Notably, one respondent considers that the absence of a DMO-type entity responsible for strategic management and mediation of stakeholder relations is a threat to the development of tourism at the ownership level. Another threat identified by four of the respondents is the lack of appropriate infrastructure for a successful tourist destination: "Threats are related to access, access to Brasov, and an absence of highway and airport" (# 2); "Inadequate road, rail, and plane infrastructure" (# 6); "Poor infrastructure and overcrowding of attractions in the area" (# 7); "We still lack a decent tourist information system" (# 2). Numerous respondents cited the labor scarcity and insufficient qualification of workers as a danger: "The biggest issue is the lack of labor force" (# 5); "There is a severe labor shortage" (# 2); and "Lack of manpower and staff qualification" (# 6). Only, one responder highlighted pollution as a threat: "pollution, which can detract from a destination's attractiveness" (# 5).

Concerning the topic of discussion, which was the enhancement of tourism infrastructure and the enhancement of destination security, the following questions were posed: "What additional tourist attractions and amenities should be established at the level of Brasov municipality?" What impact will these changes have on the lives of residents? What activities do you believe should be taken to make Brasov a safer city?

The responses were varied, with the majority of respondents advocating for a more sustainable approach: “The creation of theme parks and amusement parks” (# 1); “As facilities, I connect with those information centers that needed to be much more operational, accurate, and well located. Consider a Brasov card with card-museums” (# 2); “Accommodation and green space” (# 4); “Most likely, more facilities for elders and those with mobility issues” (# 5); “Infrastructure should be built up to global standards, including transportation and accommodation” (# 6). Respondents believe that implementing such solutions and initiatives would benefit the residents and enhance their lives.

Regarding how respondents perceive cooperation between the public and private sectors in the area of Brasov Municipality in the field of tourism, they had to describe and grade it (on a scale of 1–10); the majority believed that cooperation between the public and private sectors at the destination Brasov is functional: “In the Brasov Country area, I believe we have attained the grade eight level in the previous three years.” (# 5); “There is room for improvement.” (# 2); “In recent years, there has also been an excellent partnership with the corporate sector, particularly in the field of tourism.” (# 3); “I’d give it a 7.5” (# 7). The respondents’ average score for collaboration between the public and private sectors is over 7. The public sector respondents believe that there is good collaboration between the public and private sectors in the field of tourism, while the private sector respondents are more circumspect to use “very good” or “good” attributes, considering that the way of collaboration between the public and private environment in the field of tourism can be improved. Thus, the foundations for partnership between the public and commercial sectors in the tourist sector at the destination level of Brasov exist.

To the question: “How effective do you believe the government’s support for tourism is at the local, regional, and national levels? What could be improved?” the majority of respondents are unsatisfied with the government’s support for tourism: “Support is zero; in general, government officials do not prioritize tourism. We continue to struggle to establish those DMOs that are no longer formed, due to the absence of clear legislation governing the development of DMOs and their territorial attributions. We are developing the DMOs, but we lack the funding necessary to sustain them and the projects we propose as DMOs” (# 1); “With regards to the Tourism Law and the relationship between the government, local public entities, and private entities, everything is a mirror image. It is also problematic with strategies; nevertheless, it is a necessary first step in establishing the DMOs” (# 2); “Completely inefficient, from infrastructure to tourist information centers, which serve as a more symbolic function” (# 4). There is a legitimate worry, both from the public sector at the local level and from the business sector, about the establishment of the DMOs, given the existing state of the law and the inability of these new organizations to maintain themselves financially. In terms of solutions, what should be done differently to ensure that the government’s support for tourism is effective, one suggestion is to build a framework favorable to the formation of genuine public–private partnerships: “Stakeholders’ attitudes toward the potential of building genuine public–private partnerships must be managed more effectively. There is a system in place that can facilitate collaboration. The challenge is to provide an adequate framework for bringing all stakeholders to the bargaining table. Their meetings should be held more frequently, and it should be evaluated to ensure that genuine progress is anticipated following these meetings" (# 5); "If at the local DMO level, stakeholders in the private sector are seated alongside those in the public sector in a 50–50 ratio of forces, and those in the private sector have the ability to influence the destination of funds collected from tourism taxes, I believe that together we can develop a coherent strategy in Brasov" (# 2). Thus, the DMOs are desired in both the public and private sectors of tourism, but with the need that the legislation governing the establishment and operation of the DMO is well designed, explicit, does not leave room for interpretation, and specifies funding sources. Additionally, respondents believe that following the construction of the DMO, it is vital to regularly analyze the progress of these organizations in order to identify future destination development directions.

To the question: "How effective and efficient do you believe the marketing efforts in the Municipality of Brasov have been thus far?" the responses were as follows: "Brasov, on the marketing side, was a pioneer. At the moment, we have realized that this is insufficient, and we are developing a marketing strategy and rebranding the city" (# 3); "We require a cohesive marketing approach that is consistent with emerging digital trends and expands communication via new means that tourists choose" (# 4); "While the destination is relatively well promoted, based on occupancy levels, there is space for improvement" (# 5); "More effective and efficient" (# 6); "Efficiency 0, even in Romania's promotional video, Brașov is omitted" (# 7); "Created with the Brasov app." (# 1); "With the exception of one event and a motto, there is no marketing at the municipal level. Brasov functioned without a defined marketing strategy" (# 2). As can be seen, there are divergent views. On the one hand, respondents from the public sector had a favorable assessment of the efficiency, and effectiveness of marketing operations conducted at the level of the Brasov destination, while acknowledging the need for a new strategy and brand for the destination. On the other hand, respondents from the private sector believe that marketing activities were inefficient and ineffective; additionally, they believe that marketing is non-existent through the perspective of the director of a travel agency. They also offer a solution to this problem: developing a unitary marketing strategy that DMO can implement.

(O2) When the respondents were asked about their views on the establishment of a DMO in Brasov, all of them agreed that the initiative was suitable. At the moderator's request, stakeholders from the private sector and local public administration identified possible impediments to the establishment of the DMOs as those generated by the political and government sectors. They were reiterating the incomplete legislation regulating the establishment of the DMO, as well as inadequate cooperation with the public sector: "The biggest ones are on the political side, on the governmental side. Lack of legislation, lack of funding, and lack of professionals" (# 1); "Inadequate collaboration with the public sector" (# 4). According to the respondent from the governmental sector, the primary impediment might be caused by animosities as a result of a lack of cooperation between stakeholders from the private and public sectors; "Animosities until all parties, public and private, are brought together. They must develop the ability to cooperate" (# 6). The findings indicate collaboration among stakeholders is critical for destination development, confirm those of Zehrer and Hallmann [19].

When the moderator asked respondents to identify the primary objectives that should not be overlooked in the long-term development strategy for Brasov's tourism, which will be developed at the DMO level, the responses were varied, with some respondents identifying strategic objectives with solutions to threats to the tourism sector in Brasov that they had initially identified. The responses were as follows: "Sustainable relationship between tourism and the environment, environmental protection, construction of the airport" (# 1), "The development of a sustainable tourism industry. Environmental protection and the promotion of green tourism are essential components of Brasov's appeal" (# 6); "Development of tourism attractions in Brasov, with an emphasis on service quality" (# 7). The following key strategic objectives were highlighted by stakeholders: sustainable tourism development, environmental protection, tourism and transportation infrastructure development. The findings indicate that the destination's long-term management is likely to result in its success, confirm those of Almeida-Santana and Moreno-Gil [10]. Additionally, there is a correlation between the strategic objectives identified by respondents, and the type of professional activities is performed.

The moderator encouraged respondents to consider the big picture and to highlight the critical elements of management that the DMO developed at the municipal level of Brasov should address. The following key issues were identified by respondents: to act as a coordinator, to take a sustainable strategic approach, to establish strategic goals for destination development, to achieve desired targets, to develop projects, to act as a mediator and unifier of the stakeholders' energies, and to ensure transparency and efficiency in destination management activity. Several responses included the following: "The DMO must act as a coordinator; the objectives must be met, and the process must be transparent" (# 2); "To ensure the sustainable growth of local tourism, it is necessary to garner the support of all stakeholders in order to develop and achieve this goal" (# 4), and "I hope we will see an active DMO with at least two projects per year" (# 7). The findings regarding DMO's perceived responsibility for strategic management and stakeholder relations confirm those of Reinhold et al. [8]. The results confirming the importance of stakeholder involvement in tourism development and planning confirm those of Serra et al. [17]. The research results that the DMOs must manage the tourist destination in a transparent and efficient manner that the DMOs must be capable of attracting stakeholder participation, and that the DMOs must ensure coordination and collaboration between stakeholders, confirm those of Pulido-Fernández and Pulido-Fernández [18].

To the question, "How do you envision the destination's integrated marketing being carried out at the DMO level?" the responses are conclusive and reveal some effect of respondents' professional activities: "I would not travel to advocate particular things; rather, I would travel to promote something less conspicuous" (# 1); "Problems can arise from both the management of the DMOs and from each stakeholder. Priorities must be established, and the experience of other DMOs, where things are running swimmingly, should be incorporated" (# 5); "We require a well-developed promoting strategy. There is a demand for a tourist brand" (# 7). According to respondents, the DMO must design an integrated marketing strategy and a new brand for Brasov tourism destination.

33.5 Conclusions

Stakeholders are interested in how tourism develops at the level of the destination where it operates, as well as how management and marketing activities are carried out at the destination level. Furthermore, the findings of the study show that they are involved in the development of tourism, but most often through specialized activities or acts, in the absence of a DMO to manage tourism at the destination level.

The largest challenges to the growth of tourism at the destination level, according to stakeholders, are a lack of a sustainable development strategy that can be developed together with stakeholders and a vision that allows the destination to flourish as an integrative destination, inadequate infrastructure for a successful destination, labor shortages and insufficient staff qualification. In this regard, the stakeholders believe that establishing a DMO could be a response to the dangers to tourist development.

Stakeholders believe that the biggest obstacles to tourism development are those that may be generated by political and governmental areas, such as incomplete legislation governing the establishment and functioning of the DMOs, and a lack of adequate and functional collaboration and cooperation between stakeholders. In the authors' opinion, the government's support in the field of tourism must be effective. In this regard, legislation governing the establishment and operation of the DMOs must be comprehensive, explicit, and comply with methodological standards, including clarifications on the sources of funding for these organizations.

The study's findings highlighted the following critical aspects of the DMOs' role and the essential management activities to be achieved at the level of the destination: exercising a coordinating role, adopting a sustainable strategic approach, establishing strategic objectives for destination development, achieving the objectives, developing projects, to operate as a mediator and unifier of stakeholder energies, ensuring transparency and efficiency in destination management. The DMOs must entice stakeholders to participate and ensure coordination and strong collaboration among them. The results of this study confirm the results of other studies [8, 10, 14, 15, 17–19]. The DMO must design an integrated marketing strategy and a tourism brand at the destination level in terms of marketing activities.

The results of the study are conclusive and relevant for tourism stakeholders, for responsible public authorities in the field of tourism to aid them in developing successful destinations, as well as for DMO managers. From an academic point of view, this study helps to strengthen existing studies on tourism development at the destination level and on the DMOs and provides the basis for future research.

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Chapter 34
Using Virtual Reality in Museums to Bridge the Gap Between Material Heritage and the Interpretation of Its Immaterial Context

Carlos R. Cunha, Vítor Mendonça, André Moreira, João Pedro Gomes, and Aida Carvalho

Abstract Material heritage typically has a whole set of associated immaterial heritage, which is essential to pass on to the visitor as a cultural mission of the destinations and those who manage them. In this sense, the interpretation of material heritage is a complex process that is not a fully efficient process with the mere observation of physical artifacts. In this context, it emerges as fundamental to provide visitors with a set of tools that allow them to correctly interpret the artifacts that come to fully understand the cultural dimension of the destinations and their heritage. Accordingly, the role of virtual reality can leverage the creation of innovative and immersive solutions that allow the visitor to understand and feel part of their own heritage and its ancestral component that defines the sociocultural roots of destinations and their civilizational traditions. This article, after dissecting and substantiating the role of virtual reality in the interpretation of heritage, presents a conceptual model, based on the use of virtual reality, which was, in part, prototyped in the scenario of the Portuguese Museum in the city of Miranda do Douro. This proposal is an ongoing contribution to the creation of innovative and immersive tools for the interpretation of heritage.

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34.1 Introduction

According to Masoud et al. [1], human civilization translates a set of material and immaterial conquests in which none of them were produced without the other. In this context, it is also mentioned that the intangible cultural heritage is part of the identity of civilizations.

The cultural heritage of nations is composed of material and immaterial heritage. In this context, [2] refers to the recognition of the intangible layer of cultural heritage, established by the UNESCO Convention of 2003 that highlights the Safeguarding of Intangible Cultural Heritage.

Not infrequently, material heritage has associated with it a vast and rich set of intangible cultural heritage that must be presented and explained to the visitor so that he can understand the full richness of the physical objects he sees. According to Weng et al. [3], the ability to enable the interpretation of destinations is important to help tourists obtain the authentic values of destinations heritage and, in this way, promote an effective interpretation of tourism in the delivery of natural and cultural values—"perception of heritage values is influenced by interpretive information and interpretive principles."

Museums, as well as many of the visitable collections, are full of artifacts that have an enormous cultural richness that is not always easily known to the public, which complicates the process of interpretation. This difficulty is increased when the visitor is a foreigner and knows little or almost nothing about the culture of the country he visits. In this context, the use of tools that allow the visitor a greater ability to interpret the objects he sees is essential and will make all the difference in the fruition of the visit. For respond to this challenge, technology has been embedded in museums to provide more information to the visitor. In this domain, virtual reality (VR) has been widely considered a technology capable of allowing visitors to obtain information, in an immersive approach, about the museum's collections [4].

Technologies capable of creating immersive environments, such as VR, are tools that can play a very important role in attracting new visitors, due to their ability to provide incredible experiences and maximize the likelihood of the visitor to repeat and recommend the visiting experience [5]. A vision of a digital museum requires an analysis of how museums can take advantage of technology to boost the development of innovation networks, competitive advantages, and leverage their economic performance, as well, as solutions for digitizing and improving the visitor experience [6]. The development of VR solutions must be based on the ability to allow users greater involvement, interactivity, and control over their experiences; this will positively influence the emotional response and the intention to spread word of mouth about the VR experience itself [7].

Emerging digital technologies are a critical success factor for the sustainable preservation and communication of cultural heritage to the general public [8]. In this context, museums are no exception, as they should be able to innovate in the way they communicate to visitors the cultural heritage that they contain in their exhibition space. Providing mechanisms that enable visitors to use effective forms of interpretation is therefore central to the success of any museum's mission.

This article begins by explaining the correlation between the material heritage and its immaterial context, and the importance of making known, in an effective and motivating way, the entire cultural context of the artifacts, to those who visit a museum. Then, a review of the state-of-the-art is made on the potential of VR as a link between the physical and the virtual, and as an enhancer of the visitor's ability to interpret. After this framework, a conceptual model capable of adapting to the museological context and the technological integration with its objects is proposed, incorporating the potentialities of VR. Finally, an experimental prototype, developed for the museum of the Portuguese city of Miranda do Douro, is presented, where most of the exposed physical objects are linked to ancestral traditions (in which these objects were used), in an approach capable of improving the interpretive effectiveness of the visitors and their ability to understand the total cultural dimension of the objects exhibited.

34.2 Material Heritage and Its Immaterial Context

The 1999 ICOMOS International Charter on Cultural Tourism states that "(…) the specific heritage and collective memory of each community and each place are irreplaceable and represent an essential basis for a development which is both respectful of the past and forward-looking. (…) in this age of increasing globalization, the protection, conservation, interpretation and dissemination of the heritage and cultural diversity of each place or region constitute a major challenge for all peoples and all nations."

In this sense, there is a concern with the forces of globalization and cultural homogenization and the search for cultural identity. The concept of heritage is subject to numerous interpretations, influenced by changes in society itself and which have resulted in an increasing complexity.

It is the cultural legacy that we have received from the past that we live in the present and that we will pass on to future generations (Convención de 1972 para la Protección del Patrimonio Mundial Cultural y Natural la UNESCO).

From a conceptual point of view, cultural heritage is today the most comprehensive concept, integrating material heritage—which includes immovable and movable heritage—and immaterial heritage. In turn, mobile heritage comprises the set of works of art (e.g., painting, sculpture, furniture), and the immovable heritage comprises the architectural, archaeological, and landscape heritage. In Portugal, the legal reference framework for the whole universe of cultural heritage is given by the Law for the Protection and Enhancement of the Cultural Heritage—Law 107/2001, of 8 September. In this framework, the concept of patrimonial heritage is constituted by the universe of material and immaterial assets of relevant cultural interest, as well as "the respective contexts which, due to their value as witnesses, have an interpretative and informative relationship with them." Relevant cultural interest is understood as its "historical, paleontological, archaeological, architectural, linguistic, documental, artistic, ethnographic, scientific, social, industrial, or technical" value, reflecting "values of memory, antiquity, authenticity, originality, rarity, singularity, or exemplarity."

Tourism enables the use of heritage, and cultural resources are one of the drivers of tourism growth. However, the mere fact that heritage resources exist does not imply the existence of tourism resources or attractions. It is fundamental to structure the offer through the creation of diffusion, reception, and interpretation centers, implementing processes of structuring and organization of heritage assets for their cultural tourism use. There is an ecosystem of value that needs to be created, i.e., heritage resources need means of interpretation for the attribution of meaning and value to become a cultural resource; and, in turn, this cultural resource needs means of dissemination and promotion to enter the cultural tourism offer.

In order to the visitor to have a full interpretive experience of heritage and destinations, the creation of interpretation mechanisms based on virtual reality may constitute a leveraging approach, due to the ability to create immersive and innovative experiences that involved the visitor, and they imbued it in the atmosphere with the culture of material heritage and all its valuable immaterial component.

34.3 Virtual Reality and the Heritage Interpretation

According to Rahaman [9], the interpretation of heritage is considered an effective tool for learning, communication, and management, capable of increasing the visitor's awareness and empathy for the heritage sites or artifacts he visits or contacts. Bahre et al. [10], presents an empirical proposal focused on the importance of using modern devices and technologies in heritage interpretation and tourism marketing. In this context, it is important to develop innovative strategies that enable the best possible interpretation. The use of immersive technology, such as VR, has enormous potential to create memorable tourist experiences, specifically in heritage tourism [11].

There is an exponential growth of cultural heritage across the "digital ecosphere" which has caught up with us, regardless of traditional factors of space or time [12]. In the domain of VR, VR applications are able to show virtual reconstructions of a certain cultural property and allow and improve the user's understanding and interpretation of that heritage [13]. According to Gaugne et al. [14], the incorporation of 3D artifacts into VR experiences has been of interest to cultural heritage professionals. The use of VR can support on-the-spot interpretation experiences—translating physical objects into their non-physical cultural context; as well, it can be used as a form of remote and online interpretation. Within its remote use, according to Ren and Chen [15], 360° VR interpretation and presentation technology can help many tourists remotely learn the enormous value of the world's cultural heritage.

If, on the one hand, the use of immersive technologies has been applied in various scenarios in the context of tourism and heritage, we think that the creation of conceptual models capable of capitalizing on the interpretive experience of the visitor, equally, in favor of the manager of the cultural space, is something which still needs more research and contributions. A visit must be an act of interpretation and satisfaction for the visitor; at the same time, it must be able to provide information that allows managers and curators of cultural spaces a better capacity to manage these spaces.

In our opinion, another factor that must be guaranteed to the visitor is the ability to interpret the space, in fact. With the globalization of tourism, the concept of visitor is now multicultural and with a huge geographic dispersion of origin. Thus, it is important to meet the measure of knowledge and sensitivity of each visitor, if we want the interpretation to be effective and the cultural message to be effectively understood. According to Cassidy et al. [16], the use of technology in the context of an exhibition can allow the collection of diverse demographic data and increase the reach of a museum, such as presenting the interpretation of digital heritage in an innovative way.

The next chapter proposes a conceptual model capable of using VR to provide experiences of heritage interpretation, linking cultural objects to their rich immaterial context, while this VR experience generates useful data for the space manager.

34.4 Proposed Conceptual Model

Whereas virtual museums, also, add new possibilities to the exhibits, allowing for a new relationship between the object and the visitor in ways that physical museums do not provide [17], and allowing the visitor to enjoy immersive and complementary experiences, we believe that the development of VR museums applications should allow users to interact with different elements and contents, and this diversification will enrich the experience of visiting museums.

With the purpose of developing a VR application, which, in our opinion, should be based on dynamic content to diversify the experience of visitors. As such, it will be up to the museum manager to feed a repository of different contents (e.g., images, videos, 3D objects), as well as to define the interaction elements (Assets) that will trigger the visualization of these contents. In this context, and according to the proposed model, Fig. 34.1, the VR engine establishes the intermediation between the visitor and the contents to be made available due to the interactions carried out and the contents available for viewing. Therefore, the VR engine will have to include a set of rules whose responsibility will be the display of contents stored in the museum's internal repository (Internal database) or in repositories external to the museum (External databases) that is existing content from other entities.

Access to existing content in external repositories aims to provide the model with greater elasticity; considering that around the museum, there may be various content produced and managed by other entities (e.g., City Council, Universities, Cultural

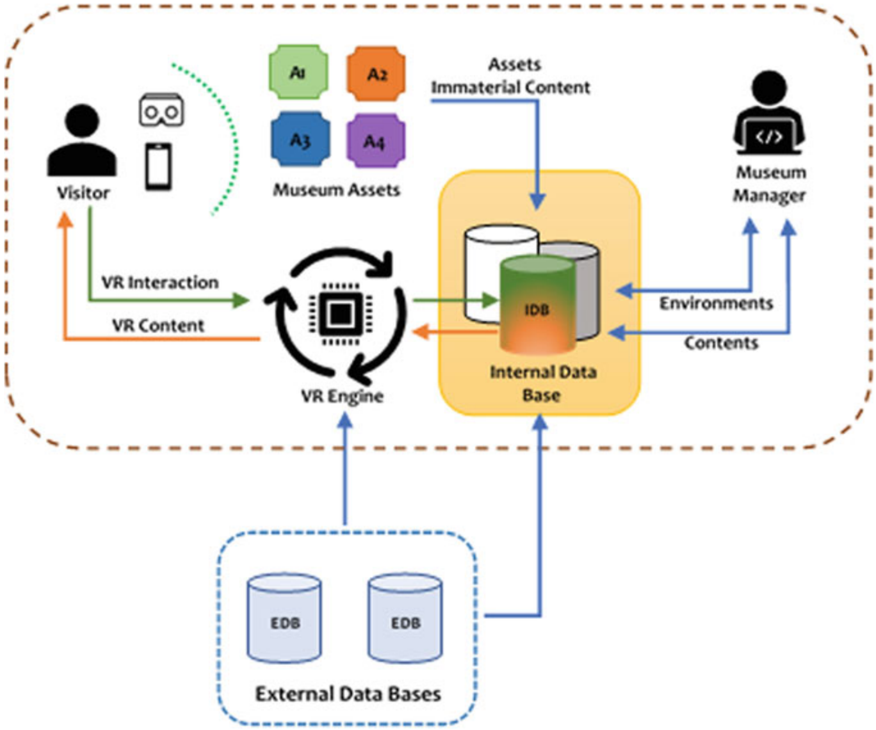

Fig. 34.1 Proposed conceptual model

Associations) that may be relevant and complementary to the contents managed by the museum. For example, the museum manager could map a particular asset to display a video produced by a folklore group.

Considering that the content is intended to be dynamic, we should point out that the museum manager can whenever he deems it appropriate to add or remove assets and/or contents.

To implement the proposed model, the proposed system includes a back office and a front-end application. Figure 34.2 summarizes the features that the system makes available to the museum manager that is the back-office features.

The front end with the visitor (user) is made using virtual reality visualization and interaction equipment, especially with virtual reality glasses. The use case diagram shown in Fig. 34.3 summarizes the features that the application makes available to the user for a virtual reality experience.

Thus, and according to the diagrams presented above, the museum manager will be able to manage the 360° virtual environments, manage the contents (text, images, audio, videos, 3D objects, and games) and map the assets that will allow triggering the interaction with the different contents; in turn, the visitor (user) will be able to enjoy the VR experience and when interacting with the assets will have access to the

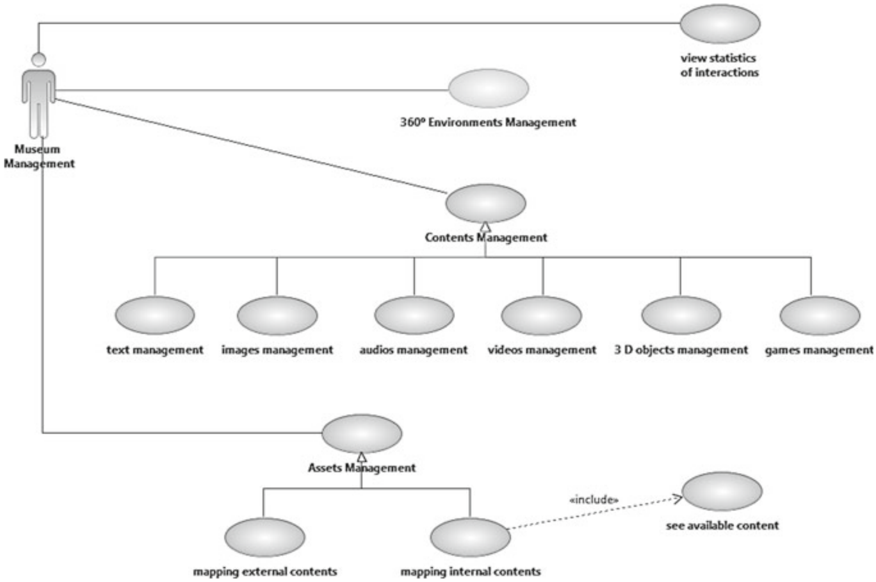

Fig. 34.2 Use cases diagram: management features

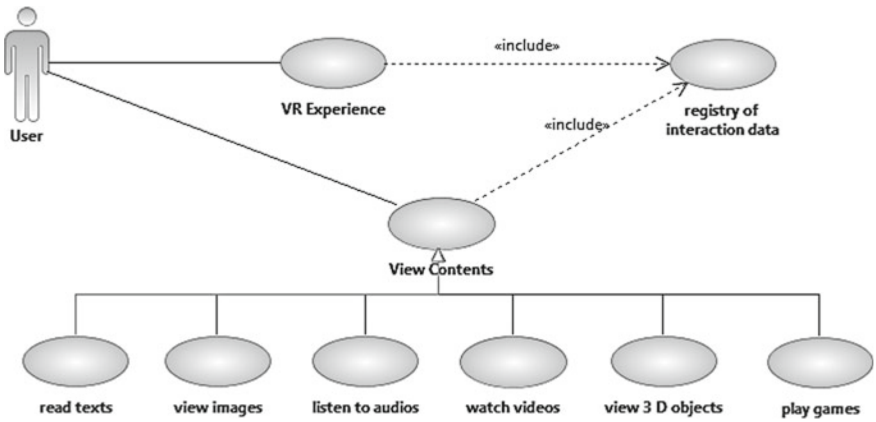

Fig. 34.3 Use cases diagram: visitor experience

different linked contents, allowing the visitor to complement their experience that is being able to read texts, view images, listen to audios, visualize videos, interacting with 3D objects, or playing a game.

The use register of user interactions will allow the museum manager to consult the statistics of these interactions to make decisions about the type of content to be made available.

34.5 An Experimental Prototype Applied to the Museum of Miranda Do Douro City

To carry out experiments with the use of VR to link the immaterial context of the “Terra de Miranda” museum assets exhibition, an experimental prototype was developed, which allowed to corroborate the model presented above.

Thus, the prototype objectives, in addition to allowing the model to be tested, also intend to demonstrate that the combination of different immersive virtual contents (text, image, audio, video, 3D objects, and/or games) will enrich the visitor’s experience.

As for the technical specifications of the development, the prototype that was developed has used the VR equipment HTC® VIVE® Pro EYE full kit (Fig. 34.4), running on a computer with an Intel® Core™ i7-10700KF processor with 32 GB of RAM and a NVIDIA® GeForce® RTX 2070 SUPER™ graphics card. The computer features exceed, by far, the minimum requirements of VR equipment and guarantee an excellent performance of the VR experience.

The development process started with the capture of 360° images of the different spaces of the museum (Fig. 34.5). For the creation of 360° images, a Xiaomi Mi Sphere camera was used.

The programming of the experimental scenario and integration of assets, the Unity game engine was used along with the C# programming language. In this way, the areas and objects on display were mapped. An example is illustrated in Fig. 34.6. In parallel to this phase, the multimedia contents to be indexed to each object in the

Fig. 34.4 VR equipment—HTC® VIVE® Pro EYE full kit

Fig. 34.5 Example of a 360° image museum-space environment

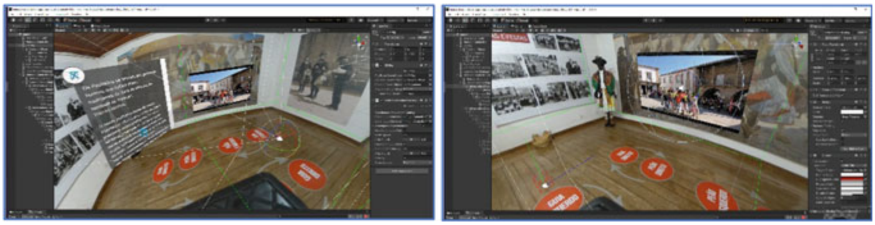

Fig. 34.6 VR assets and information-linking mapping process

museum were compiled and the dynamics of interaction between the user and the different objects designed.

After surveying the objects exhibited in the museum and the digital contents that they wanted to associate, the inclusion of marker assets was carried out to allow the visitor to identify which objects have associated digital contents.

In this context, assets were mapped and associated with digital content, as well as the graphic way in which they will be displayed (e.g., pop-up with text, video). Said contents may come from the museum's internal repositories or even from external entities' repositories.

Accordingly, as illustrated in Fig. 34.6, assets were mapped connecting the "Pauliteiro" mannequin to a descriptive text content, as well as the painting of traditional dances displayed on the panel to a video demonstrating the performance of unique traditional dances existing in the region of Miranda do Douro.

This entire process merges into a VR application that supports an immersive visit experience rich in diverse immaterial cultural content.

The experimentation of the developed application, illustrated in Fig. 34.7, shows the example of the visitor's interaction with the different assets embedded in the virtual environment.

Thus, when interacting with the existing asset on the "Pauliteiro" mannequin, the visitor will be able to read a descriptive text of its characterization, history, and about

Fig. 34.7 VR visitor experience scenario

the traditional costume. As for the interaction with the asset displayed on the panel, the visitor can watch a video (external source: https://youtu.be/iF6BUQ5sh-k).

Simultaneously, the application collects data about interactions between the visitor and the assets, as well as the visualization of the associated contents.

34.6 Conclusion

The material and immaterial heritage of regions reflects the culture and customs of the peoples, and museums are one of the best examples of a collection of excellence, whose mission is to preserve the cultural legacy between generations. However, a visit to a museum must guarantee the visitor a full interpretation experience.

In this context, the introduction of technology capable of providing innovative and immersive interpretation experiences is fundamental, especially given the degree of demand of the current (and future) visitor.

Accordingly, VR (along with other technologies) has the ability to create environments rich in digital content linked to physical objects and, in this way, translates into an approach capable of complementing and enriching the museum visitor's experience, maximizing the interpretive capacity of the exposed heritage.

This paper presents a VR-based model capable of providing an immersive experience to the visitor, providing them with useful digital elements for the interpretation of the museum's space, while ensuring useful feedback for the museum's managing entity, as well as the management of contents.

Based on the model presented, an experimental prototype was developed, which, at this stage, implements the VR component as a tool for mapping digital content, associated with the collection of the Miranda do Douro museum—"Museu da Terra de Miranda."

The work presented is part of a long-term effort to provide innovative approaches in tourism-related industry.

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Chapter 35
Hospitality Small Family Business: Some Consequences of Informal Managerial Control on Nonfamily Employees

Dendy Rosman and Keith Thomas

Abstract The purpose of this study is to investigate the relationship between owner-manager control and nonfamily member employees' affective commitment in small family business. It is frequently stated in the family business literature that family business is different from nonfamily business, and that these differences can significantly impact outcomes. Based on this assumption, this study examines the extent to which that is true in the case of managerial control and its relationship to employees' affective commitment. The research design incorporated a quantitative correlational approach using survey data. The study uses a survey with a 177-sample population of the non-family employee who works at the small family business in the foodservice sector located across Victoria, Australia. The results show that there is a positive correlation between managerial capability controls, the relationship quality (LMX), and the affective commitment.

35.1 Introduction

A family firm has a distinct organizational structure than a nonfamily company. The distinction is in the fact that family members are directly involved in the operation of the firm [1]. The peculiarities of small family firms may lead to differences in the ways control works most. For instance, in small family businesses in general, and in micro-businesses in particular, organizational control is likely to rest with one individual (the owner–manager), who usually makes most, if not all, the critical decisions. In some cases, power and authorization may also be delegated only to the member of the family. As a result, in-group and out-group perceptions of non-family employees persist [2]. This perception not only can lead non-family employees to experience various patterns of emotions [3] but also would decrease employee's motivation

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and hinder their willingness to fully contribute their knowledge and skill to the organization [4]. Moreover, a high managerial control not only inhibits employees' motivation but also increases employee intention to leave the job [5].

This paper outlines the effect of informal managerial control in the family business on nonfamily employee commitment, using leader–member exchange (LMX) theory. The family-centric characteristic of family business commonly detriment nonfamily employees [6], with a strict managerial control adding to this situation, not only will inhibit employees' motivation but also increases employee intention to leave the job [2]. Also, the current study argues that improved relationship quality can enhance the level of employees' affective commitment.

35.2 Managerial Control and Affective Commitment in Small Businesses

This study uses behavior-based controls as suggest by Challagalla and Shervani [7]. These authors proposed two different managerial control types—restrictive control and capability (or promotive). A manager can attempt to control the routine activities undertaken by employees. This control is refered as action (or activity) control [8]. Activity control is a component of behavioral control and involves the monitoring and evaluation of routine daily activities [7]. Higher levels of activity control restrict employees to perform certain routine activities and limit their autonomy in performing necessary customer services when difficulties or problems arise that call for flexible and creative solutions [9]. Such a scenario, similar to "restrictive control," is introduced by Scholl [10]. In his study, Scholl refers the restrictive control to "[a] situation, in which a manager as influencing agent behaves in such a way, pushes his or her wishes through, even though the wishes run counter to the best interests of the employees." With restrictive control, a manager uses his or her authority as a means to force compliance from a subordinate [11].

In small family business, the owner-manager monitor closely the customer service activities by the employees. For examples, every employee has to greet and serve the customers while showing appropriate emotions, good will, and a smile all the time. The owner-manager on a daily basis frequently monitors this situation. Moreover, the undesirable behavior of employees will be readily observable since these small businesses typically employ small numbers of staff. Also, with demanding customers and rising intensity in work processes, a high level of managerial control will risk adding pressure on employees. This pressure resulted from the nature of restrictive control can lead to job stress and so will affect employees' work behavior accordingly. Reflecting these considerations, the current study contends that the use of restrictive managerial control will negatively affect the employee's level of affective commitment.

Conversely, capability (promotive) control arguably accentuates the individual skills and ability development. The use of this particular control strategy can help ensure that employees (staff) have adequate competency. Also, this control strategy involves setting the standard of skills and abilities possessed by employees, who also monitor employees for competency and offer guidance for improvement, if required. The adoption of capability (promotive) control strategies, however, will require high levels of information sharing and coaching on the part of the owner-manager, assuming skills and capabilities required for a particular job are initially identified, and employees will need to be closely monitored through the work process. Thus, the capability control approach will incorporate high levels of diagnostic feedback, and is expected, reasonably, to increase affective commitment among employees.

Of relevance also for the study that the subject of this paper is the assertion by Scholl [12], stated the utilization of restrictive and capability control strategies will bring about certain specific consequences for employees. For example, the author noted on the one hand that restrictive managerial control would cause the employees to have negative feelings in the workplace, such as fear and anger. On the other hand, the effective use of capability-based managerial control could also result in positive feelings, such as joy, pride, and satisfaction. Furthermore, an employee's cognitive and emotional judgment of his or her work (e.g., job satisfaction) and the quality of the relationship between a supervisor and his or her subordinate (e.g., leader–member exchange) should suffer when restrictive control is used but be enhanced when capability control is used. Likewise, exposure to restrictive control should result in lessened employee's affective commitment and an increase in an employee's intention to leave the company. Alternatively, capability or capability control will result in enhanced affective commitment and a decreased desire to leave the company. Based on the works of literature discussed above, we propose the following hypotheses:

H1: There is a negative relationship between restrictive control and affective commitment.

H2: There is a positive relationship between capability control and affective commitment.

35.3 Leader–Member Exchange

Leader–member exchange (LMX) theory, which is based on social exchange theory [13], suggests that every employee in a business organization shares a unique relationship with his or her manager. LMX is concerned with the implications of a leader's character in influencing the performance and work attitude of their subordinates [14].

This theory is often used in studies that investigate the relationship quality between managers and employees. Several findings from the previous studies proposed that LMX have a significant relationship to positive organizational outcomes. For instance, LMX is suggested to be positively related with job performance [15] employee's job satisfaction [16], employee's work motivation [17], and also organizational commitment [18]. Based on the findings from these studies, where the positive effect is the predominant result, may be an indication that the quality of the relationship has been commonly agreed as one of the organizational outcome's primary predictor [19]. Therefore, this paper discusses whether the previous findings using LMX theory could be generalized also to the small family business context.

The use of restrictive types of managerial control will negatively impact relationship quality [20], mainly when a manager uses his or her power and authority to force compliance from their employees. In contrast, the implementation of capability control, where the employees feel as being treated fairly by the owner-manager and are given the opportunity to actively contribute and participate in every business activity, the level of relationship quality are increased significantly [21]. However, small family business, with a limited number of employees, commonly identified with the high value of trust and paternalism that consequently increase employee's commitment toward the organization [22]. Therefore, it can be postulated that regardless of the type of owner-manager control strategies being exercised, the effect on employee's affective commitment will depend on the "quality" of the relationship that exists between the managers and the employees.

Nonfamily member employee's level of affective commitment and the quality of the relationship between the owner-manager and his or her employees (LMX) could suffer when restrictive control is exercised. Equally, it could be improved when capability control is implemented. Similarly, the extensive use of restrictive control could result in reduced the nonfamily member employee's sense of attachment to the organization (affective commitment), while the use of capability control should improve the level of affective commitment. Therefore, the current study proposed several hypotheses:

H3: There is a negative relationship between restrictive control and LMX quality.
H4: There is a positive relationship between capability control and LMX quality.
H5: There is a positive relationship between LMX quality and affective commitment.
H6: The relationship between owner-manager control (restrictive and capability control) will be mediated by the quality of relationship (LMX).

35.4 Methodology

Data were gathered from nonfamily member employees in small family business in Melbourne CBD, Victoria. The information regarding the small business information was generated from Orbis Bureau van Dijk, an online database that provides comprehensive data and information on companies around the world. By using specific software provided on the Web site, the author was able to gain the business information that falls into a small family business category in the foodservice sector. Several methods of data collection were used: such as sending the questionnaire by email to the small family businesses' owners and by visiting the business in person, and with Qualtrics, an online survey software used to distribute the survey data.

35.4.1 Measurement

The constructs of the present study are restrictive control, capability control, relationship quality, and affective commitment. All constructs were measured utilizing a seven-point Likert scale, ranging from strongly disagrees [1] to strongly agree [7]. Affective commitment scale adopted from Meyer and colleagues [23] was employed to measure the employees' affective commitment. To measure the relationship quality between owner-manager and the nonfamily employees, this study employed the LMX-7 measurement scale that based on the study conducted by Scandura [24]. Moreover, two types of managerial control were measured by using the modified scale from Miao et al. [25]. The results of the reliability tests for each construct revealed that Cronbach's alpha ranged from 0.79 to 0.89, indicating the constructs were above the minimum value of 0.70.

35.5 Result

A correlation analysis was used to examine the relationships among the research variables and also include the control variables. In particular, Pearson's correlation was employed to identify the strength and the direction of the relationship between restrictive controls, promotive control, LMX quality, and employee's affective commitment (see Table 35.1).

The correlation matrix above shows that the four variables are positively related with one another. The employees' affective commitment positively related to LMX quality ($r = 0.72$; $p < 0.001$), capability control ($r = 0.35$; $p < 0.001$), and restrictive control ($r = 0.30$; $p < 0.001$). This result is consistent with earlier study who examines the relationship between managerial control and the relationship quality and employee's affective commitment [18].

Table 35.2 shows the relationship between restrictive control, LMX, and affective commitment. The relationship between these three variables was significant. However, the direction of the significant relationship is positive. Therefore, Hypothesis 1 (H1), there is a negative relationship between restrictive control and LMX quality, is rejected. It also is shown that there is a significant relationship between restrictive control and affective commitment ($\beta = 0.30$, $p = 0.000$). The direction of the relationship is positive. Therefore, the present study rejects the Hypothesis 3 (H3). Moving on to the next analysis, as indicated from the relationship between capability control and LMX shows a significant positive relationship ($\beta = 0.35$, $p = 0.000$), therefore, Hypothesis 4 is accepted. A positive relationship also has been found between capability control and affective commitment ($\beta = 0.35$, $p = 0.001$). Hence, the present study decided to accept the Hypothesis 2 (H2).

As we can see from Table 35.2, the addition of restrictive control and capability control to the prediction of affective commitment (Model 2) led to a statistically

Table 35.1 Descriptive statistics and correlation coefficients

	Correlations	Mean	Std. deviation	1	2	3	4	5	6	7	8
1	Affective commitment	2.93	0.69	1.00							
2	Restrictive control	3.27	0.89	0.30	1.00						
3	Hospitality competency	1.61	0.49	0.04	0.09	1.00					
4	Type of employment	2.28	0.62	0.06	0.09	0.61	1.00				
5	Tenure	2.26	0.85	−0.09	−0.07	−0.57	−0.73	1.00			
6	Gender	1.41	0.49	−0.06	−0.02	−0.09	−0.08	0.16	1.00		
7	Capability control	3.30	0.86	0.35	0.58	−0.04	−0.02	−0.02	−0.12	1.00	
8	LMX quality	2.97	0.78	0.72	0.26	0.06	0.04	−0.07	−0.05	0.35	1.00

Table 35.2 Summary of hierarchical multiple regression analysis

	Variables	Unstandardized Coefficients		Standardized Coefficients		
Model		*B*	Std. error	Beta	*t*	Sig
1	(Constant)	2.59	0.50		5.15	0.000
	Restrictive control	0.23	0.06	0.30**	4.01	0.000
	Hospitality skills	−0.06	0.13	−0.04	−0.42	0.672
	Type of employment	−0.03	0.13	−0.02	−0.21	0.837
	Tenure	−0.09	0.09	−0.11	−0.95	0.342
	Gender	−0.05	0.10	−0.04	−0.49	0.622
	$R2$	0.96				
	F	3.61				
	ΔR^2	0.96				
	ΔF	3.61				
2	(Constant)	2.09	0.52		4.01	0.000
	Restrictive control	0.11	0.07	0.14	1.59	0.115
	Hospitality skills	−0.02	0.13	−0.02	−0.16	0.874
	Type of employment	0.00	0.12	0.00	−0.03	0.979
	Tenure	−0.07	0.09	−0.09	−0.78	0.435
	Gender	−0.01	0.10	−0.01	−0.14	0.893
	Capability control	0.21	0.07	0.26*	2.92	0.004
	$R2$	0.14				
	F	4.56				
	ΔR^2	0.04				
	ΔF	8.51				
3	(Constant)	0.93	0.39		2.37	0.019
	Restrictive control	0.07	0.05	0.09	1.30	0.194
	Hospitality skills	−0.08	0.10	−0.05	−0.79	0.432
	Type of employment	0.03	0.09	0.03	0.32	0.748
	Tenure	−0.04	0.06	−0.05	−0.57	0.571

(continued)

Table 35.2 (continued)

	Variables	Unstandardized Coefficients		Standardized Coefficients		
Model		*B*	Std. error	Beta	*t*	Sig
	Gender	−0.01	0.08	−0.01	−0.15	0.885
	Capability control	0.05	0.05	0.06	0.85	0.396
	LMX quality	0.60	0.05	0.68**	12.13	0.000
	*R*2	0.54				
	F	28.31				
	ΔR^2	0.40				
	ΔF	147.02				

Notes *$p < 0.05$; **$p < 0.1$
Dependent Variable: Affective commitment

significant increase in R^2 of 0.04, $F(6168) = 4.559$, $p < 0.0005$. Moreover, an examination of the change statistics indicated that there was a significant amount of variance resulted from the addition of LMX quality (R^2 change = 0.40, $p = 0.147$), which also means the variance explained increased by 40%. Subsequently, the individual contribution of each independent variable to affective commitment also can be identified. The LMX quality was the main contributor to the dependent variable ($\beta = 0.68$, $p = 0.00$) and followed by restrictive control ($\beta = 30$, $p = 0.00$).

35.5.1 Mediation Analysis

The Baron and Kenny [26] methodology was employed to examine the hypothesis (H4) that the relationship quality (LMX) would mediate the relationship between owner-manager control strategies and employee's affective commitment.

The outcome of the regression analysis indicates that managerial restrictive control was a significant predictor of LMX quality, $b = 0.23$, SE = 0.021, $p < 0.05$, and that LMX quality was a significant predictor of employee's affective commitment, $b = 0.064$, SE = 0.005, $p < 0.05$. However, the managerial restrictive control no longer significant predictor of affective commitment after controlling LMX quality as a mediator variable, $b = 0.093$, SE = 0.042, $p = 0.026$. A Sobel test was also used, and the result indicates full mediation in the model ($z = 3.46$, $p = 0.0005$). In other words, this study found that the relationship quality fully mediated the relationship between managerial restrictive control and employee's affective commitment.

Subsequently, the outcome of the mediation analysis indicates that managerial capability control was a significant predictor of LMX quality, $b = 0.31$, SE = 0.006, $p < 0.05$, and that LMX quality was a significant predictor of employee's affective commitment, $b = 0.060$, SE = 0.005, $p < 0.05$. However, the managerial capability controls no longer significant predictor of affective commitment after controlling LMX quality as a mediator variable, $b = 0.092$, $\mathrm{SE} = 0.040$, $p = 0.039$. A Sobel test was also used, and the result indicates full mediation in the model ($z = 3.46$, $p = 0.0005$). In other words, this study found that the relationship quality fully mediated the relationship between restrictive control and employee's affective commitment ($z = 4.50$, $p = 0.000$). In other words, this study found that the relationship quality fully mediated the relationship between managerial capability control and employee's affective commitment. Based on the mediation analysis above, we can conclude that the H6 is accepted in that the effect of restrictive and capability managerial control on employee's affective commitment is mediated by the quality of the relationship between the owner-manager and the employees.

35.6 Discussion and Implications

As anticipated, the results show that there is a positive correlation between managerial capability controls, the relationship quality (LMX), and the affective commitment (see Table VII). The main findings of this research thus are consistent with early studies on the effect of managerial control on employees' work attitude and behavior. In particular, the result concerning the impact of owner-managers capability control on the affective commitment of employees is by early studies [11].

The distinctive aspect that this study highlighted in the findings is the notion that the business owner commonly believes that nonfamily workers (part-time and casual employees) have a lower level of commitment and are less willing to put their full effort into the organization [27]. Given the features of capability control: knowledge sharing, continuous support, and diagnostic feedback activities, part-time and casual employees will likely perceive that they are being treated fairly and perhaps even that there are no differences between them and family member employees.

Interestingly, the findings of this current study indicate that the use of restrictive control by the owner-manager is positively correlated with the level of affective commitment among nonfamily member employees. The reason that may explain this finding is most likely related to the level of skills and knowledge possessed by the nonfamily employees. In this study, the majority of the respondents participating in the survey did not possess the appropriate skills required in the hospitality industry (62.5%). With inadequate skills and knowledge to perform the task at hand, the employee is likely to perceive the close monitoring activity exercised by the owner-manager as a form of support. Therefore, under this condition, restrictive control may have a positive rather than negative effect on affective commitment.

Regarding the positive effect of owner-manager and nonfamily employees' relationship quality (LMX) on affective commitment, this study confirms the previous research [28]. Past study found that less bureaucratic organizational cultures in the foodservice sector in the hospitality industry, like those found in independently owned family restaurants, create positive relationships between the employees and the organization. With a lesser number of employees, combined with the paternalistic culture that inherent in family business, high quality of owner-manager and nonfamily employees is likely to occur. For instance, the owner-manager may treat the nonfamily employees as part of the family. As a consequence, no matter how tight or lose the level managerial control strategies, as long as the owner-manager can build a positive relationship with the nonfamily employees, the loyalty of this type of employees is most likely can be maintained and enhanced.

35.6.1 Implication

Based on these findings, owner-manager in small family business should be aware of some implications associated with their control strategies and its impact on their employees' work attitude and behavior. Although it is likely that the owner-manager in small family business will need to exercise restrictive control in particular situations, the opportunity to express their views and be heard and able to provide feedback frequently may mitigate the negative impact of this control approach on employees. Likewise, if capability control was employed, the owner-manager would be well advised to maintain or enhance the benefit associated with this type of control approach. Also, the owner-managers should learn how to give autonomy and accountability to non-family member employees to increase their affective commitment and improve their work performance accordingly. Accountability is not only about delegating the job to them but it also about giving them trust that may lead to various intrinsic work motivation such as accomplishment.

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Chapter 36
German Residential Tourists and Residents in Southern Spain (Andalusia). Distribution and Recent Evolution

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Abstract On the basis of an approach to the state of the matter regarding the residential tourism segment, this paper takes a descriptive approach to German residential tourism in the Spanish region of Andalusia based on census registration, an administrative act used by a large number of foreigners in eminently touristy territories when they strengthen their relations with the destination. The identification of specific patterns and dynamics that distinguish the German colony from other nationalities in specific areas of the region suggests future lines of research into the origin, nature, and territorial implications of the decisions taken by this contingent.

36.1 Introduction

The tourism sector, and in particular that associated with tourists choosing to reside in the destination, is an important source of revenue in the Spanish region of Andalusia, especially in areas such as the Costa del Sol [1], where the residential segment has caused the effects of the 2008 economic crisis better compared to the decline observed in other areas such as the Balearic Islands [2].

At this point, we would like to make some methodological considerations. The term residential tourism has been used over several decades of the twentieth century [3] and was associated with the purchase of houses by foreign retirees on the Costa del Sol to live there for part of the year. Since then, numerous researchers have approached the term, based on a variety of criteria: temporality [4, 5], motivation [6, 7] lifestyle [8–10], or forms of social interaction [11, 12].

Authors such as Huete and Mantecón [13] include the decision to register in the analysis, thus turning residential tourists into migrants. However, this milestone does

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not include those who have chosen to reside in their destination but do not formalize their registration. Navarro and Carvajal [14] developed a methodology to delineate this phenomenon: the foreign population that is resident but not registered.

More recently, the economic impact of residential tourists whose income comes from outside the destination has been addressed [15].

In line with the latter interpretation, the initial objectives of this work focus on analyzing the phenomenon of tourism of German origin in the Spanish region of Andalusia and some of its areas, such as the Costa del Sol, which are visited with varying intensity by citizens from an external economic system who thus bring capital generated in another economy to the destination.

We chose this source for several reasons. Firstly, due to the little research about German tourism in Andalusia, mainly focused on British tourism [16–18]; has approached it with criteria other than its origin [19–26] has not dealt exclusively with German origins [27–29] or studied them in other areas [30–36].

Another reason for our study is its usefulness for strategic planning, as the impact of Brexit and the pandemic make it advisable to explore non-UK markets. It is also interesting to note the trend observed among German tourists, with a growing attraction to nature and the different variants associated with sustainable tourism [1], which, we suggest with our study, could explain the link between German residents and certain areas of Andalusia, a region that concentrates the largest area of protected natural spaces in Spain, an important opportunity for initiatives associated with sustainable tourism [37].

As mentioned above, the primary objective of this study is to characterize the segment of residential tourists of German origin in Andalusia by achieving the following sub-objectives:

- Identify their preferred location in Andalusia and Spain.
- Identify possible trends, according to the development of their registration.

For the purposes of this study are valid, both seasonal tourists and those whe stay semi-permanent, often registered in the municipal "Padron".

Based on this approach, we have made a first approach to residential tourists through the municipal register, the only statistical source available at the municipality level and updated annually. In a second phase of the study, currently in preparation, it will be complemented by information from our own primary sources (interviews and surveys), which we will use to assess the extent to which the phenomenon tested in other parts of the Mediterranean and known as the "life cycle of the tourist product" [38], which recognizes certain patterns in tourists who begin as residents and continue as residents, is repeated in our study area.

36.2 Methodology

The methodology used here is quantitative. Using data from the Padrón [39], graphs and maps are produced to illustrate the evolution and current distribution of German inhabitants, on a double scale: at provincial level for the whole of Spain and at municipal level in the context of Andalusia.

In doing so, we compare the volume of the German population with two indicators: The total population of the unit of analysis (province or municipality) and the total number of inhabitants of some nationalities are recognized as important emitters of residential tourists to Spain (hereafter referred to as emitter countries). Within Central and Northern Europe, those considered by the public tourism planning unit in the Province of Málaga in its reports on residential tourism and residents were as follows: Germany, Belgium, Denmark, Finland, France, Netherlands, United Kingdom, and Sweden [1].

36.2.1 Development of the Ethnic German Resident Population

The first approach is based on two graphs showing the development of the German resident population between the end of the twentieth century and the present:

2.1.1. Graphical representation of the development of the German population in the Spanish provinces: based on data from the National Institute of Statistics [39].
2.1.2. Graph on the development of the German resident population in Andalusia and the other countries of origin.

Both figures give a first and comprehensive impression of the development of the German population in Spain and in Andalusia. It is also possible to compare them with other important countries of origin of tourists to this autonomous community.

36.2.2 Panoramic Mapping of German Inhabitants in Spain and Andalusia

At national and Andalusian level, maps are produced on the following aspects:

2.2.1. Volume of foreign residents from the countries of origin of residential tourists on the Costa del Sol. Number of registered residents.
2.2.2. Nationality with the greatest weight in the group of main output countries.
2.2.3. Size of the German colony in Spain as a whole. Absolute numbers of registered Germans.
2.2.4. The importance of the German colony in the province. Germans registered per 1000 inhabitants.
2.2.5. The weight of the German colony among the main countries of origin with the largest presence in the total number of resident tourists (only the provinces with more than 5000 foreign inhabitants).

2.2.6. Position of the German colony among the most important sending countries.

36.3 Results

36.3.1 Developments

Figure 36.1 shows the evolution of the German population in all Spanish provinces since 1998. Two blocks can be observed: The provinces that at some point exceeded 10,000 registered Germans and the rest. In the first block, a group can be identified that we now call "Costa-archipelagos," with provinces recognized as receiving residential tourists: Alicante and Málaga on the Mediterranean coast and the Balearic Islands in the Mediterranean, and Santa Cruz de Tenerife and Las Palmas, in the Atlantic. In addition to this group, the block is completed by Barcelona and Madrid, which are not recognized as receiving places for residential tourists, but whose capitals are strong points of attraction for foreigners.

This block shows an upward trend in German registrations since 1998 until they slow down with the 2008 crisis and start a sharp decline in the Costa-archipelagos group from 2012. This decline started earlier in the two major capitals (2009) although less pronounced, and the recovery started earlier (2020), while the Costa-archipelagos has not yet shown an upward trend. This could be related to the metropolises, which

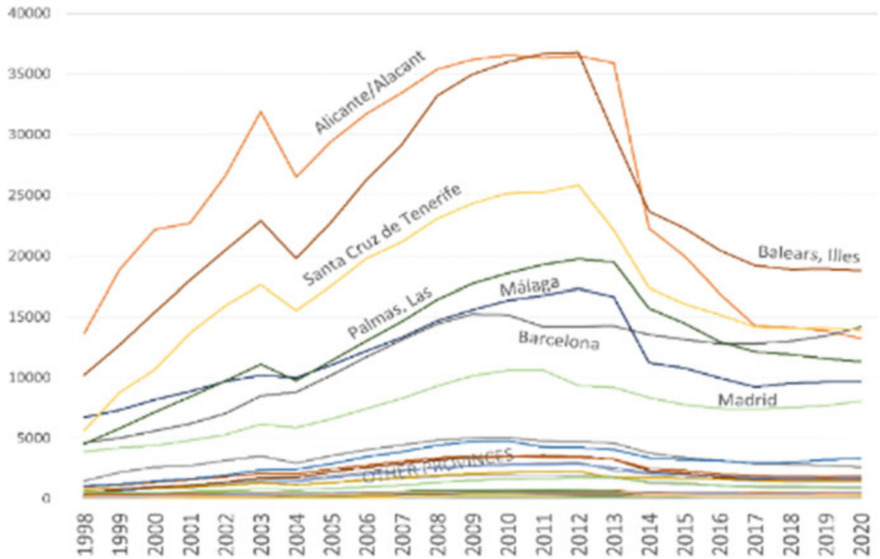


Fig. 36.1 Development of the number of registered foreigners from countries that traditionally emit residential tourists to Spain (United Kingdom, Germany, France, Belgium, Holland, Sweden, Denmark, Finland, Norway). Provincial data. *Source* Prepared by author based on INE, 2021

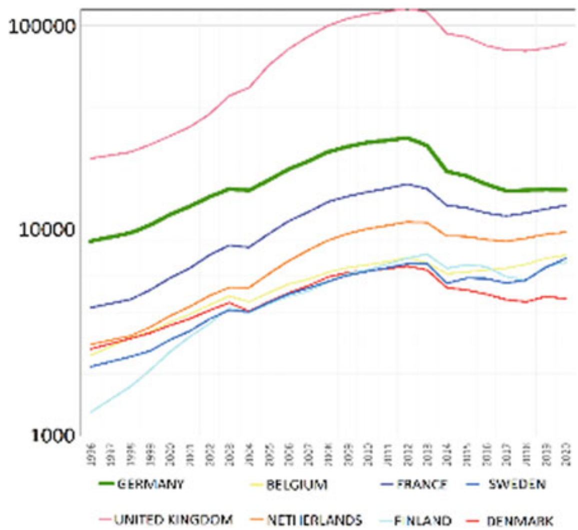


Fig. 36.2 Evolution of the number of foreign residents registered in Andalusia from countries that traditionally send residential tourists to that region (United Kingdom, Germany, France, Belgium, Holland, Sweden, Denmark, and Finland). Logarithmic scale. *Source* Own elaboration based on INE, 2021

show greater diversification and structural recovery capacity, in contrast to the crucial dependence on tourism in the second group.

With regard to our study area, Andalusia, Fig. 36.2 shows the evolution of the number of Germans registered as residents compared to the other countries of origin. As can be seen, the German colony is the second largest of the main nationalities of origin, reaching 23,398 in 2012 [40], after which a decline began to 15,834 in 2020.

The development curve of Germans is similar to that of the province of Málaga (Fig. 36.1), in line with the preference of German residents for this province, where the majority of German residents are concentrated in the region in 2020 (9,662).

36.3.2 Current Spatial Distribution

Currently, Germans are concentrated in the most touristy Spanish provinces, on the Mediterranean coast and in the archipelagos. In Fig. 36.3, Map 1 represents the provinces with the highest absolute numbers of residents from the main sending countries, while Map 3 represents only Germans.

The Mediterranean and island provinces have the highest absolute number of registered residents from the main sending countries. The figures for Germans (in Map 3, Fig. 36.3) show roughly the same distribution pattern, but with greater weight on the islands and with the distorting element of metropolitan areas: Balearic Islands (18,922 in 2019), Canary Islands (14,119 in Santa Cruz de Tenerife and 11,577 in Las Palmas), Alicante (13,883), Barcelona (13,445), Malaga (9648), and Madrid (7696). Map 4 shows the weight of Germans in the total population (Germans/1000 inhabitants), reflecting the concentration of this colony in the islands and on the

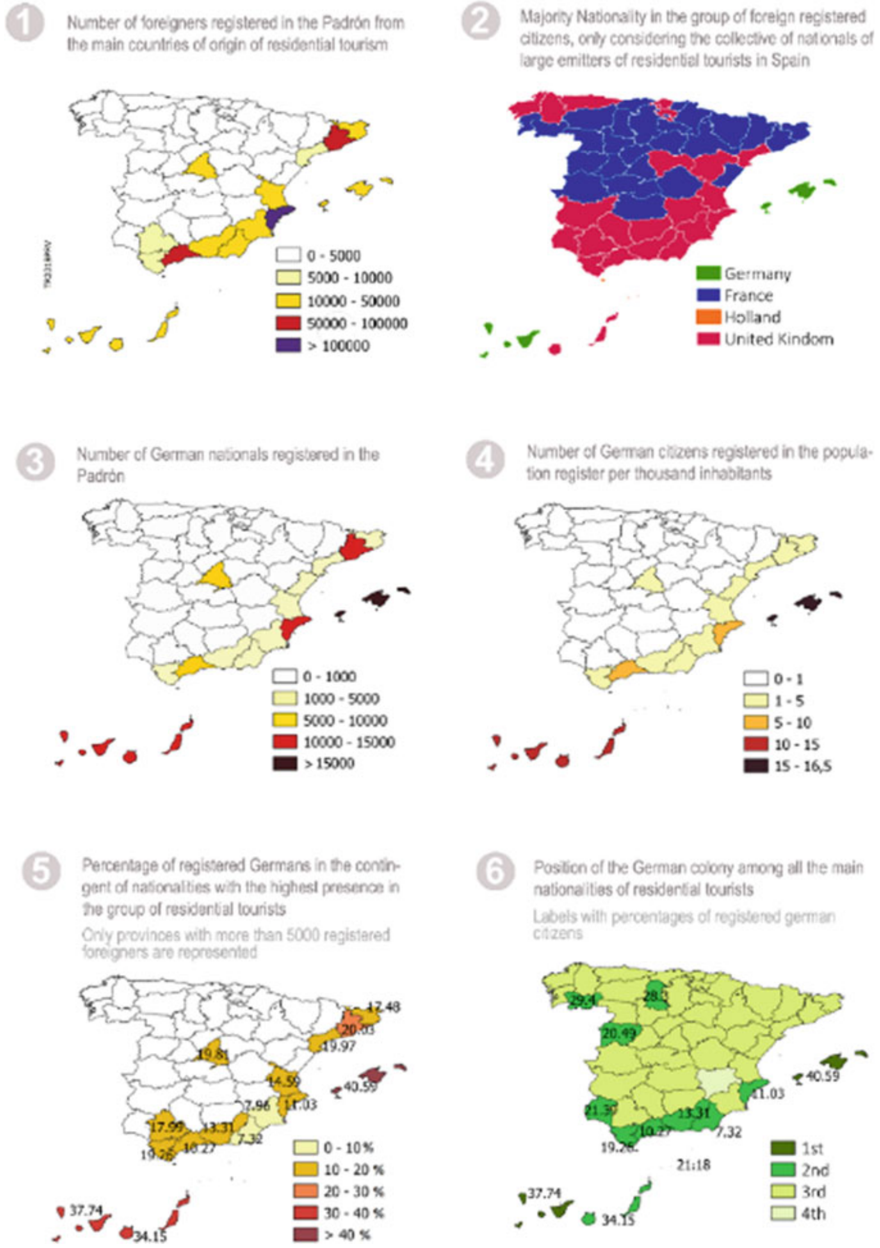


Fig. 36.3 Illustrative maps of the current panorama (2019) in Spain of foreign residents from countries that traditionally emit residential tourists and specifically of German nationality. *Source* Own elaboration based on INE, 2021

Mediterranean coast: 10.33‰ in Las Palmas, 13.6‰ in Santa Cruz de Tenerife, 16.4‰ in the Balearic Islands, 7.4‰ in Alicante, and 5.8‰ in Malaga.

Map 2 (Fig. 36.3) only considers the group of output countries. The German contingent is in the majority in the Balearic Islands and Santa Cruz de Tenerife, ahead of the Anglo-French contingent, which leads in the other Spanish provinces.

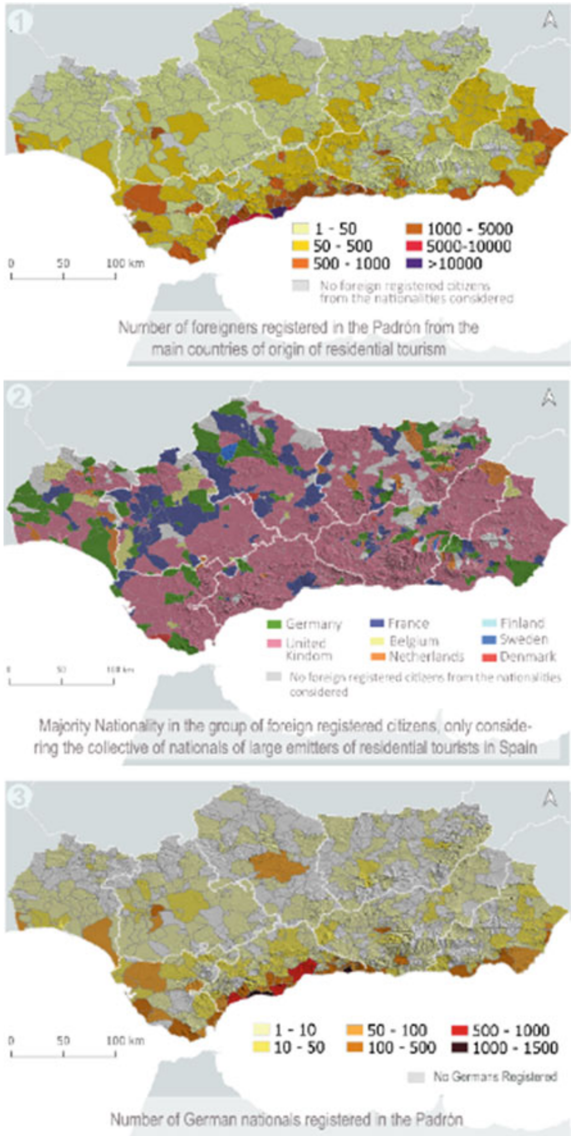
In the south–southeast region of the country, the German colony is the second largest in all the coastal provinces: from Huelva to Alicante, with the exception of Murcia, and also in Las Palmas (Canary Islands), a region clearly marked in Map 6. However, the weight of Germans within the contingent of exhibiting countries decreases where they coexist with a good number of other nationalities, such as in Málaga and Alicante (Map 5), and increases where there is no such "competition," or in provinces that although touristy, have a lower absolute number of this type of foreign resident but a relatively high number of Germans. This is the case in Cadiz (19%) and Huelva (21%), compared to 10% in Malaga and 11% in Alicante, both of which represent the second largest contingent (Map 6 in Fig. 36.3).

Figures 36.4 and 36.5 represent the above aspects, but in Andalusia, through different maps. Map 1 in Fig. 36.4 shows that coastal municipalities have the largest concentration of registration preferences of residents from the main sending countries, followed by inland rural areas. Similarly, the population of German origin (Map 3 of Fig. 36.4) can be seen in the corridor of coastal municipalities, where almost all have more than a hundred Germans registered, from Chiclana on the Atlantic (383 registered) to Salobreña on the coast of Granada (136), with the highest values in towns on the Costa del Sol, both in the western sector (Marbella with 1454 registered) and in the east (Torrox with 1415).

The relative figures per 1000 inhabitants (Map 1 in Fig. 36.5) confirm the remarkable German presence in the coastal municipalities of the western Costa del Sol (including Mijas: 11.3%; Marbella: 10.1%) and especially in the eastern section (Algarrobo: 35.7%; Torrox: 82.1%; Nerja: 16.87%). In this last area, the Axarquia in Málaga, the German presence extends and strengthens strikingly across the immediate mountainous foothills, with a block of 11 municipalities exceeding 15% and rising as high as 130.3% in Sayalonga and 50.22% in Cómpeta. The same process can be observed in the inland coastal municipalities of the western Costa del Sol. In addition, high values are observed in other coastal municipalities that are recognized as enclaves of coastal tourism but are less populated: Tarifa (15%), Almuñécar (14.5%). and Salobreña (11%) in the province of Granada, and Mojácar (17.5%) in the Levante Almeriense, in whose nearby inland municipalities the German presence is also notable; Bédar is an example with 22%. A similar process can be observed in Andévalo (border with Portugal), the inland area closest to the west coast of Huelva.

On the other hand, there is also a notable German presence in inland areas that traditionally benefit from rural tourism: Alpujarras and Sierra de Aracena, among others. This makes them the majority nationality in the municipalities around the nature reserves, as shown in Map 2 of Fig. 36.4 in the areas of influence of the natural parks of Cabo de Gata-Níjar (Níjar), Sierra Nevada, Sierra de Baza (Guadix), Alcornocales and Estrecho (Tarifa), Grazalema (El Bosque and Prado del Rey, Sierra

Fig. 36.4 Current panorama (2019) in Andalusia of foreign residents from countries that traditionally emit residential tourists and specifically of German nationality. *Source* Own elaboration based on INE, 2021



de Aracena, and Picos de Aroche (Alájar), as well as in numerous inland municipalities. It is in these areas far from the coast that the greatest weight of Germans among the large sending countries can be seen (Fig. 36.5, Map 2). As we have seen, this predominance makes the German colony the largest foreign contingent in 100 municipalities in all provinces (Fig. 36.5, Map 3), except in the province of Malaga, where they are relegated to second place by the overwhelming British presence in 40 municipalities (Map 2, Fig. 36.4).

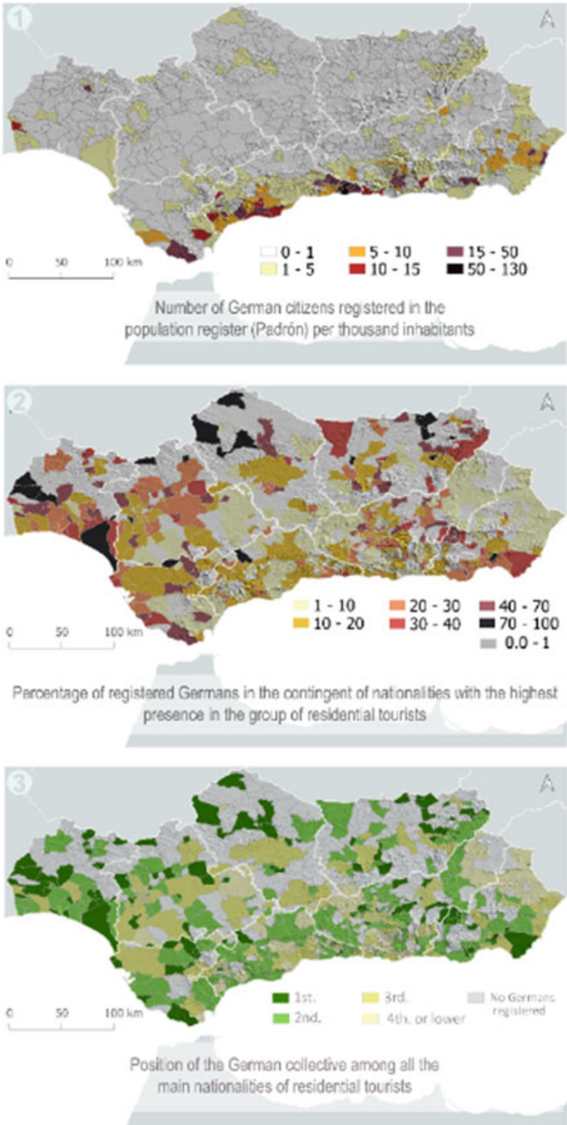


Fig. 36.5 Current panorama (2019) in Andalusia of foreign residents from countries that traditionally emit residential tourists and specifically of German nationality. *Source* Own elaboration based on INE, 2021

The distribution of this contingent has various geographical implications. These are more noticeable where this population is more numerous. The expansion of the German population in the interior of the Axarquia region of Malaga (municipalities of Alcaucín, Canillas del Aceituno, Sedella, Canillas de Albaida, Sayalonga, Cómpeta, Frigiliana, among others), together with other populations of various nationalities, has multiplied diffuse urban development in rural areas [41]. The environmental consequences are palpable in the landscape [42]. The high demand for housing in these rural areas has led to construction everywhere on all types of land, even where it is banned by law [43]. In some cases, buyers were not aware of the illegal status of the purchased property, nor of the natural dynamics of the area, so in many cases, they may also be exposed to various natural risks [44]. On the positive side, economically declining areas have been repopulated. In many cases, the German population itself is actively involved as a provider of tourist and accommodation services. Dynamics are different in urban areas. One of the main consequences is that the arrival of many foreigners is not registered in the respective host municipalities. Some do not consider it necessary to register, but this entails additional costs for the municipalities, which could better serve these populations if they were registered.

36.4 Discussion and Conclusions

Germans are widespread in the most touristy provinces of the Mediterranean (Alicante, Malaga) and in the Balearic and Canary Islands. That population were increasing paraleling to the economic cojuncture till slow it down because of the 2008 crisis, then they experiment a decline. Nowdays that decrease has stoped but the number of germans still does not increase again significantly. There are 15,834 Germans registered in Andalusia, a figure whose annual fluctuations have stabilized since 2017, compared to the growth in other sending countries (UK, France, Belgium, Netherlands, Sweden, and Finland).

56.8% is concentrated along the narrow coastal corridor Chiclana-Salobreña, where the very touristy Costa del Sol with the largest settlements of Germans (Marbella and Torrox) is located. However, a not inconsiderable 43.2% (6806) is spread over the rest of Andalusia, concentrated in regions such as the mountainous hinterland of the Costa del Sol, the area around Mojácar or western Andévalo, or scattered over wide areas. In this respect, the 13% of Germans (2089) registered in the rural areas around the natural parks stand out, where they are the majority nationality among northern Europeans in some municipalities.

The concentration of residential tourism and foreign residents in general on the Andalusian coast is widely known [5, 17, 45], in other areas of the Spanish Mediterranean [46–48], in the archipelagos [33, 34]; the expansion of residential tourism in general [23] or from colonies such as the British [4, 17] toward the interior on the Costa del Sol has also been documented. In this work, a similar distribution pattern is found in Andalusia as described in other cases, but with specific features of development and spatial distribution that distinguish Germans from other groups of residential tourists and foreign residents.

As this is mainly descriptive work, it can be complemented by studies that look more closely at the more specific reasons for the above. In this regard, there are approaches to specific areas such as the Costa del Sol, specifically relating to the German colony [27, 28], to the British [17, 49], and to the development of residential tourism [28, 50] and its impact [42]. The patterns discovered encourage the exploration of other areas of the Andalusian territory. This is the case in the surroundings of the natural parks, where a significant contingent of German inhabitants has been identified. Their spread receives less attention, perhaps because there are no agglutinating urban centers like on the Costa del Sol, but it is a phenomenon that invites exploration.

The debate on the delineation of “residential tourism” is wide ranging [18, 51, 52] and depending on what is conceptualized, the techniques for its quantification are sometimes complex [14]. There are studies that end the discussion by pointing out that the different concepts used, such as lifestyle mobility, hetero local lifestyles, multiple dwellings, and residential tourism, refer to “roughly the same phenomenon” [53], taken from Hannonen [33]. With this in mind, this paper proposes an approach to the phenomenon of German residential tourism in Andalusia based on the Padrón, as it is widely known that in this and other tourist areas, registration is an administrative act that many foreigners undertake when they further deepen their tourist relationship with the destination. Therefore, apart from the accuracy of the results, the figures and their evolution are indicative of the Andalusian areas that are actually chosen by German “resident tourists” and/or German residents to enjoy the new lifestyle, the better climate, the atmosphere, etc., and give rise to a more detailed analysis of the factors involved in this choice and the territorial impact of the arrival of these contingents.

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Chapter 37
Understanding the Key Performance Indicators for Business Intelligence Maturity in the Healthcare Sector

João Silva, Célia Talma Gonçalves, and Catarina Félix

Abstract The digital transformation associated with the huge volume of data that healthcare organizations deal with today is based on transforming this complex knowledge-driven industry to turn data into knowledge. The healthcare industry requires comprehensive models that help identify priorities to implement business intelligence (BI) solution. Business intelligence can help organizations make better decisions by showing current and historical data within their business context. This paper systematizes and analyzes three business intelligence maturity models into one and also attempts to understand the main key performance indicators in adopting business intelligence maturity model in healthcare organizations. For this purpose, we present a questionnaire that was based on the systemized business intelligence maturity model that was sent to X% of the Portuguese hospitals with the objective of identifying not only the business intelligence maturity stage of the Portuguese hospitals but also to infer the most important key performance indicators that will characterize each stage.

37.1 Introduction

In the recent digital transformation, the decision process is supported through data analysis. Established as a common denominator, small and large organizations transform their data into valuable knowledge and powerful capabilities to help them become more data-driven organizations.

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In the healthcare area, the quick growth of information technologies has had a particular and striking impact as it has led to an urgent need to improve the health care provided to the population [1].

In a hospital organization, most of the data come from the medical activity and of all the processes related to organization management.

All this data are transformed into useful clinical information and then provided to the various parties involved, such as patients, doctors, managers, government, and other employees of the organization [2].

Maturity models are based on the premise that people and organizations evolve through a process of development or growth toward a more advanced maturity.

The higher the level of maturity, the greater the organization and the effectiveness of a company. These models are also used in healthcare organizations [3].

The decision support systems together with technology help the decision makers to gather insights to enhance organizations. The success of business intelligence systems in the organization depends on a series of factors related to the work environment and its culture, and all these factors constitute the maturity of the project.

As healthcare organizations continue to be asked to do more with less, access to information is essential for evidence-based decision-making.

The use of technology to help ensure the quality of healthcare and cost reduction is a constantly evolving theme of research [4].

Through business intelligence, healthcare organizations can have the potential to improve methods and processes that support the individual's health, promote better operational performance, and provide more and better quality, cost savings and patient involvement [5].

37.2 Business Intelligence

Business intelligence systems cover a wide range of decision support applications with fast, shared, and interactive access to information, allowing for easy data analysis and modification [6]. Business intelligence is a broad and generalist concept, with various business processes, software applications, and specific technologies.

The BI environment enables the transformation of raw data into relevant, accurate, and useful data. The knowledge produced by business intelligence systems, leveraged by current communication technologies, supports and justifies the measures taken by the various players in the decision-making process [6].

Business analytics is a data-centric approach that combines the science of predictive analytics with advanced business intelligence capabilities [7].

It can be split in four types of analytics: descriptive, diagnostic, predictive, and prescriptive analytics.

Descriptive analysis tries to understand and analyze what happened in the past, using business intelligence techniques and technologies such as OLAP tools, dashboards, reports, data visualization, among others.

Predictive analytics can be helpful on various areas of the healthcare industry like “life-sciences, healthcare providers, insurance providers, public health, and individuals” [6].

Prescriptive healthcare analytics can predict the best treatment for a patient or can predict a heart disease for an individual based on the patient’s lifestyle [6].

37.2.1 Business Intelligence as Decision-Making Support

The decision-making process is a method by which a manager attempts to eliminate shortcomings or gain advantages in each functional environment. How this process occurs depends on the attributes of an organization and the ability to use appropriate problem-solving tools [8].

How the decision-making process occurs depends on the characteristics of an organization, the attitudes of the managers making the decisions, the availability of appropriate problem-solving methodologies, and the availability of effective technologies that support and assist in decision-making [9].

Business intelligence systems, as mentioned earlier, are responsible for transforming raw data into information and knowledge. Through this, it can feed strategic thinking and influence different ways of acting in organizations [10].

At the strategic level, business intelligence makes it possible to set precise objectives and monitor their progress. It also allows performing different comparative reports, such as: historical results, profitability of offers, and effectiveness of distribution channels along with performing simulations of development or forecasting future results based on some assumptions [10].

At the tactical level, business intelligence systems can provide some basis for decision-making in marketing, sales, finance, capital management, etc.

The systems can optimize future actions and appropriately modify organizational, financial, or technological aspects of the organization to help companies realize their strategic objectives more effectively [10].

At the operational level, business intelligence systems are used to perform ad hoc analysis and questions related to the departments’ ongoing operations, up-to-date financial situation, sales and cooperation with suppliers, customers, etc. [10].

37.2.2 Business Intelligence in the Healthcare Sector

The growth of information technology has had a particular and remarkable impact on healthcare, as it has led to an urgent need to improve the health care provided to the population. It is important to identify and define the main processes of a hospital unit so that it is easier to prioritize information, thus making a faster and more efficient decision [11]. In the healthcare sector, the data produced come from medical activity, management-related processes, and other activities.

All this data are transformed into clinical or financial information and provided to various stakeholders, such as patients, physicians, managers, government, and other employees of the organization [2].

There are several applications of business intelligence system within a healthcare organization, and this translates into the optimization of processes related to clinical and financial information, which allows for better management of costs associated with hospitalization times, fees, and even the detail of each billed service [12].

The healthcare industry has similarities and differences with other industries. Like other industries, health care focuses on revenue, spending, utilization, and quality, but differs, as it should, in using information to influence the behavior of a more diverse set of constituencies, such as physicians, patients, government, insurance companies, hospital administrators, pharmacies, and more [4].

Data analytics can be used to improve many aspects of a business or organization. In health care, in addition to clinical decision support, it can also improve operational and financial aspects.

It is believed that careful and thoughtful use of business intelligence in health care can turn data into insights that can improve patient outcomes and operational efficiency [13].

37.2.3 Advantages and Barriers to Using Business Intelligence in the Healthcare Sector

Business intelligence systems in healthcare organizations have different applications and therefore bring several benefits, both financially and in terms of healthcare services. Business intelligence benefits in the healthcare industry can be extend to patients, providers, and board members, and the technology can make centralized patient management a reality.

As a result of this implementation, everyone from executives to managers and clinicians now have the information needed to support better decision-making on a daily basis.

The application of Business Intelligence can produce useful information and knowledge through existing public health data, another benefit is that through these business intelligence solutions health professionals have immediate access, in real time, to the information they need, allowing to increase the quality of health services provided and, simultaneously, reduce costs [4].

Also, Muraina and Ahmad [10] briefly describe the benefits both clinical and financial that business intelligence system brings to healthcare organizations:

- Optimizes resources in key services, such as surgical service [10];
- Develops and monitors key performance and clinical indicators, in order to increase its quality [10];
- Provides ability to plan, budget, and forecast efficiently in complex organizations [10];

- Provides ability to understand and manage the supply chain and logistics in order to contain costs and always ensure products and services [10];
- Ensures more patient safety through efficient diagnostics and the identification and application of best treatment practices [10];
- Controls costs and improve performance and quality through human resources management and medical suitability of the specialty to the patient [10];
- Allows for information on insurance claims—information on what was done to the patient and costs associated [10];

A good management of the patient's health history, with the use of business intelligence solutions, allows a more balanced patient health. In the case of chronic patients, predictive analysis helps predicting the risk of rehospitalization, worsening of secondary diseases, among other situations [14].

It is thanks to data mining, one of the several existing BI techniques that has great applicability in the health sector given its usability that these predictive analyses are possible.

Some of the difficulties in implementing business intelligence system are: the lack of transparency about the costs and benefits of implementing a BI system, both for clinicians and investors, the insufficient support and incentives for the clinicians involved, as well as their relationships with information providers, and in legal terms, the privacy of the health information involved, are factors that were not yet fully ensured [15].

As for the difficulties in implementing business intelligence system, the biggest obstacle was the lack of financial resources, followed by lack of human resources and, thirdly, the poor quality of the data is to be analyzed [14].

37.3 Business Intelligence Maturity Models in the Healthcare Sector

To balance the investment in BI with the value it adds, it is very important to understand the maturity of an organization through an assessment at the technology, process, and organizational level. In this way, it is possible to compare the maturity level with the goals to be achieved [16].

Six requirements for the establishment of business intelligence maturity model for the healthcare sector have been developed: [13]

- Establish a responsible department to manage the business intelligence system;
- Determine and focus on operational, financial, and clinical information needs;
- Consider the specific processes of the organization and capture the key processes and practices of business intelligence;
- Incorporate key processes that include the people, technology, and processes of the organization;

- Incorporate quality aspects, including system quality, information quality, and service quality;
- Provide an understanding of the relationships between the different levels and key processes involved in the maturity model.

As already mentioned, maturity models help organizations understand where they are and how they can improve. We can also understand the answers to the following questions [9]:

- Where is most of the reporting and business analysis done to date?
- Which department in the organization uses the reports and analysis obtained from the business intelligence data?
- What is driving the use of business intelligence in the organization?
- What strategies are being used to develop business intelligence?
- What strategic and business value does business intelligence bring?

The fast development of hospital organizations over time and the rapid technological evolution have led to a phenomenon of change that emerges with the aim of correcting the mistakes made and improving the care provided. Several information systems have been implemented in order to improve this situation.

Maturity models are used to describe, explain, and evaluate the life cycle of something. The basic concept of all models is based on the fact that things change over time, and that most of these changes can be predicted and regulated [9].

It quickly became apparent that this implementation could be monitored, making it possible to determine how a given organization could improve [17].

Aiming to advise leading global organizations interested in what are the best practices in health information and technology, this organization drives key data resources, guiding operations, and clinical practice through predictive analysis tools and maturity models. HIMSS analytics is a research and analytical branch of HIMSS, responsible for collecting, analyzing, and distributing data. It is also responsible for developing seven different maturity models.

The adoption model for analytics maturity (AMAM) is designed to measure and improve the analytical capabilities of an organization, and although it is a normative model in the competencies considered essential, it recognizes that each organization is unique and therefore provides flexibility regarding the achievement of the objectives outlined [1].

The electronic medical record adoption model (EMRAM) consists of an eight stages model that allows to be following the progress of the organization to be evaluated, in relation to other healthcare organizations in Europe and around the world [1].

According to Eggert et al. [18], it is necessary to invest in solutions associated with data analysis and the use of databases. In this sense, the healthcare analytics adoption model (HAAM) was developed to accelerate the advance of maturity analytical data in healthcare organizations. This model is used to measure the adoption and use of data storage and data analysis in health care [13].

37.3.1 Systematic Review of Healthcare Business Intelligence Maturity Models

We have studied three different maturity models that were studied: adoption model for analytics maturity, electronic medical record adoption model, and healthcare analytics adoption model. After analyzing each of them, they were summarized, highlighting the components considered most essential and common:

Stage 0: There is poor data quality, and spreadsheet usage is high, while the use of reporting tools is limited. Data are inconsistent and of poor quality. Most data are only used for basic and functional processes. There is a lack of knowledge or little interest in it. There are no reusable procedures for future tasks.

Stage 1: Although the data are spread internally, people have permission to store according to their functions in the organization, but access to it is protected. There is little support for business intelligence projects.

Stage 2: A data warehouse that holds the information regarding the activities of an organization was created, in a consolidated manner, thus allowing to "feed" and improve the business intelligence analysis. The data are organized with clearly defined roles and responsibilities. A team has been developed specifically to look after the data warehouse.

Stage 3: There is 100% utilization of the capabilities of a data warehouse including OLAP analysis. There are internal and external reports to improve the various areas of the hospital and clinical practices. Senior leaders recognize the importance of data analytics. Processes are well defined and exists a clear communication between technology and business rules.

Stage 4: The hospital begins to find patterns, connections, correlations, or anomalies in large amounts of data, allowing it to find problems, hypotheses, and opportunities more easily**.** Clinical support and quality metrics are implemented to capture insights from organization business processes. At this stage, healthcare organizations are fully engaged as a data-driven culture.

Stage 5: Healthcare organizations can leverage advanced datasets and use them to support healthcare treatments that offer mass personalization of care combined with prescriptive analytics. Data are viewed as a strategic asset and can make a difference in an organization if it is properly used.

To better understand what all these models have in common, Table 37.1 presents the mutual factors of each stage divided into three distinct areas: technology, process, and people.

Table 37.1 Systematic review of healthcare business intelligence maturity models

	Technology	Process	People
Stage 0	Data are inconsistent and have poor quality	Basic organization processes	Unaware of data
Stage 1	Data are protected	Ad hoc processes	Little support
Stage 2	Existence of a data warehouse	Organized and defined roles	A data analytics team is created
Stage 3	Full use of a data warehouse	Internal and external reports	Senior leaders start to recognize the importance of data analytics
Stage 4	Advanced analytics	Clinical support and quality metrics	Data-driven decision
Stage 5	Artificial intelligence	Predictive analytics	Data are viewed as a strategic asset

37.4 Business Intelligence Maturity Assessment of Portuguese Hospitals

This survey arose from the need to collect data for a future master's thesis and consists of 15 questions. Portugal has 225 hospitals public and private, and it was sent to 106 of them. We can conclude that was sent to 47% of them.

A survey is an important vehicle for collecting data in a certain scope. Although there is no standard methodology for its formulation, there are some recommendations, as well as factors to be considered for the success of the survey: analyze the objectives and determine the problem, preparation of the questionnaires, pre-testing, and analysis and interpretation of the results [19].

The survey was developed as follows: The first six questions were about the basic information of the person answering the survey and about the hospital; the questions seven through nine were about the IT department; the question ten and eleven were about the use of business intelligence, and finally, the last three questions will assess the maturity of BI in the hospital.

It was structured in the following way, as it shows Table 37.2 (Tables 37.3, 37.4, 37.5):

Table 37.2 Questions about the person answering the survey and about the hospital

1. First name
2. Last name
3. What is your position in the hospital
4. Hospital name
5. City
6. Hospital type: Public/Private/Public–Private

Table 37.3 Questions about the IT department

7. Total number of employees
8. How is the IT department organized in the hospital
9. Total number of employees in the IT department

Table 37.4 Questions about BI

10. For what purpose is the BI application used? Clinical/financial/both/there is no business intelligence application/other
11. Is there a clinical data repository that allows users to access clinical information from various departments: Yes/No/I Don't Know
12. Do you use any BI tool to support your management: Yes/No/I Don't Know

Table 37.5 Questions about the maturity of BI in the hospital

At the technology level, which statement best fits your organization? 1. Data are inconsistent and of poor quality, being scattered across spreadsheets 2. The data are dispersed internally 3. There is a data warehouse—a data warehouse that stores information about the activities of an organization, in a consolidated form, thus allowing to "feed" and improve the business intelligence analysis 4. There is 100% use of the capabilities of a data warehouse including OLAP analysis 5. The organization uses predictive data models that allow it to anticipate health problems, build patient health profiles, predict costs arising from hospitalization, predict occupancy rates, anticipate diagnoses, etc., in order to continuously improve the delivery of health care 6. I don't know
At the data processing level, which statement best fits your organization? 1. Data processing is only used for basic hospital processes 2. Data processing is used only for ad hoc processes 3. Data are organized with clearly defined roles and responsibilities 4. Internal and external reporting is in place to improve the various areas of the hospital and clinical practices 5. Clinical support and quality metrics are in place to capture knowledge of the organization's processes 6. Data processing is at an advanced level that allows predictive analytics to be performed 7. Don't know
At the people level, which statement best fits your organization? 1. There is a general lack of knowledge/poor interest in the benefits of data analytics 2. There is controlled access to data and permission to store and access appropriate data according to the roles performed by the user 3. There is a data analytics team with well-defined roles and responsibilities 4. Senior leaders recognize the importance of data analytics 5. The decision-making process is completely based on dashboards provided by BI systems 6. Data are viewed as a strategic asset that aligns analytics with business processes 7. Don't know

37.5 Conclusion

At the present moment, we have just developed and send the survey to the hospitals, and we are gathering the answers for evaluation. The objective of the present paper was to focus on the development of the questions and not on the evaluation of the answers that will validate our work in progress by allowing us to better understand and evaluate the level of maturity of each hospital.

The development of business intelligence maturity model for healthcare organizations provides great contributions to the information and knowledge of the organization's management.

Business intelligence offers breakthrough possibilities for new discoveries, better patient care, and greater efficiency in health and healthcare, innovate, and research to enhance patient care effectively, optimize operations, among others.

After evaluating the three different maturity models, we have proposed an aggregated business intelligence maturity model that only highlights the common variables proposed by the three models.

After analyzing the answers given, it was found that the maturity stages in the hospitals that responded to the survey are not uniform. There were discrepancies between hospitals, and, within each hospital, there were also discrepancies since they were at different stages of maturity in the different levels studied. It was found that in general, the most advanced level is people, and the least advanced is technology, indicating the opportunity for further development at this level. Regarding the limitations of our study, due to the fact that we had few answers for the development of this study, it was not possible to conclude much about Portuguese hospitals as a whole.

However, with the responses obtained, we were able to conclude that regardless of maturity level, the hospitals studied use business intelligence as a crucial factor for their management.

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Chapter 38
Freecycle Applied to Community Tourism: An Approach

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Abstract Planet Earth is undergoing severe climatic changes due to human activities. The carbon footprint increases every year, and the amount of waste produced is reaching alarming values. In a society of consumerism, so many products are disposed in a relatively good condition, being replaced by new ones. The situation is unsustainable. To help facing this scenario, some concepts have evolved over the years, like Freecycle. It is an environmental concept with the mission of "building a worldwide gift-giving movement" that reduces waste, saves precious resources, and eases the burden on landfills, exploring the growing interest in practices that reduce the ecological footprint, allowing members to benefit from the strength of a larger community. However, the current implementations don't fulfill the fundamental essence of Freecycle. This concept can also be applied to community tourism. This paper describes an mobile application' proposal that enables the implementation of the Freecycle concept, allowing people to help others while practicing community tourism and, at the same time, contributing the reduction of the amount of waste produce daily, saving the planet.

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38.1 Introduction

Planet Earth is undergoing severe climatic changes due to human activities. The carbon footprint increases from year to year, reaching unprecedented values. What scientists said that was going to happen in the future is happening now, but with the help of technologies, and what they offer, it is still possible to change this paradigm?

Mobile devices, in particular smartphones, achieved enormous popularity over the past few years due to their great versatility and multifunctionality, conquering, meritoriously, a prominent place in daily lives of the citizens, both personally and professionally.

Freecycle is an explicitly environmental concept, with the mission of "building a worldwide gift-giving movement" that reduces waste, saves precious resources, and eases the burden on landfills, exploring the growing interest in practices that reduce the ecological footprint, allowing members to benefit from the strength of a larger community. However, there is still a major obstacle in the actual mobile application's market related to Freecycle. There is a gap between the models developed by the existing systems and the fundamental essence of Freecycle. In fact, there is not an attractive way that combines the principles of Freecycle and the practical features required for the owners to donate their stuff and strangers to respond to them in a safe and comprehensive way.

This concept can also be applied to community tourism. Actually, through donations, people will be able to practice community tourism while offering clothing, school supplies, and sports, among others.

This paper describes a mobile application' proposal that enables the implementation of the Freecycle concept, allowing people to help others while practicing community tourism. The application is intended to facilitate the communication and interaction between two people who want to discard or receive used items for free, and, when integrated in a community movement, can make people to travel to certain locations (e.g., underdeveloped countries), helping that population while practicing tourism. It is also a paradigm of reducing the consumption of goods and consequently the GHG emissions, protecting the planet [1].

38.2 Freecycle Concept to Combat Climate Changes

This section will describe the global climate changes verified in the last years and the ideas that have been developed to face it, namely the 3Rs policy and the Freecycle concept.

38.2.1 Global Climate Changes

Global climate change already has observable effects on the environment [2–4]. The effects that scientists predicted in the past are now taking place.

According to Quercus [5], the evolution of the quantity of products available on the market and the way they are made available to the consumer caused a significant increase in the production of waste. This growth has led to a wide debate involving various environmental issues associated with the sustainability of the planet, in a scenario in which the increase in consumption is proportionally reflected in the amount of waste that needs to be eliminated [6–8].

The extraction of raw materials from nature has enormous environmental impacts associated, in addition to the high consumption of water and energy involved not only in the extraction phase but also in the transport, transformation, and manufacture of the products.

This trend led, in turn, to a second problem: lack of adequate space for the installation of landfills to eliminate the waste produced, as well as the need to resolve their environmental impacts, namely the production of leachate water and methane, a gas with a high global warming potential.

38.2.2 Reduce, Reuse, and Recycle

A new concept was created to change the way waste was viewed: the 3Rs policy (Reduce, Reuse, and Recycle). The 3Rs policy consists of a set of adopted action measures that are applied and valid for all types of solid, liquid, and gaseous waste/effluents [9, 10].

The first step in solving the waste management problem is to reduce the amount of waste produced. Using creativity, it is possible to use different materials for new functionalities, avoiding the production of waste.

In fact, most of the objects available are non-biodegradable (namely those with plastic), from clothing, furniture, equipment, among others. Living in a highly consumerist society, there are two major problems: The first is how to get rid of so much plastic, knowing that it is extremely harmful to the terrestrial ecosystem and that much of it is sent to landfills and incinerated, creating gas emissions with greenhouse effect (GHG) highly harmful to the ecosystem. And the second problem is that as more waste is disposed; more and more products are produced in order to meet the existing demand.

Actually, in recent years, global climate changes have been one of the most pressing environmental challenges faced by society. The annual CO_2 emissions per capita worldwide increased from 2.2t in 1990 to 7.5t in 2014, with China being the largest producer and consequently the largest emitter of GHG in the world [11].

As one of the main sources of GHG emissions, waste management activities have recently attracted the attention of governments and many researchers. According to the emission reduction experience of some developed countries, waste is the second largest area of research for emission reduction after energy. Therefore, reducing GHG emissions from urban solid waste disposal (MSW) is one of the most effective ways to achieve emission reductions.

According to the United Nations, planet earth is drowning in plastic pollution. Researchers estimate that more than 8.3 billion tons of plastic have been produced since the early 1950s, and about 60% of that plastic ended up in a landfill or the environment. Today, around 300 million tons of plastic waste are produced every year, almost equivalent to the weight of all humanity. If current trends continue, by 2050, the oceans could contain more plastic than fish [12, 13].

38.2.3 The Freecycle Concept

Freecycle is a concept that enables anyone to dispose their used material, whether furniture pieces, kitchen accessories, textile materials, sports equipment, among others, in a responsible way. It allows the reuse of objects by other people, helping the environment by reducing the ecological footprint [14, 15].

There is a high demand for the Freecycle concept, originated by the founder of the Freecycle Network, Deron Beal [16]. This concept consists in the members of the Freecycle Network giving freely and without any reservations or forms of negotiation articles that are still in excellent condition, contributing to the creation of a sense of social/spiritual generosity, as well as strengthening ties in the local community and promoting values like sustainability and reuse.

38.3 Freecycle Applied to Community Tourism

This section explores the potential of technology in the tourism sector, specifically when applied to community tourism.

38.3.1 Technology as a New Way of Communication

Technology has been advancing more and more in recent years, and as a result, communication and interaction becomes faster and more effective, having a global reach. At this level, mobile phones play an increasingly important role in society, no longer just as an extension of the body but also becoming an extension of personality, identity, lifestyle, and social status.

The ease of understanding, intuitive handling and reliability were crucial to boost its use by people, allowing them to reach the number of users found today [17].

Actually, in an era where mobile devices have a great impact on society, companies themselves seek to project their businesses through these means (Uber, Lyft) [18], due to the fact of being able to have a greater proximity to the target audience, providing new ways of communication and business.

In addition, the globalization led to an increasingly competitive world, making it necessary to generate new ideas and modernize and reinvent the way in which services are presented to people.

Thus, mobile applications appear as a new channel to serve people. In fact, these new tools allow people to be able to enjoy, at any time, a panoply of available services which are just a click away. It is a scenario in which mobile computing meets the needs of today's society.

38.3.2 Community Tourism

One of the applicability of the Freecycle concept is community tourism [19–21]. In recent decades, in developing countries, the tourism sector has been immersed in an intense process of strengthening, involving the participation of local communities through the so-called community tourism initiatives, whose main objective is to improve the quality of life of the inhabitants of the host communities, ensuring the subsistence of traditional culture [22–24].

Community tourism is an endogenous alternative to traditional tourism strategies in underdeveloped regions, enabling the creation of specific destinations that allow local communities to generate wealth with a new complementary activity. It is not a replacement for the dominant traditional one; it is a new way of tourism [25, 26]. It can be described as a form of sustainable community-based tourism that aims to meet the needs of residents and current tourists without compromising the needs of future generations living in or visiting the tourist destination. Thus, if applied in a sustainable way, community tourism has the potential to improve the quality of life of residents and, at the same time, optimize local economic benefits, minimizing the adverse effects of tourism, protecting the natural, and built environment and providing an experience of quality to visitors [6, 27–29].

38.3.3 Mobile Application-Based Approach

The proposed approach for Freecycle applied to community tourism is based on the development of a mobile application. The application is intended to facilitate communication and interaction between two or more people who want to offer and receive used items and encourage citizens to use the Freecycle concept based on a shared economy. The authors aim to develop an application that provides security to the service's stakeholders, reducing the waste of products, and GHG emissions emitted by their excessive production, helping at the same time communities with donated items through community tourism practice.

Through the application, users could collect local donations and transport them when doing community tourism. This community tourism with the help of the application could be carried out in two ways: directly or indirectly. Directly would be to visit a country or a village and take donations collected in the application. Indirectly, any user of the application would participate in community tourism through their donations but without physically traveling to the place.

In cases of community tourism in underdeveloped countries, donations could be school materials, sports items, general clothing, among others.

One of the goals is to bring more confidence to donors because they could visualize the use of their donations by the local community, going physically there or through the sharing of images.

38.4 Application Proposal

The technological architecture of the proposed system is described in Fig. 38.1.

Users will use mobile devices (smartphones and/or tablets) with a geolocation system (GPS), as these devices usually already contain embedded web and geolocation systems. In the case of other systems, the technology will pass through external services, namely Web and/or application programming interfaces) (APIs), for the simplicity of implementation and their reliability.

All data packets, before being received by the application server, will go through a security system that will have as main features encrypted sections (OAuth token) for users, security protocols such as TLS to protect HTTPS connections, and firewalls.

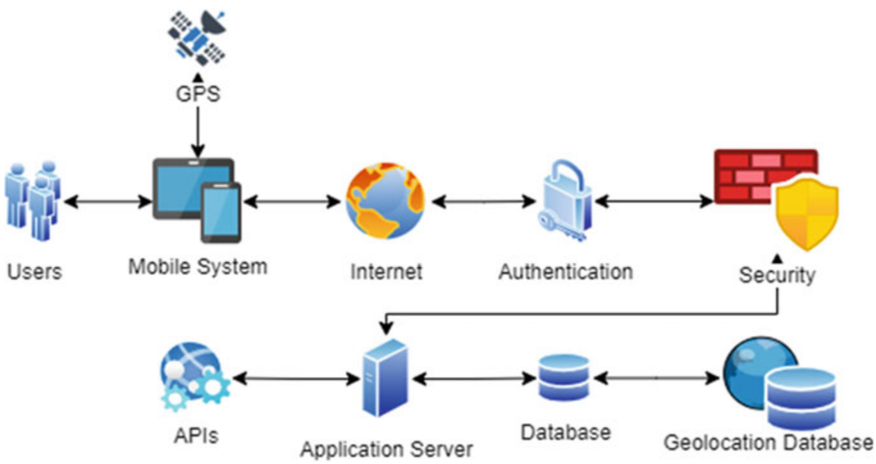

Fig. 38.1 Technological model

The data center will consist of two database groups. One group only for geolocation coordinates and another group for the insertion and reading of data related to users and donations.

Both the server and the data center will be hosted on cloud.

The application is expected to help people who need these items and, at the same time, to reduce the amount of waste produced daily, helping the planet. The solution should contain an attractive layout and simple interaction for users, easing the communication between them. It also aims to make it easier to place images of the articles, offering traceability in every moment, from the first interaction to the delivery and receipt of the articles, allowing users to do an evaluation of the service in order to create a safe environment for donations.

38.5 Conclusion

Global climate change already has observable effects on the environment, and the effects that scientists have predicted in the past that would result from it are now taking place. Glaciers have shrunk; ice on rivers and lakes is quickly thawing; plant and animal diversity has reduced, and trees are flowering early. There is also an accelerated rise in sea level and more intense heat waves.

Scientists believe that global temperatures will continue to rise in the coming decades, mainly due to GHGs produced by human activities. The Intergovernmental Panel on Climate Change (IPCC), which includes more than 1300 scientists from the United States and abroad, predicts a temperature rise of 1.4–5.5 °C over the next century.

The global climate is expected to continue to change throughout this century and beyond [30]. The magnitude of climate change in the coming decades depends mainly on the amount of heat-trapping gases emitted globally and how sensitive the Earth's climate is to these emissions.

According to the IPCC [31], the extent of the effects of climate change in individual regions will vary over time, according to the capacity of different social and environmental systems to mitigate and adapt to changes.

Following this line of thought, and as the main motivation for carrying out this work, the suggested application results in the adoption of a new solution to reduce the levels of greenhouse gas emissions caused by the excessive production of goods, as well as the possibility of using donations in the practice of community tourism.

With the development of this application, it is intended to facilitate communication and interaction between two or more people who want to offer and receive used items and encourage citizens to use the Freecycle concept based on a shared economy. The proposed application will provide security to the service's stakeholders, reduce the waste of products, and GHG emissions emitted by its excessive production, helping communities with donated items through community tourism practice. When integrated in a community movement, the application will allow people to offer items, helping the local population. The help of the application could be carried out in two ways: directly or indirectly. Directly would be to visit a country or a village and take donations collected in the application. Indirectly, any user of the application would participate in community tourism through their donations but without physically traveling to the place.

The initial part of the project consisted in the study of the actual needs in this respect, as well as the study of the existing applications available. It allowed to identify their weaknesses and the potential problems to solve.

The next step was the definition of the system and the selection of the technologies better suited to implement it.

The initial reception of the idea by the society was good, emphasizing the importance of a system like the proposed in this paper to help solving the environmental issues the world face nowadays, more specifically related with the excess of products created to replace other ones that still in good shape.

The next stages will be the fully implementation of the system, which will promote the communication among people, allowing the application of the Freecycle concept to community tourism, permitting people to travel while helping other people in need and the planet itself.

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Chapter 39
The Application of a Generational Approach to the Marketing Management of Gerês-Xurés Cross-Border Park (Portugal and Spain)

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Abstract The purpose of this study is to understand the importance of the application of generational marketing tools to generational groups visiting Gerês-Xurés cross-border Park (Portugal and Spain), considering their natural values, the specific consumer behavior giving insights about the most effective marketing tools for natural parks tourism destination promotion. The study adds value to the existing literature on the theory of generational marketing because it assesses its applicability to the concrete case of cross-border parks (an area that stills little explored from the conceptual point of view and the application of specific marketing techniques adapted to this type of concrete reality). As a result of the study, it was found that considering marketing activities of the entities involved in the cross-border park promotion as a nature destination are used a combination of tools of both online and offline marketing, for generations baby boomers, generation X, Y, Z and Alpha with an emphasis on experience marketing that contributes to a growth in visitors to the Gerês-Xurés cross-border Park.

39.1 Introduction

Considering the increasing competition between tourism destinations and the growing uncertainty due to the dynamism and instability of the modern market environment (example: Covid-19 pandemic crisis), marketing plays a growing strategic role for public entities and companies involved in the promotion of nature destinations. Due to the increasing external environmental challenges, marketing managers also have to deal with new factors influencing consumer preferences and demand [1]. There is a claim for new and innovative approaches in the management of marketing

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activities [2, 3] that consider the different interests, perceptions and receptivity of several generations like X, Y and Z generations. This will be the only way enterprises have to ensure the effectiveness of marketing tools particularly in the case of the reality of national parks. Tourism in Portugal can be considered a strategic economic activity for the country's development. Its growth is associated with the increase in the number of destinations and their diversification, whether through changes in organizations or generations, which are increasingly informed so that nature tourism is seen as an opportunity for change. The pandemic crisis caused by Covid-19 further accentuates this trend and hence the importance of integrating studies such as this one in the literature. Tourism, particularly in the northern region of Portugal and Galicia (Spain), is quite diversified in terms of landscape, with good communication routes, a qualified network of science and technology equipment and multiple tourist attractions, including protected natural areas whose size and biodiversity are particularly prominent.

Technology continues to impact the tourism industry. Through it, the connection of the sustainable perspective with the intelligent use of resources, reaching the development of tourism, emerges [4]. Generational marketing, related to the most varied types of marketing, likewise relates to certain groups that were born at the same time [2, 3], grew up with access to the same products and services, with the same mentality. These generational novelties come with a new mentality, willing to learn, open to change for a better world, more developed in technological and scientific terms, with more innovation, more production and better distribution, ready to make commitments. It should be noted that in 2017, Portugal received more than three times the international awards for various categories of the tourism sector, with emphasis on the World Travel Awards for "Best Tourist Destination in the World 2017". Portugal has always been promoted, in tourist terms, as a country of sun, sea and beaches, and all its tourist development was concentrated on these attractions in detriment of inland tourism and the tourist values in which these regions are abundant such as thermals, culture, gastronomy, landscapes, mountains, natural parks and heritage elements like castles, shrines, churches, museums and various monuments. It also offers other attractions: leisure, hunting, fishing and rivers.

This article contributes to the understanding of the importance of the application of generational marketing tools for generational groups visiting Gerês-Xurés cross-border Park in Portugal and Spain, considering their values and specific interests. There is some literature in X, Y and Z generation but there is a scant literature theory about its receptiveness to marketing techniques mainly in the case of national parks promotion as nature destinations or even cross-border parks. Marketing managers need to develop specific marketing communications for each of these generational groups in order to ensure the right strategies for marketing to them.

39.2 Literature Review

It is important to seek to know the generations, their needs, and what their expectations are, that is, which marketing practices can promote tourists' loyalty [5]. As generations have their expectations, experiences, lifestyles and values, marketing seeks to identify customers through relationship actions that can reach those differences [5]. The goal of generational marketing in tourism is to discover the characteristics that most arouse the need to apply to the service/product, develop deep and lasting relationships with all people and organizations [2, 6, 7].

Generational marketing according to each generation has a group of individuals who were born and lived at the same time, among the different existing generational groups (Baby Boomers, Generation X, Generation Y or Millennials, Generation Z and Alpha generation), it is worth saying that the generational marketing is related to all types of marketing, whether social, relationship, communicational, commercial, business, territorial, each type covers various knowledge and develops campaigns according to the needs of consumers, and go adjusting according to a certain time [8]. In generational marketing there is a lack of precision in the literature regarding Generation Z [3]. On the other hand, we found several studies comparing older generations. With the appearance of a new generation, the younger group acquires characteristics typical of one historical and social period of time. It's important to use different marketing communication vehicles to appeal to the overarching characteristics of each generation [2].

Each generation presents specifics habits, it's not a monolithic group of people with the same standardization [2], but we can identify a group with similar styles and characteristics based on the circumstances in which each cohort is inserted. In addition, different generations have unique preferences and interests that should be taken into account while defining the company's marketing strategies.

Seeking to understand the complexity related to each age group, and the role in the process related to the professional field, a study was carried out on the omnipresence of generations, that is, the ability to be everywhere at the same time [9]. There are some myths about generations and generational differences [9], and themes relevant to the development of research, were unveiled in order to inspire researchers and professionals about generational thinking: (a) The questioning of the generational theory; (b) Generational clarification is not evident and are summarized in the literature; (c) Generational stereotype and age ranges vary considerably among researchers; (d) The study of generations is not simple, isolating the effects in terms of age, period and group; (e) Differences between generations and their effects cannot be revealed by statistical models; (f) There is no need to manage generations in the professional field, (g) Younger generations are not to blame for changes in the professional environment; (h) Generations unveil the changing nature of society by being deterministic; (i) Age-only research is not the solution to studying generations; (j) Exposure about generations is not benign and fosters social prejudice toward people of specific ages. Age-related labels link an individual to a specific generational group, according to social changes throughout history, marked by their values

[10]. The research was based, in addition to other authors, on the Strauss-Howe Generational Theory [10]. The Strauss-Howe Generational Theory was created by two authors (William Strauss and Neil Howe), popularizing the theme in the 1990s in the United States of America. According to this theory, generations were indicated in peculiar groups of behavior and each group goes through historical cycles that echo with each cycle: The High, The Awakening, The Unraveling and The Crisis. Each historical cycle takes from 80 to 90 years and the four-generation archetypes reproduce—continually. This entire generational explanation justifies conflicts and political decisions over the years in the US state [11]. Over the years, and with the advancement of technologies, marketing has segmented, the market has been directed toward a better strategic plan for companies, adjusting generational specificities, according to the generation that they want to captivate [2]. Generational marketing presents practices that change the lives of communities, generations and tourists, who are increasingly aware and informed.

There isn't a consensus in the literature about the types of generations to be considered and the range of years that they include but the main tendency is to consider:

(a) *Generation "Baby Boomers" also categorized as Generation W (1946–1964)* whose main characteristics are: freedom of expression, peaceful movements like the hippie culture of the years 1960–1970, time with the family are the main motivations, they value health and food, conservative and loyal and large increase in the birth rate. The best marketing techniques for this generation are: quick solutions offer, social networks, internet (but they prefer to shop in a physical store), face-to-face contact or if not, they use the phone [12–15].

(b) *Generation X or Post Boomers (1960–1980)*: Generation X was disappearing and is indicated as a forgotten Generation, positioned between Baby Boomers and Millennials, this population is marked by travelers, loyal to the brands and connected. They are the first generation to have computers at home, there are some on Instagram, but most have Facebook, the physical store is no longer as important as it was for their parents, and older brothers, they are digital immigrants [12, 14, 16].

(c) *Generation Y or Millennial (1980–2000)*: today they are of legal age, some are already parents, they are the internet generation, very related to technologies, prefer to personalize their experiences and control their options at the lowest cost, they like to travel and reach everywhere. They are most concerned about current problems, due to growing up in a time of many and rapid changes, with huge computers at home and in schools, wise for their age, were born in a technological, electronic society, in the age of globalization, they fear nothing, they are independent and autonomous. Social networks are their preferences, they are open-minded, optimistic, goal-setting and highly motivated concerning their perceptions of success [14, 15]. In terms of platforms, we find both on Instagram and Facebook and also YouTube. It's the first generation to acquire products and services, after a good online review on platforms such as Trip Advisor and Facebook [14, 15]. This generation has its characteristics and is transforming the tourism industry, traveling to discover new cultures, choosing destinations based on recommendations from family and friends, seeking travel information on mobile devices, searching various websites before booking, looking for the best price, share vacation photos/videos on social media, use Facebook, have been at the forefront of the tourism industry for a few years now [17].

(d) *Generation Z (1990–2010)*: they like to travel and see the world, have zero-tolerance, are immediate and trust friends' opinions more than advertising campaigns. They are familiar with the internet and technological developments; skeptical of traditional marketing, this one already annoys them, Instagram and YouTube are the platforms of choice, they prefer products and services advertised by their influencers to platforms like Trip Advisor [3].

(e) *Generation Alpha (from 2010 up to present)*: firstborn in the twenty-first century, 100% digital, they cannot shop yet, due to their age but they dictate the rules of the digital future. Young people from the internet generation, using tablets, smartphones and note- books [18].

39.3 Methodology

In this study exploratory and qualitative research was developed using content analysis to identify types of communication patterns and also interviews. The content analysis was taken to analyze all available data like the communication plan to Gerês-Xurês cross-border Park, news, posts in social networks and press releases (from June 2020 to June 2021). A semi-structured interview was taken in July 21 with the CEO of ADERE-PG the public organization responsible for the communication planning about the park that worked with IPDT for planning development as well as other entities like deputation of Ourense. Considering these qualitative research categories or "codes" were considered for the interview and then analyzed the results. The categories considered were: (C1) the communication strategy adopted, (C2) techniques to reach different generations, and (C3) the impact of communication.

39.4 Discussion

The Peneda-Gerês National Park presents itself as the first protected area to be created in Portugal (1971), by Decree-Law nº 187/71 of 8 May [19], being the only one classified as "National Park", with attractions for tourists who seek nature tourism offering them a unique natural and landscaped space. Located in the north of Portugal, close to the Spanish border, namely, with the border of Galicia, which forms a continuous landscape with the Natural Park of Baixa Limia-Serra do Xurés, in the Municipality of Lóbios, in Spain. The two parks together form the Gerês-Xurés cross-border Park [20]. The Gerês-Xurés cross-border Park is characterized by being an area where there are enough samples that exhibit the characteristics of the region, in terms of natural and humanized landscapes, elements of biodiversity and natural sites, with scientific, eco- logical or educational value, encompassing a territory that it is part of the areas of influence of the rivers Minho, Lima, Cávado and Homem, with emphasis on the different mountains: Serra da Peneda, defined by the rivers Minho, river Lima; Serra Amarela, defined by the Lima and Homem rivers; and the Gerês mountains, defined by the Homem and Cávado rivers. The Portuguese part of the Gerês-Xurés cross-border Park has "Doors" that represent a support point to visitors, whose creation started in 2004: Lamas de Mouro Door; Door of Mezio; Lindoso's Door; Gerês Door; Paradela Door; Vidoeiro Environmental Education Center. The Portuguese part of the park is supported by a development association that was born in 1993 (ADERE), it is a private non-profit entity that concentrates its activity in the five municipalities of the region covered by the Peneda-Gerês National Park. Its mission is to develop and help resident populations and, in the enhancement, and conservation of the built heritage, and support visitors and tourists with the right promotion of the park. Gerês-Xurés cross-border Park is a brand that represents the region with its identity, with a well-structured strategy, such as a product/service, placement in the market that gives its visibility, with good and well-placed marketing strategies [21]. The region presents the visitor experiences, as well as natural resources, and the continuity of the community's culture ensuring that sustainable tourism does not have adverse impacts on the culture, and on the community, as the local community is important in tourism planning and management.

The Gerês-Xurês cross-border Park stands out for being among the 21 UNESCO cross-border Biosphere Reserves in the World, with two protected parks: Peneda-Gerês National Park and Baixa Limia-Serra do Xurés Natural Park, with 260 thousand hectares of area, it has immense biodiversity. The differentiating factors of Gerês-Xurês Transfrontier Park are its natural and cultural heritage and concern for sustainability (at an environmental and social level) and also take advantage of the cooperation between municipalities creating development strategies between the community and local municipalities. Considering this, it represents an important tourism destination and is also considered an international UNESCO Biosphere Natural Reserve with high notoriety concerning to tourism and nature with an autonomous brand. It also integrates the European Charter for Sustainable Tourism and has European and national financial support to implement actions integrated into the Action Plans for the Transboundary Biosphere. The Biosphere reserve claims for a stronger communication among the general population and better identification of ecologically sensitive areas and, despite the communication being present on the Website, Instagram, Facebook, YouTube, Twitter and Pinterest, continue to be boosted by the CCDR-N.

Concerning its strategic product such as Nature Tourism, it has an active and contemplative nature, and the official entities try to communicate with the following strategic markets like Portugal and Spain, France, Germany and the United Kingdom. Complementary products include History and Culture, Gastronomy and Wines, Health and Well-being and Nautical Tourism. Still, as secondary markets, we find countries like Holland, the USA and Brazil. The Brand of the Park reveals a commitment between what is tangible as the two symbols, the leaf, as a symbol of nature present throughout the territory, and the real eagle, a symbol of the immense biodiversity existing in the Biosphere Reserve.

Considering the interview conducted to the ADERE-PG the following coding scheme was used with the definition of seven main categories: (C1) the communication strategy adopted, (C2) techniques to reach different generations, and (C3) the impact of communication.

Regarding the communication strategy adopted (C1) by the Gerês-Xurés cross-border Park, it was possible to understand that there is an attempt for cooperation and an integrated communication plan developed with the help of IPDT for local entities (Portuguese and Spanish) like ADERE-PG, all the municipalities that have territory integrated into the park, Deputacion de Ourense, Tourism of Galiza, Tourism of Porto and Northern Portugal, CCDR-N and ARDAL but there is a claim for deeper cooperation and more integrated strategies.

The main communication objectives for the Biosphere Reserve are: (a) communicate to the tourist market the existence of a cross-border destination, associated with the UNESCO brand, with a unique offer in terms of natural and cultural heritage; (b) promote the Gerês-Xurês Transfrontier Park destination, with the market segments most interested in consuming; (c) promote strategic location and proximity to routes with good airplane access—Porto, Ourense and Vigo; (d) explain to the general public the concept of a Biosphere Reserve; (e) inform and explain that the Reserve contains two classified parks of enormous heritage value; (f) involve institutional and private partners in the various actions of the Communication Plan; (g) promote the UNESCO Biosphere Reserve Brand; (h) communicate to the local population, visitors, economic agents and potential investors the importance of a Biosphere Reserve; (i) standardize the communication strategy, including training actions, in order to harmonize the information with the respective strategy for the destination Portugal and the destination Porto and North of Portugal; (j) involve the public in the destination's communication strategy (entrepreneurs from all subsectors of tourism—accommodation, catering, entertainment and transport); (k) communicate to investors the benefits and recognition of the UNESCO Brand in the tourism market, as well as the local population; (l) communicate to visitors the importance of the elements that differentiate the destination, in different communication channels, such as: digital channels, Famtrips and Presstrips, fairs, events, congresses, advertising, signage and promotional/merchandising materials.

The Messages used in the communication of the Gerês-Xurês cross-border Park must be appealing and attractive for the population to understand the importance of Heritage Protection, the relevance of "One Destination, Two Countries", the resources that unite Portugal and Spain, with the Biosphere Reserve, the UNESCO Brand, must also used for promotional purposes.

As for the implementation of Marketing Techniques (C2), they have short-term, short/medium-term or long-term planned actions, depending on the type of advertising to be applied (outdoor advertising, merchandising, signage, digital presence, or others). Until now they have merchandising and outdoors (this is interesting to communicate with baby boomer's generation) and also posts in social networks mainly in Facebook (interesting to communicate with generation X). It was found that they adopt diverse signage such as welcome panels, Portuguese Road signaling signs, 3-level counter display in micro-corrugated cardboard, diverse merchandising, famtrips (with press), events, fairs, radio and TV. Tourism of Porto and Northern Portugal and the Galician Tourism organization prepared also a map for the Gerês-Xurês cross-border park, to publicize relevant places of interest, as well as visits. There are also some printed publications in the written press like National Geographic. With Baby Boomers, the Gerês- Xurés cross-border park maintains an active website and social media presence and uses images that show people in the boomer age group. All of these are good channels to reach the baby boomers generation.

Generation X to be more achieved requires a detailed and more informative website with a focus on specific benefits.

For the millennial generation, the Gerês-Xurés cross-border park prepares posts with interesting images on social media and the municipalities' social media share reviews and tag tourists. They could develop also some programs connected with the support of causes and charities because this generation is sensitive to this kind of issue. They still don't have Instagram or YouTube which represents a difficulty to establish communication with Generation Y or Millennial and also with Generation Z.

However, the Gerês-Xurês cross-border park has a strong project connected with communication to reinforce this lack like strong digital marketing to reinforce the reputation of the destination through channels such as tourism website, Google Networks, e-Mail marketing, advertising, YouTube, Facebook and Instagram, Bloggers, with permanent moments of communication between the product and the market. Digital marketing campaigns will thus integrate several platforms, will be aimed at segments that they want to reach, for example, choose the destination according to the vacation period. The content at the destination's digital communication dynamization will be carried out using images and videos that will be collected and edited. Influencers are used by the Municipalities in current times of pandemic and many came to the territory of the Gerês-Xurés cross-border park with negative and positive points, attracting generations Y and Z, very young people.

Finally, taking into account the targeted markets, as well as new trends in tourism and marketing, the Gerês-Xurês communication impact (C3) is interesting for some generations like baby boomers, millennials and generation X but still weak and needs more development for generation Z and Alpha. The communication developed impacts baby boomers, Generation X (more connected with Facebook). Millennials, Generation Z and Alpha are the ones that claim more attention but there are already some initiatives with influencers and Instagram. However, they have a written communication plan that will be implemented in the next years in order to achieve this targeted audience.

39.5 Conclusion

Among travelers, we cannot ignore the existence of different generations. Travel and tourism marketing needs to coordinate the execution of business policies by both private or public sector tourism organizations operating at the local, regional, national, or international level to achieve the different generations. Understanding the audience and its characteristics before developing different advertising methods will save time and money and help marketing managers to attract the customers they're looking for.

With this investigation we were able to conclude that the communication of the Gerês-Xurês cross-border Park tries to achieve the attention and satisfaction of the needs of identifiable tourist groups from different generations, and in doing so, to achieve an appropriate return to the tourism in the region. This article gives an important contribute to the understanding of the importance of application of generational marketing in natural areas and is possible to conclude the positive effect of considering in marketing activities of the entities involved in the cross-border park promotion a combination of tools of both online and offline marketing, for generations baby boomers, generation X, Y, Z and Alpha with an emphasis on experience marketing that contributes to a growth in visitors to the Gerês-Xurés cross-border Park.

However, there is a lack of higher coordination of communication actions and a unique entity responsible for the Communication of the Gerês-Xurês cross-border Park. However, Digital Marketing works have already been carried out by CCDR North, ADERE, Deputation of Ourense and the municipalities with workshops, with Municipalities and with local agents, to promote the region and how to use communication channels. It was also found that digital marketing is still not able to sufficiently reach Generation Z and Alpha, but it has been able to assertively reach the information shared on social networks by influencers and tourist entertainment companies that also invest heavily in promotion and in the dissemination of the activities they do. Generations like baby boomers, generation X, millennials, generation Z and Alpha have distinct interests and the entities involved in the Gerês-Xurês cross-border Park promotion have this present in their communication actions and are still developing communication planning actions in order to improve even more this objective.

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Chapter 40
The Changing Face of Events After COVID-19: Initial Reactions and Future Perspectives

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Abstract The COVID-19 health crisis has significantly impacted the tourism and events industries, having prompted different responses from stakeholders and decision-makers. Focusing on the initial response from event managers and drawing from their perceptions, this paper outlines the dimensions considered to have been more directly affected by the crisis, analyzing how they shaped event managers' outlook on the future. In order to provide a comprehensive view, researchers carried out six interviews, having resorted to purposive sampling, as to collect data from managers working with social, corporate, and cultural events. Overall, Operations, Human Resources, and Decision-making stood out as the most relevant dimensions, mostly stemming from the need to act quickly when faced with this unforeseen situation, having had a short- and medium-term impact on recovery prospects. Together with Health and Safety and Customer Relationship Management, these dimensions are expected to play an important role in shaping the future of events, as, in addition

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to changes regarding the dimension, format, and sustainability, managers anticipate a shift in peoples' behavior and expectations, which will ultimately affect their experience, calling for different approaches and strategies.

40.1 Introduction

Having caused a major impact in economies and markets worldwide, the COVID-19 pandemic has significantly affected the events industry, which is currently struggling to recover from an unprecedented crisis. Following successive cancelations and postponements, event managers resorted to governmental aid and technology as ways of minimizing the impacts felt on day-to-day operations and business sustainability.

Aiming to understand the unique situation the events industry is currently facing and how it was initially perceived by event managers, as well as project the future, this paper draws from recent research on the impacts of COVID-19 on the tourism and events industry, collecting first-hand impressions from the field. As a result, following a background section outlining the most significant impacts of the pandemics in the sector, with an emphasis on Portugal, the authors set out to interview six event managers, as to determine their perceptions on the effects and future implications of the pandemic for their areas of activity. Relying on a purposive sample, a qualitative approach was used in order to establish key dimensions that were analysed and ranked according to their relevance and recurrence. Part of a comprehensive, cross-disciplinary research project covering different sectors of the tourist activity, the results are provisional and segmented, paving the way for future analyses that will further contribute to the ongoing reflection and discussion regarding the pandemic and ensuing recovery, as will be described in the last section.

40.2 Background

The COVID-19 pandemic has had an overall profound economic and social impact, having originated what some sectors, including hospitality and tourism, have deemed to be an unprecedented global disaster [1]. In the case of the events industry, the effects of this sanitary crisis were particularly detrimental [2–4], as most of the restrictions introduced relied on social distancing and limiting the number of attendees at public and private gatherings, thus resulting in worldwide cancelation of several initiatives and activities, ranging from small-scale, local events to mega events [5], regardless of their nature (e.g., corporate, religious, sports, and/or geopolitical) [6].

Even though most initial concerns were focused on mass events, as they were considered to have the potential to "amplify the transmission of the virus and potentially disrupt the host country's response capacity" [7], the cancelation and/or postponement of all types of events "has become the new normal" [4], having had a direct impact on the survival of the industry.

In addition to significant financial losses [4, 8–10] and workforce reduction [8, 9, 11], the cancelation or putting off of events has also affected associated businesses, namely transportation, accommodation, restaurants, and catering [8]. The interdependence of these sectors, together with the tremendous impact of the tourism and events industry on local communities, namely on promoting economic and societal development and growth [12, 13], make it hard to estimate the actual repercussion on the crisis, with researchers expecting it to have a long-lasting, structural effects [3, 14].

Nevertheless, and as shown by research focusing on previous crises, crisis planning and crisis management strategies [15, 16], creativity and innovation [17], implementing Health and Safety procedures [16], together with governmental support [4, 17] and "community-based, bottom-up approaches" [15], can help mitigate some of these difficulties. In fact, a recent framework developed by Miles and Shipway [15] focusing on international sporting events, has identified key themes that can help prioritize and design future action as to reinforce the events industry's resilience, namely: (1) criticality of venue resilience—highlighting the importance of effective multiagency cooperation and emergency planning; (2) risk perceptions—through hazard and risk identification and the use of risk reduction agendas, (3) social, community, and individual resilience—dealing with public perception and willingness to attend different events (4) crowd management and control (5) cascading disasters (6) private and public partnerships—referring to synergies and the wide-ranging effects of crises (7) crisis communication—addressing the issue of reputational risk and its potential long-lasting negative effects, and (8) simulating disaster scenarios—in order to anticipate possible issues and being able to react promptly and assertively [15, 16]. However, given the unparalleled nature of the current situation, there are no clear answers, making it necessary to carry out further studies documenting the industry's reactions on the road to recovery.

Apart from economic repercussions, whose effects were felt instantly, having prompted an immediate response from stakeholders, the pandemic has also resulted in a general lack of confidence from the public, with event attendees becoming more withdrawn and less willing of taking part in onsite gatherings [4]. These new concerns and behavioural patterns, as well as the need to keep the industry afloat, have resulted in the need to adapt, rethink, and redesign traditional events and experiences [3, 18], so as to not only meet Health and Safety and social distancing requirements [12], but also implement sustainability strategies and methods [19], which, paired with technology, emerge as the most significant trends within the scope [3, 9].

Despite questions surrounding their long-term viability and attractiveness [3, 9], virtual events are expected to become a new normal [20], as they will increasingly coexist and complement different types of events, paving the way for hybrid models. This shift will be instrumental in fending off uncertainty [21], as it makes it possible to reduce onsite physical interaction and contact [3].

Considering the global outreach of the pandemic, the Portuguese event industry is currently struggling to survive. Recent national studies and reports describe the situation as challenging, not only for small companies currently facing foreclosure, but for the sector as a whole, with about 70% of companies having resorted to some type of governmental support over the last year [4, 11]. Amply recognized in the literature, this financial support translated in "a series of measures aiming to maintain jobs, securing a support in terms of liquidity" [22], including financial aid, tax reliefs, layoff, and telecommuting.

40.3 Methodology

The methodological design of this ongoing, exploratory study was based on its research goals, specifically the contributions toward a broader understanding of event managers' perceptions on the impacts of the COVID-19 crisis, concerning their initial response and future trends. Prior to the interviews, researchers carried out a literature review focusing on the effects of the sanitary crisis on the events industry, having identified systemic dimensions and categories. In addition to providing a snapshot of the current state of the sector, this preparatory research supported both the development of the interview scripts and the ensuing analysis, making it possible to draw preliminary conclusions and establish further categories and research directions.

In total, six semi-structured interviews were carried out with different managers from event companies operating on different areas, most specifically, with social, cultural, and corporate events. The sample included participants from both public and private enterprises, operating within different scopes and regions. In compliance with ongoing restrictions, the 30–40-min interviews were conducted over Zoom, having taken place in May and June 2021.

40.3.1 Participants' Profile

As seen in Table 40.1, this study involved 6 differently scaled companies (2 focused on social events, 2 on cultural events, and 2 on corporate events), employing between 2 and 95 people. Three of the selected companies operate in local and regional markets and 3 work at both national and international levels. The interviewees have between

Table 40.1 Participant characterization: typology, market, number of staff and years of experience

Interviewee	Type of events	Market	Staff	Years of experience
I1	Social	National/international	65–95	11
I2	Corporate	National/international	4–5	20
I3	Cultural	Local/regional	10	13
I4	Cultural	Local/regional	5	10
I5	Corporate	National/international	10–15	10
I6	Social	Local/regional	2	17

10 and 20 years of experience in the event sector and academic qualifications and specific training in this field.

The headquarters of the 6 companies are located within continental Portugal, 3 in metropolitan areas, namely Lisbon and Porto, and 3 in the differently sized urban areas in the north of Portugal. Regarding closure periods, considering the declaration of the state of emergency in the country (on March 18, 2020) only mandated the closure of companies specializing in social events, most companies remained open, operating mostly online.

40.3.2 Data Collection and Analysis

Based on the research goals and literature review, the script for the interviews focused on the following topics: (1) general perceptions and initial concerns about the pandemic's effects on event organizers; (2) crisis management strategies implemented and their perceived impact; (3) overall perceptions regarding managers' learning journey; and (4) their insights on the future of the sector.

Following the interviews, the transcripts were imported into a web qualitative data analysis software (webQDA), designed to work with non-numerical and non-structured data in order to code, classify, and cross-reference different information segments according to different matrixes [23].

The research goals and literature review made it possible to identify 4 primary categories, namely Operations, Human Resources, Decision-Making (that were grouped into one macro dimension—Crisis Management/Response) and the Future of Events, according to which the transcripts were initially coded. Upon further analysis, following the identification of recurring messages and most prominent topics, the previously defined categories were divided into subcategories (Table 40.2), which were subsequently cross-referenced with the literature review to ensure consistency. The analysis and respective coding were conducted by the authors, benefiting from the multidisciplinary nature of their academic background and research areas.

Given the preliminary nature of the data, the current paper focuses on the two most representative dimensions, namely Crisis Management/Response and the Future of Events, aiming to establish the grounds for a comprehensive study addressing the

Table 40.2 Coding dimensions and ensuing subcategories

Dimensions	Subcategories
Crisis management/response	Health and safety; Operations; Marketing and Sales; Human resources; CRM—Customer relationship Management; Sustainability; Community involvement; Participants' Experience; Corporation and Stakeholders' Engagement; Decision-making
The future of events	Events typology; Events recovery; Events sustainability; Stakeholder cooperation; Habits/behaviours

impact of COVID-19 on different sectors of the tourism industry, drawing from the managers' perceptions.

40.4 Findings

Globally, 154 references were coded within these dimensions, with those relating to the management of the COVID-19 crisis accounting for 69.5%, while references on the future of events accounted for 30.5%. Considering the Crisis Management/Response dimension, the three categories in which the highest number of references were recorded were "Operations" ($n = 33$), "Decision-making" ($n = 17$) and "Human Resources" ($n = 15$). Considering the Future dimension, the three categories in which the highest number of references were recorded were "Events Typology" ($n = 20$), "Events Recovery" ($n = 14$), and "Events Sustainability" ($n = 6$).

40.4.1 Crisis Management/Response

When referring to their initial reaction to the crisis (Crisis Management/Response), all interviewees made references to their companies' operations, having highlighted the importance of ensuring economic sustainability, specifically considering the fixed costs they had to support, the cancelation/management of leases and management of raw materials stocks—"*The first concern was how we were going to deal with the fixed charges. (…) Next there was the issue of leases, what were we going to do (…) how were we going to negotiate them and reduce costs. The third was the issue of raw materials, which was the most critical.*" (I1). The strategies implemented implied negotiating with suppliers and official bodies, regarding expiration dates, for example. As mentioned by I1: *"The only thing that we managed to do, in some specific cases, was, and with the authorization of ASAE*[1] *and the suppliers themselves, was to extend the expiration date of some products [particularly] for products with a shorter shelf life. In exceptional cases, the supplier, in articulation with ASAE, carried out a market study that made it possible to use some products past their shelf life.*"

In addition to these immediate concerns and reactions, there was also the need to postpone or adapt scheduled events, namely, in terms of format, with event managers having to decide whether to hold virtual or hybrid events—"*We immediately realized that it was not going to be possible, and we tried to understand how we could minimize the fact that there would be no events.*" (I3)—with the question of incurred costs arising as a key concern—"*When we cancel (…) a lot of investment has already been made [and] there is no return. I think this was the worst part (…) the money*

[1] ASAE—Autoridade para a Segurança Alimentar e Económica (Portuguese Economic and Food Safety Authority).

that has been invested could not be recovered, and there was still a great effort on our part." (I5).

The interviewees consider that no one was prepared for this type of crisis, which implied a change in procedures and mindsets—"*We had to relearn [everything], from having different entrances and exits, to how to be in spaces, without coming into contact with each other.*" (I4); "*In the events sector some of the services have evolved in an amazing way.* (…) *Basically, it was [about] (…) converting and developing an organizational culture of adaptation to a way of working, in which we are not physically present, but we managed to maintain the motivation and work pace, [even though] it was more difficult to get answers [from suppliers].*" (I2).

Other operational impacts and adaptations mentioned by the interviewees included the size and format of events. In terms of size, events become smaller—"*they have reduced in size and that has forced us to make a big adjustment.*" (I1), whereas when it comes to format the focal point was the shift toward online virtual events—"*The big transition will have been the migration an online format.*" (I4); "*I believe that, in fact, in 2020, the focus was virtual [events], everything we could do was to adapt to the virtual [format] and also make it interesting (…) in terms of keeping people interested and focused on the contents being shared needed. It required creativity and engagement from everyone.*" (I5) These changes affected the way event organizers worked and managed venues and workspaces—*"It is evident that during this time of the pandemic an event space that would normally have a capacity of 500 was limited to 150, so it became more important to have spaces that allowed for this physical distancing between people and to create circuits that prevented contact.*" (I2); "*[For us] it was not usual to telework. (…) Not everyone had a laptop, so the first reaction was to ensure that we had the minimum conditions. We had to (…) set up mini [home] offices so that we could remain active and (…) see what was going on, what we could do (…) it was no longer a question of day-to-day or not, we had to cancel, we didn't want to risk it.*" (I5).

Another difficulty mentioned has to do with the public's trust and willingness to attend events—"*It's not very easy to bring the public back to the venues. People are a little afraid, habits have been lost and the fact that we have to change showtimes doesn't make it any easier. We don't have the habit of having shows at the end of the day, for example, as other European cities have (…). But we had to change.*" (I4).

The topics of uncertainty and fear were also relevant in the decision-making dimension, with interviewees referring to their initial shock: "*Fear is a feeling that numbs and paralyses us, in a certain way. The greatest drama during this whole process is the enormous uncertainty in which we live and, the immense difficulty that decision makers have in moving forward with organizing any kind of event (…) No one wants to take the initiative to move forward with the production or holding of an event having the notion that this could constitute a risk for public health.*"(I2).

Considering the Crisis Management/Response dimension, the third highest ranking category was Human Resources, specifically what could be done to maintain jobs and keep teams motivated—"*The first thing was human resources, what needed to be done and what support we had, how we were going to do it, because if we closed down, there were legal issues. Closures implied the suspension of contracts.*"

(I1); "*Fundamentally, we should stay, as a team, without COVID. Because that would raise a lot of problems in relation to what we wanted to do, which was online programming*" (I4); "*the first reaction, the first measures to be taken are basically to maintain a certain cohesion in the team, to reorganize the work in virtual terms, in digital terms, i.e., to keep the whole team working.*" (I2). Teamwork is considered a key element, even though, opinions differ as to effectiveness of telecommuting, particularly within this scope—*"I think that in all these months, the most important thing for us was the connection between everyone and the ties that were created, which are very important and that allowed us to move forward.*" (I4); *before it was easy to exchange ideas or doubts with each other, [Now] that was lost! That teamwork, it was lost!*" (I3).

Moreover, the relevance of eventual, temporary workers (contracted on an outsourcing basis) and the difficulty in maintaining staff turnover was also established—"*In the case of casual workers (about 98%) (…)[they] had access to unemployment benefits and were protected. [However], now that I need them, some prefer not to come back. There will have to be a moment here when the state will have to say it's over*." (I1).

40.4.2 The Future of Events

Regarding the Future of Events, the three most referred categories were "Events Typology" ($n = 20$), "Events Recovery" ($n = 14$), and "Events Sustainability" ($n = 6$). Concerning events typology, this category considered aspects such as the dimension and the format of the event, as well as the participants' experience.

Regarding dimension, interviewees consider that in the future, events will tend to be smaller, which will have an impact on the tourism sector's economy and in the type and timing of events, with hybrid events becoming the norm—"*This reduction in the number of attendees and onsite events will inevitably generate a lower amount of work. [Particularly] in a country like Portugal, where the weight of the meetings industry is enormous.*" (I1); "*Now the idea, this year, is to have more weekend events, (…) and smaller things with an audience.*" (I3); "*I think they are going to become different and that is more than evident, (…) many of them are going to become hybrid events.*" (I1); "*In 2021, I believe, [events] will mostly be hybrid*." (I5).

This shift toward virtual or hybrid events emphasizes the importance of technology, even though there is an understanding that face-to-face, on-site events will not be replaced, particularly in some areas—"*It is clear that this is an area where technology will play an absolutely key role, part of the movement and part of the investment that was made in the organization of face-to-face events, will necessarily be transferred to a new digital world. (…) There are things that (…) will never replace face-to-face.*" (I2).

Concerning the events participants' experience, a shared opinion is that it needs to be improved, with the focus being on high-end experiences—"*I would say that what until some time ago was, in a certain way, a massified experience (…) will* *become luxury experiences, I have no doubt about that, in other words, they will be a privilege, more exclusive.*" (I2). In this regard, I3 considers that the reduction in the dimension of events, can also contribute to a better, less massified experience: "*I think we will be able to have access to events and culture (…), but without having masses. I hope that [focus on working towards the masses] is over*."(I3).

Overall, the interviewed managers are confident in recovery, even though different types of events and companies are expected to recover at different paces: "*Within events there are segments that will recover, which are already recovering very well, there are others that will take longer and others that will take a long time.(…) The social events sector is already making a strong comeback, as there is the possibility of holding more open air events*" (I1); "*we in the corporate events and incentive travel segment only see some light at the end of the tunnel in 2022 or 2023*" (I2);

On the other hand, despite this positive outlook, the interviewees are anticipating an economic crisis that will undoubtably constrain the sector—"*We are all afraid of the economic crisis that is coming. We are all preparing for it.*" (I6).

Regarding the future sustainability of events, even though its importance is acknowledged by the interviewees, opinions on the effective awareness and implementation of sustainable practices differ, with one of the interviewees clearly stating nothing will change—"*I don't believe it when people [say that] you should have more and more events online to avoid people travelling so much and reduce the ecological footprint of each event*" (I1). However, environmental sustainability is perceived as a challenge that must be tackled in the near future, something event managers are very aware of—"*the question of sustainability is probably the biggest challenge we will have to face in the future, (…) sustainability seen in a global perspective, the one that has to do with social progress, with economic development and with environmental protection. Sustainability must always be seen in these three perspectives. (…) this awareness of sustainability is something that will inevitably force us to change certain habits.*" [I2].

This awareness along with a change in pace, are perceived as positive outcomes from the crisis, with interviewees highlighting the fact this period, albeit challenging, gave them time to stop and think, with technology, again, playing a relevant role in facilitating task and time management—"*it ended up being some extra rest that, frankly, was even good to unplug a little more time than usual in this hustle and bustle*" (I6); "*I think that for us the pandemic in terms of organisation brought several advantages, this is because we found new, easier, and more agile ways to monitor projects, we started to do it with immense ease and in one day monitor ten projects, which was unthinkable in person. (…) We took advantage of the opportunities of going digital and accumulating new projects*" (I3).

40.4.3 General Consideration

A general overview of the answers of the interviewees, regarding the response to the COVID-19 crisis, shows there are no significant differences between the perceptions presented by the representatives of the various sub-sectors of events (social, cultural, and corporate), operating in the different markets (local/regional, national/international). However, when considering the decision-making category, organizations promoting social and corporate events in the national/international markets were the ones which the most concerns (c. 88%).

As for the future of events, there are also no significant differences between the perceptions presented by the representatives of the various sub-sectors of events (social, cultural, and corporate), operating in the different markets (local/regional, national/international). When considering the markets they operate on, corporate events organizers that work with national and international markets (I1, I2, I5) were the ones that made more references to the future typology of events, including the need to make digital events more attractive from the participant's experience.

40.5 Conclusion

Overall, the findings, though preliminary and based on a limited sample, are in line with previous studies, most particularly when it comes to the realization of the economic repercussions of the pandemic and its impacts on typology and format of events, with hybrid models becoming the norm.

Bearing in mind the need to assure economic sustainability, both the literature and the interviewed managers highlight the importance of adaptability and government support, namely when it comes to staff retention and investment. Within the context of this study the first is more deserving of attention, not only in terms of keeping jobs, but also when it comes to find new ways of working and keeping teams motivated.

Another key issue, not explicitly found in the literature, but widely reported by the interviewees, was the participants' experience and the opportunities that can derive from the ongoing crisis as to provide people with more exclusive and tailored events.

All in all, however, the data confirms that technology will increasingly play a more relevant role within this scope, as it is key not only for the events themselves, but also for companies and staff.

40.6 Future Research Directions

As part of a comprehensive, cross-disciplinary research project covering different sectors of the tourist activity, the results put forward in this paper are provisional and offer a segmented view. As a result, it should be complemented by future analyses that can contribute to a broader discussion regarding the effects of the pandemic and the ensuing recovery. In addition to this analysis, future work will also include broadening the scope of the sample, as to achieve more reliable results that can inform future strategic decisions in the sector.

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Chapter 41
The Opinions of Decision-Makers Regarding the Rural Tourism Development Potential in the Azores Region

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Abstract If we focus on the actual scenario, sustainable development is one of the regional territories' fundamental concerns and ambitions. In this regard, new typologies of Tourism activities, as Rural Tourism, are seen as catalysts for regional sustainable development and growth. The present preliminary study intends to assess the decision-makers' opinions about the potential of rural tourism development in the Azores Archipelago. In this regard, the research used an exploratory methodology that enabled to assess the opinions of the decision-makers of the Azores Autonomous

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Region. Consequently, this study revealed that most of the surveyed decision-makers assume that rural tourism has progressed in the Azores Autonomous Regions in the last years. This preliminary research also concludes that four main pairs of items should be considered for the promotion of this typology of tourism in the Azores Autonomous Region: (i) *Specificities of the Azores Destination in the context of Rural Tourism*; (ii) *Sociability, traditions, and customs*; (iii) *Hospitality and security*; and (iv) *Gastronomy and local products.*

41.1 Introduction

Rural tourism can be a catalyst for the growth and sustainable development of low-density and rural areas [1–7]. In fact, these areas face several problems associated with economic decline, a large increase in unemployment, migration, unfavorable results of the re-conversion of agricultural lands, ending with the loss of cultural identity [8–11]. In this regard, entrepreneurship, allied with small- and medium-sized businesses, is an exciting way to accomplish sustainable development in peripheral regions once it fosters the employment and the incoming creation [9].

Additionally, employment in tourism has significantly added to the nationals economy's growth as well as to the conversion of some regional economies [12]. Some experimental evidence shows that tourist spending generates more jobs and income than any other sector of the economy; also, it creates and maintains employment in different sectors of the economy that encourages visitors and tourist businesses. Diverse studies conducted in emerging countries and rural areas are evidence of this premise [13–16].

Besides, not all rural regions that lack employment possibilities are aspirants to promote tourism as a strategy for economic development [14, 17]. In fact, the rural areas must have good quality resources and know-how to gain from them. In those cases, tourism can be one activity able to contribute to the: (a) revitalization of local economies; (b) diversification of tributaries activities; (c) development of different economic sectors; (d) creation of employment; (e) income generation; (f) modernization of transport infrastructure, of services—benefitting the local community; and (g) the creation of local government income [18].

Thereby, it can be understood as a country development policy based on large investments at the level of infrastructure and services essential to the investment—i.e., roads, railways, electrification, and the establishment of human resources [19]. Hence, tourism should be seen as just an element of a more comprehensive rural development strategy; however, it is also essential to exist a tight collaboration among the public sector, the private sector, local societies, and civil community in order to guarantee that the purposes of its investment policy are accomplished [15, 20].

If we focus on the actual scenario, sustainable development is one of the regional territories' fundamental concerns and ambitions [21]. This growth is no longer just a desire but truly regional need to enhance the inhabitants' life's standards and assure future generations' prosperity [22, 23].

Here, territorial planning policies are vital for empowering pre-conditions of resources to the local residents [24]. Those planning tools support future living in that region, encouraging the demise of social disparities and spatial inequalities, being an incentive mechanism for sustainable development [21, 23].

So, studies that intercross and analyze regional planning, strategic planning, and other complementary planning techniques and their relationship with tourism are essential to proceed with these regions' sustainable development. Consequently, and bearing in mind the properties displayed by the ultra-peripheral region of the Azores Autonomous Region, the subsequent research problem was established: "*Which are the opinions of the decision-makers concerning the potential of rural tourism development in the Azores Autonomous Region?*".

41.2 Methodological Framework

Contextually, to answer the research problem mentioned above, we used testing methods about Azores decision-makers' opinions about the potential of rural tourism development in this Autonomous Region.

Moreover, considering prior studies that the team conducted on this subject [see: 24–29], it was possible to get previous information regarding this regional reality, allowing us to assemble an even more robust quantity and quality of data.

In this regard, the methodological framework was divided into four principal levels: (i) interview design; (ii) data acquisition; (iii) case study analysis; and (iv) description of the results, ending with the discussion and conclusions. The last stage converges on decision-makers' prominent opinions about the potential of rural tourism development in the Azores Autonomous Region.

Also, it should be noted that the decision-makers for whom this study was directed were persons with public administration roles in the Autonomous Region of Azores. In this regard, the sample group consisted of some of those Azorean decision-makers, which we consider are the most appropriate participants for this investigation. Thus, 45 participants formed the sample. Web interviews were used and implemented during the Spring and Autumn months of 2020.

Knowing the research's goal, the authors chose to use short and direct questions about the potential of rural tourism development's opinions in the Azores Autonomous Region.

After the interview data have been assembled, mathematical were performed using the Statistical Package for the Social Sciences (SPSS).

41.3 Findings

The current section displays the results obtained from the implemented interviews.

Firstly, it was considered a set of twelve items that aim to assess decision-makers' opinions on the role/importance of Rural Tourism activities in the Azores for clients. Therefore, Categorical Principal Component Analysis (CATPCA) was used as well as some algorithms of Ascendant Hierarchical Cluster Analysis (AHCA) in the scope of Cluster Analysis.

Cluster analysis's main objective is to group observations (cases) or variables into homogeneous and distinct groups (clusters) [30–33].

Applying a Categorical Principal Component Analysis, with Varimax rotation and Kaiser Normalization, to a set of twelve items on a five-point scale, from 1 (totally disagree) to 5 (totally agree), four principal components (dimensions) were retained (Table 41.1). The Percentage of Variance Accounted For (PVAF) across these components is 78.467% of the total variance data.

The items B4, B9, B10, B11, and B4, are the most essential items for the first component. Thereby, this component was named "*Specificities of the Azores Destination in the context of Rural Tourism.*"

Table 41.1 Rotated component loadings of the 4-component solution provided by CatPCA

	Component			
	1	2	3	4
B4 Feeling that the Azores are an authentic destination	.690			
B9 Perform activities in nature	.705			
B10 Carry out activities at sea (fishing, boat trips, others)	.604			
B11 The desire to return to visit the Azores in the context of Rural Tourism	.863			
B12 A story to tell friends/family	.795			
B1 Enjoy a complete tourist pack		.786		
B 2 Contact with people, local life, and their customs		.828		
B3 Meet new people and create new friendships		.853		
B5. Feel that the population is welcoming			.891	
B6 Feeling safe			.697	
B7 Enjoy the local cuisine				.701
B8 Buy local products				.800
Cronbach's Alpha	.843	.795	.788	.788
Eigenvalue (VAF)	3035	2499	2132	1750
Percentage accounted (PVAF)	25,292	20,825	17,767	14,583

Variable Principal Normalization. Rotation Method: Varimax with Kaiser Normalization

Table 41.2 Proximity matrix: values of spearman's rank correlation coefficient between pairs of items

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
B1	1.000	0.501	0.435	0.445	0.325	0.210	0.250	0.286	0.372	0.290	0.360	0.135
B2	0.501	1.000	0.665	0.459	0.346	0.181	0.408	0.500	0.460	0.285	0.521	0.467
B3	0.435	0.665	1.000	0.290	0.104	0.037	0.191	0.226	0.253	0.219	0.572	0.261
B4	0.445	0.459	0.290	1.000	0.536	0.431	0.279	0.170	0.562	0.537	0.523	0.543
B5	0.325	0.346	0.104	0.536	1.000	0.602	0.526	0.448	0.455	0.458	0.281	0.393
B6	0.210	0.181	0.037	0.431	0.602	1.000	0.423	0.303	0.477	0.547	0.193	0.300
B7	0.250	0.408	0.191	0.279	0.526	0.423	1.000	0.744	0.370	0.357	0.308	0.347
B8	0.286	0.500	0.226	0.170	0.448	0.303	0.744	1.000	0.570	0.369	0.391	0.510
B9	0.372	0.460	0.253	0.562	0.455	0.477	0.370	0.570	1.000	0.716	0.545	0.509
B10	0.290	0.285	0.219	0.537	0.458	0.547	0.357	0.369	0.716	1.000	0.413	0.418
B11	0.360	0.521	0.572	0.523	0.281	0.193	0.308	0.391	0.545	0.413	1.000	0.602
B12	0.135	0.467	0.261	0.543	0.393	0.300	0.347	0.510	0.509	0.418	0.602	1.000

The second component displays the strongest correlations with the items B1, B2, and B3. Therefore, this component can be called "*Sociability, traditions, and customs*."

The items B5 and B6 are the most essential items for the third component. Thereby, this component was named "*Hospitality and security*."

B7 and B8 items are associated with the fourth component, which was called "*Gastronomy and local products*."

The application of AHCA on the submatrix that contains the twelve items under analysis was performed based on Spearman's rank correlation coefficient, as comparison coefficients between elements to be classified (in this case, items). The values of this coefficient, shown in Table 41.2, were combined with three aggregation criteria, Single-Linkage, Complete-Linkage, and Average-Linkage [32].

According to the values of the global statistics of levels (STAT), the best partition is the following partition into four clusters (level 8) concerning the dendrogram provided by the Average-Linkage (STAT = 4.5980):

Cluster 1: {B1, B2, B3}, which reflects the second principal component resulting from the CatPCA.

Cluster 2: {B4, B9, B10, B11, B12}, here, it is recognized the first principal component.

Cluster 3: {B5, B6}, aligned with the third principal component.

Cluster 4: {B7, B8}, which reflects the fourth principal component.

The results obtained with CATPCA and AHCA were concordant/consonant, so the data are robust. The reduction of the dimensionality of the data from 12 to 4 dimensions suggests the existence of 4 relevant factors/dimensions concerning the role/importance of Rural Tourism activities in the Azores for customers, in the perception of decision-makers (Fig. 41.1).

Fig. 41.1 Dendrogram provided by Average-Linkage method

```
B1   --*--------------------*
                            |--------*
B2   --*-----*              |        |
             |--------------*        |
B3   --*-----*                       |
                                     |
B4   --*--------------*              |
                      |--*           |
B9   --*--*           |  |           |
          |-----------*  |           |
B10  --*--*              |--------*  |
                         |        |  |
B11  --*--------*        |        |  |
                |--------*        |  |
B12  --*--------*                 |--*
                                  |
B5   --*-----------*              |
                   |-----------*  |
B6   --*-----------*           |  |
                               |--*
B7   --*                       |
       |-----------------------*
B8   --*
```

The AHCA allowed us to find a typology of the several items, allowing us to identify groups of items whose levels of importance attributed by respondents are similar to one another, enabling a correlation of the individuals' answers.

41.4 Discussion and Conclusions

To fully understand this issue, we should look in retrospective to the Azores Autonomous Region reality. So, by the time Portugal joined the European Union (EU), the Azores were identified as the less developed Portuguese Region.

By the end of the twentieth century (late 90's) and in the first years of the twenty-first century, there was an efficient convergence of the Azores' regional economy compared to Portugal and the EU. In that period, the growth patterns and dynamics conduct the Azores to a close resemblance to the values of creating national and community wealth. Still, this momentum has slowed down. After comparing Portugal's mainland (between 2010 and 2018), an economic stagnation was verified—even showing a delay considering the EU's standards.

In the 2000s, the regional GDP represented less than 2.0% of the Portuguese wealth, while in 2018, this value reached 2.1%.

Nowadays, it reaches more than 85%. If we go a little bit further back in time, it seems that in 1995 the Azores' GDP per capita was only 6894 euros compared to 8880 euros at the national level (78%). So, there is a notable progression in the capacity to create wealth, even in a significant economic instability—i.e., the period between 2007 and 2012, whose impact on small and fragile economies (such as the Azorean) is magnified.

The Azores Region's economic dynamics directly affect the labor market, as in terms of opportunities as in terms of the quality of the jobs created. In 2010, there was a meaningful decrease in this indicator due to the tangible impacts of the regional economic and financial crisis, making the number of people employed closer to the values recorded in the early 2000s.

Notwithstanding the considerable number of employed people in 2019, unemployment prevails as a significant challenge for the regional economy.

Contextually, tourism consequently emerges as a sector with vast potential, given the established capacity and the existing natural potential [6, 33–36]. Nevertheless, it will be necessary to reinforce the focus on qualifying the destination, which involves train the sector's population and their associated professionals.

The prominence of the Azores Autonomous Region's economic growth defines tourism as one of its strategic pillars. As a piece of evidence, there is the regional Smart Specialization Strategy. The islands' natural features, the existing comparative gains, and the economy's rising tertiarization made this resolution an easily acceptable option. The development recorded reveals the vast potential for generating value in this sector and leveraging the regional economy, particularly concerning rural tourism.

Based on the above-mentioned, this preliminary study is of great importance to keep planning and investing wisely in this sector. Thus, the study results show that in the opinion of the decision-makers, the main pairs of items should be considered for the promotion of this typology of tourism in the Azores Autonomous Region: (i) *Specificities of the Azores Destination in the context of Rural Tourism*; (ii) *Sociability, traditions, and customs*; (iii) *Hospitality and security*; and (iv) *Gastronomy and local products*.

Also, if we considering the relevance of tourism (mainly rural tourism) for the Azores region, and by the another, the tremendous power of digital marketing, we do believe that a specific effort by the main regional actors should be conducted in order to invest and provide more training and education on the transition to the digitalization—i.e., specific training for rural tourism entrepreneurs and workers regarding the digital marketing.

As final remarks, even this research provides us interesting new insights regarding this issue, further studies should be carried out to understand the problem from different points of view—i.e., analyzing the entrepreneurs, local population, and tourists' opinions.

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Chapter 42
Bankruptcy Prediction Model in Portuguese SMEs

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Abstract The study aimed at choosing a bankruptcy prediction model for Portuguese small and medium-sized enterprises (SMEs), given its importance in the country's economy. It uses logistic regression on panel data from companies in the Portuguese manufacturing industry, in the period 2019–2020. The analysis performed allowed us to verify that the (Altman and Sabato in Abacus 43(3):332–357 [1]) model, with the coefficients updated from the paired sample, correctly classifies bankrupt SMEs, one year in advance, with an overall predictive capacity of 92.9%, with a type I error (bankrupt companies classified as active) of 21.2% and type II error (active companies classified as bankrupt) of 6.8%. To test the ability to improve the model, dummy variables were included to assess the impact of location and economic activity code (CAE). The results obtained, when compared with the initial ones, allowed us to verify that the simultaneous introduction of the location and CAE variables benefits the predictive capacity of the model.

42.1 Introduction

According to the National Institute of Statistics [2], it is estimated that the number of deaths of non-financial corporations, which occurred in Portugal in 2017, corresponds to a mortality rate of 5.6%, representing a reduction of 40,095 people per

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year. service and €1,322 million less in turnover. Considering the importance of the economic contribution of small and medium-sized enterprises (SMEs) to the growth of countries, it is clear why the theme is so important and the usefulness of bankruptcy prediction models. Also in Portugal, SMEs are especially important. Together with microenterprises, they make up more than 99% of existing companies in Portugal (INE 2019), and the figures show that they play a dynamic role in the evolution of the country's economy, being the main employers in the labor market.

Among the results referred to by several studies related to the constraints and challenges faced by SMEs, the risk associated with their financing is one of the widely cited challenges. Financial institutions assess SMEs as being inherently high risk debtors with high mortality rates.

Given the existence of these challenges related to the risk of bankruptcy among Portuguese SMEs, there is a need for further studies on the determinants of this vulnerability in order to better understand behaviors. Thus, the aim of the study is to analyze a set of financial indicators associated with Portuguese SMEs and identify the most predictive variables that affect their solvency.

In research on the prediction of failures, both theoretical literature and empirical studies have produced several results that reflect the diversity found in practice. Some are studies of updated application of reference models, or the creation of new models or improvement of existing ones.

The inexistence of a consensual theory for the selection of variables gives the authors freedom of choice. A large number of relevant financial indicators were extensively analyzed to select the most predictive ones. In this study, considering the various authors and methodologies recognized as the cornerstones of the study of failure prediction, the choice fell on logistic regression as an appropriate statistical technique, following the modeling developed with the participation of the authors Altman and Sabato [1], appropriate to the problem in themselves and the target population: SMEs.

As it is agreed that the model could have a better predictive capacity if it were directed to a certain sector, as opposed to a more global model, it was decided to reduce the population to SMEs in the manufacturing industry. The SABI database was used to obtain the samples. Due to difficulties associated with the lack of complete data on the companies in the database, the study was limited to a sample of 68 bankrupt companies (in the years 2019 and 2020).

The bankruptcy of a company cannot be easily predicted, being considered a rare event [3], however, its consequences make the prediction of bankruptcy a topic of growing interest.

Increasing understanding of the problem of bankruptcy among SMEs can facilitate greater access to finance, and can also help to ensure that public policies to strengthen support for SMEs are the most effective.

The article is organized into five sections. The first corresponds to the introduction, followed by a review of the literature that explains some of the analysis possibilities used in the development of bankruptcy prediction models. The third section presents the methodological procedures and then, in the fourth section, the data are analyzed and the results obtained are discussed. The final section presents the conclusions.

42.2 Literature Review

The phenomenon of bankruptcy can be explained in two ways, depending on whether you consider the economic aspect or the legal aspect, differing from each other. The identification of the determinants of business failure, and the consequent statistical modeling process, is directly related to the definition of bankruptcy used. For example, [4] defines bankruptcy as the inability of a company to meet or meet its financial commitments at maturity. In turn, [5, 6] use a legal criterion. Companies are defined as bankrupt when they are considered legally bankrupt. Abdulkareem [7], in his study of validation of the Z-Score model, as a predictor of bankruptcy, considers that the bankruptcy process starts, "when companies are unable to pay their obligations to banks, suppliers,

It is concluded that there is no single definition for the concept of bankruptcy, as this terminology has registered multiple variations over time, influenced by the researcher, country of origin, proximity to legal, financial or economic terminology, etc.

In a systematic review of the literature on bankruptcy prediction, carried out over the last 50 years, analyzing 496 papers, [8] conclude that in most cases, authors tend to use the final bankruptcy as a dividing line when distinguishing companies bankrupt and not bankrupt.

In Portugal, the CIRE—Insolvency and Corporate Recovery Code distinguishes insolvency from bankruptcy, considering that insolvency consists in the impossibility of complying with overdue obligations and bankruptcy implies the economic infeasibility of the company and its financial irrecoverability. In its article 3, point 1, the CIRE defines: "A debtor who is unable to fulfill his overdue obligations is considered insolvent".

42.3 Methodology

Altman et al. [9] refer to the difficulty of working with a single model in all countries, given the heterogeneity between companies, and it is preferable to analyze the various models by country. Countries differ in legal requirements, accounting, tax and labor systems, ease of access to credit, characteristics of their financial systems and, ultimately, macro and microeconomic policies, cultural and tradition issues that affect management style. On the other hand, the prediction accuracy of the model developed by Altman and Sabato [1] for SMEs was almost 30% higher than the performance of the generic model. Balcaen and Ooghe [10] consider that information regarding the sector, size and age should be considered in a bankruptcy prediction model.

In line with [11], who consider that it is more important to focus on existing studies than to create new models, this study intends to test one of the existing models that seems adequate to the reality of the population above. Correia [12], in his review of works that analyzed the subject, both in an international context and in the case of particular sectors of the Portuguese economy, found that the application of a logit model would bring greater explanatory power to the business failure prediction model for SMEs in the Portuguese manufacturing industry.

42.3.1 Variables

The dependent variable, "bankruptcy", is a dichotomous variable, which takes the value 1 if the company is in bankruptcy and the value 0 if it is not. This choice is not without criticism, since business failure does not have a well-defined meaning [10]. The dependent variable takes its value according to a probability calculated by the model and an arbitrarily defined cut-off. Altman and Sabato [1] used a 30% cut-off rate.

Tascón and Castaño [13] found that, in recent decades, the choice of variables is increasingly made due to its popularity in previous studies. The independent variables to be used are from the model by Altman and Sabato [1]. Balcaen and Ooghe [10] argue that the use of a classical statistical model in a predictive context requires that the relationships between the model's variables be stable over time. Altman et al. [14] report that non-financial information (such as age, size, insolvency of the sector, if the company is audited, …), when available, is likely to improve the model's forecast accuracy.

42.3.2 Sample

Most studies are carried out with paired samples obtained by choosing an active company in the same sector and with the same size as the bankrupt company, following the methodology of [4, 5]. A sample of Portuguese SMEs from the manufacturing industry with data from 2018 and 2019 (bankruptcies in 2019 and 2020) was selected to test the model. Data were collected from the SABI database.

According to Iberinform Crédito y Caión, in 2018, the insolvency rate of the manufacturing industry was 1.7%. Not all companies had available the necessary data to apply the model, having been excluded from the study. A total of 68 companies were obtained to be considered bankrupt (51 in 2019 and 17 in 2020), which corresponds, maintaining the proportion of 1.7% of bankrupt companies, to a total of 4000 active companies (3000 in 2019 and 1000 in 2020). Thus, the study sample consists of 4068 companies.

The test sample consists of bankrupt companies between 2015 and 2018, plus companies active in the same period (6 companies to be considered bankrupt, which corresponds, maintaining the proportion of 1.7% of bankrupt companies, to a total of 354 active companies (118 in 2018 and 2015 and 59 in 2017 and 2016) Thus, the test sample consists of 360 companies.

42.4 Results

The coefficients for the [1] model were estimated through a sample of 4068 companies. The results obtained were as follows (Table 42.1).

It can be seen that the variables,, $X_1 X_2 X_3$ are statistically significant. The adjusted one indicates that the explanatory capacity of the model is 36.5%. As for the predictive capacity of the model, the following result is observed: R^2.

As for the predictive capacity of the model, the following result is observed (Table 42.2)

Using the cut-off of 30%, an overall predictive power of 98.65% is obtained. Type I error is 64.71%, a high value, and type II error is only 0.28%.

To test the impact of the inclusion of qualitative variables, a new sample was selected, matching for each bankrupt company, an active company with: the same CAE, which defines the type of industry; the same Location (Region); a similar total of assets. A matched sample of 60 bankrupt companies and 60 active companies was obtained.

Table 42.1 Model estimation

Variables	Model
Constant	−4.062172 (0.201633)
X_1	−10.08914*** (1.174747)
X_2	−0.116020*** (0.036839)
X_3	−1.752196*** (0.264692)
X_4	1.460984 (0.927002)
X_5	0.0000235 (0.000793)
Comments	4068
Method	*ML—binary logit (quadratic hill climbing/eviews legacy)*
LR statistic	2,525,121
Prob(LR statistic)	0.000000
R^2 Adjusted	0.365278

*, ** and *** indicate statistical significance at the level of 10%, 5% and 1%, respectively

$\boldsymbol{X_1}$ is the ratio between EBITDA and Total Assets. is the ratio between Current Liabilities and the book value of Equity. is the ratio between Retained Earnings and Total Assets. is the ratio between Cash and Total Assets. is the ratio between the EBITDA and the Supported Financial Charges $X_2 X_3 X_4 X_5$

Table 42.2 Model predictive capacity

		Forecast			
Sample		Active		Bankrupt	
		No	%	No	%
Active	4000	3989	99.73	11	0.28
Bankrupt	68	44	64.71	24	35.29
		Global predictive ability		98.65%	

To add the qualitative variables to the model, we used the creation of dummy variables:L_1,$L_2 C_1$ C_2, and, that assume $C_3 C_4$ the values in the following tables (Tables 42.3 and 42.4).

In order to verify the impact of the inclusion of the variables, we started by estimating the model with only the original variables, then the Location variables were included, then the CAE variables and finally we simultaneously included the Location and CAE variables. We present the results obtained in the estimates (Table 42.5).

As one can only check the introduction of CAE variables managed to slightly increase the explanatory power of the model. In the following table, we present the global predictive capacity and type I and type II errors of each model (Table 42.6).

Analyzing the table, it can be seen that the initial model has a good global predictive capacity of 83.33%, with a type I error of 8.33% and a type II error of 25%. It is also verified that the introduction of the Location variable, in isolation, did not bring any change to the model. Conversely, the introduction of the CAE variable increased the global predictive capacity by about 2.5% and decreased the type II error by 5%. The introduction of the Location and CAE variables simultaneously resulted in an

Table 42.3 Values of dummy variables, location

Localization	L_1	L_2
Lisbon and Tagus Valley	0	0
North Portugal	1	0
Center Portugal	0	1

Table 42.4 Values of dummy variables, CAE

CAE	C_1	C_2	C_3	C_4
Others	0	0	0	0
10	1	0	0	0
14	0	1	0	0
15	0	0	1	0
25	0	0	0	1

Table 42.5 Estimation models, sample paired by CAE and location

Variables	Model 1	Model 2	Model 3	Model 4
Constante	−0.177952 (0.342042)	−0.164980 (0.386309)	−0.661389 (0.576242)	−0.671492 (0.625670)
X_1	−7.535820 *** (1,924,177)	−7.530308 *** (1,926,622)	−7.929124 *** (2.041875)	−7.956161 *** (2,050,988)
X_2	−0.027423 (0.045308)	−2.587716 (0.045815)	−0.045069 (0.048236)	−0.045535 (0.048701)
X_3	−2.583294 *** (0.771617)	−2.587716 *** (0.775186)	−2.614630 *** (0.791307)	−2.622135 *** (0.794300)
X_4	−0.653384 (1.233962)	−0.668130 (1.273514)	−0.788327 (1.286710)	−0.728980 (1.323079)
X_5	−0.000597 (0.001859)	−0.000597 (0.001863)	−0.000440 (0.001875)	−0.000383 (0.001900)
L_1		−0.069830 (0.729032)		−0.053127 (0.792697)
L_2		−0.020055 (0.710303)		0.147000 (0.815965)
C_1			0.272500 (1.043705)	0.183277 (1,133,999)
C_2			0.580475 (0.758256)	0.559757 (0.783935)
C_3			0.837103 (0.773765)	0.845672 (0.788524)
C_4			1,005,780 (0.917798)	1.001663 (0.925812)
Comments	120	120	120	120
Method	*ML–Binary logit (quadratic hill climbing/eviews legacy)*			
LR statistic	63.88879	63,89,807	65.65872	65,70,385
Prob(LR statistic)	0.000000	0.000000	0.000000	0.000000
R^2 Adjusted	0.384050	0.384106	0.394690	0.394961

*, ** and *** indicate statistical significance at the level of 10%, 5% and 1%, respectively
$\boldsymbol{X}_1$ is the ratio between EBITDA and Total Assets. is the ratio between Current Liabilities and the book value of Equity. is the ratio between Retained Earnings and Total Assets. is the ratio between Cash and Total Assets. is the ratio between the EBITDA and the Supported Financial Charges. assumes the value 1 if the location is in the North of Portugal and 0 in the other cases. assumes the value 1 if the location is Centro de Portugal and 0 otherwise. assumes the value 1 if the CAE is 10 and 0 in the other cases. assumes the value 1 if the CAE is 14 and 0 in the other cases. assumes the value 1 if the CAE is 15 and 0 in the other cases. assumes the value 1 if the CAE is 25 and 0 in the other cases. $X_2 X_3 X_4 X_5 L_1 L_2$ $C_1 C_2 C_3 C_4$.

Table 42.6 Predictive capacity of models, sample paired by CAE and Location

Model	Variables	Type I error %	Type II error %	Global predictive capacity %
1	Originals	8.33	25.00	83.33
2	Originals + Location	8.33	25.00	83.33
3	Originals + CAE	8.33	20.00	85.83
4	Originals + Location + CAE	6.67	18.33	87.50

improvement of around 4% in the global predictive capacity, compared to the initial model and a decrease of around 1.5% in the type I error and 7% type II error.

42.5 Conclusion

Although the study by Altman and Sabato [1] was carried out for SMEs in the United States of America, its applicability is verified with good results in Portuguese SMEs.

The results of the analysis with data from the initial sample, (respecting the proportion of bankruptcies in the population, 68 bankrupt companies and 4000 active ones) showed that the adjustment to the model coefficients did not allow it to be considered adequate. Despite the high global predictive capacity of 98.65%, the existence of a type I error (classifying a bankrupt company as active) of 64.71% shows that the model is out of step with its main objective: correctly classifying bankrupt companies.

The inclusion of qualitative variables—location and type of industry—benefits the predictive capacity of the model. The results obtained with the simultaneous introduction of the variables of Location and CAE, allowed to obtain the best results of the model, whose predictive capacity increased to 87.50%, the type I error decreased to 6.67% and the type II error decreased to 18.33%.

Notwithstanding the results obtained meet what would be expected and, despite having started with a reasonable battery of economic and financial ratios, it could have been interesting to introduce in the analysis another type of indicators such as macroeconomic data or other qualitative variables that reflect, in a way, a more behavioral aspect, whose impact can be relevant in terms of the problem under study.

Its non-inclusion stems from the main limitation of the study, which was the lack of data, leading to the implicit assumption that the relevant factors for default are essentially reflected in the financial statements of companies.

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Chapter 43
Study of the Relationship Between Sensory Marketing and Consumer Satisfaction

Sandrina Teixeira, Maria José Angélico Gonçalves, and Ana Reis

Abstract Today, it is possible to purchase products or services online anytime and anywhere, using just a computer, a tablet, or a simple smartphone. E-Commerce has been growing as a result of the increase in online shopping. Given the relevance of e-commerce for businesses, it is necessary to create unique, dynamic, and emotionally rewarding experiences for consumers, similar to those experienced in physical stores, even as a differential advantage over the competition. The main purpose of this paper is to understand whether there is a relationship between consumer experience through stimulation of the five senses and consumer satisfaction in an online store, using sense measurement equipment. This study is focused on the electrodermal responses of the skin, upon stimulation of the five senses, in an online store. The results concluded that there are indeed responses to stimuli in an online store. It was possible to prove that there is a relationship between sight stimulus and hearing stimulus and the consumer satisfaction, but there is no relationship between customer satisfaction and the other senses.

43.1 Introduction

As consumers, we would all like to browse a certain website and be able to experience the feeling of a new shirt on our skins, to know if the food we see on screen tastes as good as it looks, to feel the warmth of the beach sand under our feet, or even to smell the coconut oil on the pictures of our friends' trips on social networks [1]. Sensory marketing is increasingly used in services, in order to perform better, and different

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practices are being used to target different senses and create a wide range of impacts on consumers. The human senses may create a barrier for marketing practices but also act as elements that motivate the buying process in sensory marketing [2]. We are all consumers and for this reason, we are always receiving messages coming from marketing and advertising professionals. However, our brain is constantly collecting and filtering information, some of which will be stored in our brain, but most of which will be forgotten. This process is unconscious and happens instantaneously throughout the daily life of a human being [3]. Therefore, brands have to offer value and great experiences to their consumers so that they will be registered in their memory.

The main objective of this article is to understand the existence of a relationship between consumer experience through the stimulation of the five senses and consumer satisfaction in an online store. It is also intended to understand whether sensory marketing contributes to customer retention and positive word-of-mouth. A literature review was carried out to cover themes such as e-commerce, consumer satisfaction, sensory marketing, and neuromarketing. The data collection method was exploratory in nature, consisting of the collection of electrodermal responses (EDAR) from the skin of 18 volunteers when exposed to certain sensory stimuli through existing virtual stores with pre-defined characteristics.

This study allowed us to realize that there are indeed positive relationships between sensory stimuli and consumer satisfaction in specific cases, however, it should be noted that all stimuli were visual and auditory despite aiming to invoke the sensations of taste, smell, and touch.

This study opens doors for research in the area of sensory marketing applied to the e-commerce universe, thus combining the discovery of new ways to provide positive experiences to consumers. In the business world, it can be an asset for companies that want to stand out from the competition in an innovative/differentiating way.

43.2 Theoretical Background

In an increasingly technological world, the internet has captured much of the attention, and over the years there have been changes in business models due to its ability to interact and personalize. Online presence allows traditional companies to reach more diverse customers and in different locations that they would otherwise not be able to reach [4], and there has been an exponential increase of companies selling exclusively online [5]. However, the transformation from traditional to digital business requires marketing expertise in order to achieve success [6]. Businesses are evolving rapidly, the real and virtual environments are increasingly interconnected, and the division between online and offline is no longer clear [7].

In this context, consumer behavior and expectations are dramatically changing. They are increasingly curious, demanding, and impatient. 81% want brands to know them and recognize the right time to approach them [8]. Today, e-commerce customers are informed and aware of the prices at which products are sold on different websites [9, 10] and there is not much that inhibits them from buying from another online store, which makes customer retention even more difficult to achieve [10].

To create a successful online presence, you need to develop a customer-focused experience [11], where product pricing and returns are just as important as good performance and can leverage customer loyalty. Companies must be able to consistently manage these experiences for their customers before, during, and after the purchase [12], even though the meaning of the online experience elements may vary depending on the purchase situation, the type of customer segmentation, and the customer's intentions when visiting the site [11].

For many years now, marketers have been trying to improve how to reach consumers through the five senses [13]. With high competition and the ease of copying competition, it is crucial to create a differential advantage that is not only product-related [1, 12]. Despite its growth, e-commerce still faces the challenge of creating an online shopping experience that is as dynamic, exciting, and emotionally rewarding as an offline experience [12]. The truth is that the market has competitive products that are difficult to differentiate and consumers are more informed and demand memorable experiences [14].

Sensory marketing comprises the use of sensory stimuli in the customer experience to create an identity and image that serves the brand's purpose [15]. As is known, sensation and perception are stages of sense processing. Sensation is when the stimulus impinges on the receptor cells of a sensory organ and perception is the awareness or understanding of sensory information [16]. In a sense, sensory marketing is an application of the understanding of sensation and perception to the field of marketing—to consumer perception, cognition, emotion, learning, preference, choice, or evaluation [16]. Sensory marketing starts with consumer perceptions and forces marketers to influence buying behavior, using physical stimulants [2]. For marketers, stimulating the senses is important because they make it possible to achieve the performance perceived by consumers and thereby satisfy them. For this to happen, they must create value for the customer throughout his life, understanding the perception process in order to influence him through the senses, since several studies show that by influencing consumers' perceptions it is possible to influence their purchasing decisions [2]. A sensory strategy brings the possibility of differentiating products and services by bringing the consumer's mind and their five senses closer together from both a cognitive and emotional standpoint [13].

Abstract notions of a product are considered to be characteristics such as sophistication, quality, elegance, innovation, modernity, and interactivity—the brand personality. And sensory marketing can be used to create subconscious triggers that define the consumer's perceptions about abstract notions of a particular product. Sensory marketing can also be used to affect the perceived quality of an abstract attribute such as its color, taste, smell, or shape [16]. It is important to maintain consistency between marketing messages when stimulating different senses. Ortegón-Cortázar and Gómez Rodríguez [14] clarify this coherence with the following example: in a marketing message aimed at a company's environmental responsibility, sight should be stimulated through images of nature, smell through the aromas of nature, touch through the possibility of interacting with natural artifacts, hearing through ambient nature sounds, and taste through the tasting of liquids or fruits that are easily associated with nature.

For Rathee and Rajain [13], the senses affect an individual emotionally, helping to create a long-lasting bond between consumers and products/services, where these become registered in the consumer's memory, leading them to repurchase and spend more time in a shopping environment. A good brand strategy aggregates all five senses, thus reinforcing the way it is perceived among consumers, creating an advantage over its competitors.

According to Lindstorm [3], we are all consumers and for that reason, we are constantly bombarded with messages from marketing and advertising professionals, which our brains collect, filter, and some of them, store—memory—but most are forgotten. This process is unconscious and happens instantaneously throughout a human being's daily life.

Neuromarketing has been defined as the study of the brain mechanisms, to understand consumer behavior in order to improve marketing strategies [17]. In marketing and neuromarketing, the main research topic is the act of buying and how it is stimulated [18]. This is studied through neuroscientific methods that, through the use of tools and techniques, are able to measure, map and record brain and neural activity during a given behavior [19]. According to the same author, it is possible to generate neurological representations of this activity in order to understand the specific responses of the brain and nervous system as a result of exposure to stimulus.

Lim [17] organizes the methods used by neuroscientists to observe neurological processes during a given activity and classifies them into three basic categories: "recording neurological activity inside the brain", "recording neurological activity outside the brain" and "manipulating brain activity".

Kolar [17] states that neuroscience, by studying the customer's decision process, can reveal how a product might satisfy the consumer's needs, since it has been proven that certain products or brands are bought for their physical characteristics. Regarding price, a number of neuroscientific results reveal that "price evokes general value considerations, regardless of whether products are known or unknown before consumption" [18], as consumers evaluate products even without knowing their price. From a neurological point of view, Lim [18] also reveals that price can elicit reactions in the nervous system such as happiness, pain, or regret.

From a digital perspective, neuromarketing will be an asset because it can be used to measure the levels at which we are reached by the advertising that is presented to us daily, across all devices [17].

43.3 Research Problem and Methodology

The main purpose of this study is to understand the existence of a relationship between consumer experience, through the stimulation of the five senses, and consumer satisfaction in an online store. It is also intended to understand whether sensory marketing contributes to customer retention and positive word-of-mouth.

The study is based on the adaptation of Eroglu, Machleit, & Davis [18]—SOR model adapted from Eroglu et al. (2003). The "Stimulus" or stimulus corresponds to the online store atmosphere that features as indicators: high relevance tasks (all descriptive, verbal or pictorial, that appear on screen and facilitate and enable the consumer's purchase objective), and low relevance tasks (website information relatively irrelevant for the purchase completion); the "Organism" or organism corresponds to the consumer's attitude toward the aforementioned stimulus that can trigger a positive or negative response; and the "Response" or response is what results from the attitude and reflects the satisfaction or dissatisfaction of the consumer. Based on the model of Eroglu et al. [18] and the concepts mentioned in the literature review, the SOR model was adapted and is presented below (Fig. 43.1).

The responses to these stimuli will be collected using the MP35 system, which measures the so-called Electrodermal Activity (EDA) or Skin Conductance (SC), and "is one of the most sensitive measures for the evaluation of arousal and measures the activity of the sweat glands of the hands, that is, if the hands perspire, it suggests the existence of emotional stimulation, and was even once used as a lie detector, at the time called a polygraph, measuring the conductivity of the skin when in contact with an electrode". [18].

To understand if there is a positive relationship between the five senses and consumer satisfaction, purchase intention, and word-of-mouth, the following hypotheses were made:

H1: There is a positive relationship between the stimulation of the sense of sight and consumer satisfaction.
H2: There is a positive relationship between the stimulation of the sense of sight and the intention to purchase again.
H3: There is a positive relationship between the stimulation of the sense of sight and word-of-mouth.
H4: There is a positive relationship between the stimulation of the sense of hearing and consumer satisfaction.

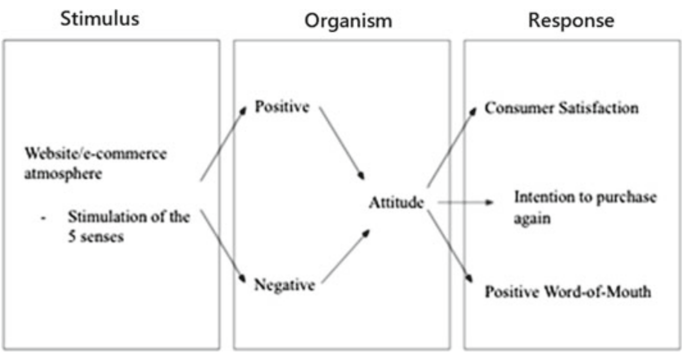

Fig. 43.1 SOR model adapted for the present study

H5: There is a positive relationship between the stimulation of the sense of hearing and the intention to purchase again.
H6: There is a positive relationship between the stimulation of the sense of hearing and word-of-mouth.
H7: There is a positive relationship between the stimulation of the sense of taste and consumer satisfaction.
H8: There is a positive relationship between the stimulation of the sense of taste and the intention to purchase again.
H9: There is a positive relationship between the stimulation of the sense of taste and word-of-mouth.
H10: There is a positive relationship between the stimulation of the sense of touch and consumer satisfaction.
H11: There is a positive relationship between the stimulation of the sense of touch and the intention to purchase again.
H12: There is a positive relationship between the stimulation of the sense of touch and word-of-mouth.
H13: There is a positive relationship between the stimulation of the sense of smell and consumer satisfaction.
H14: There is a positive relationship between the stimulation of the sense of smell and the intention to purchase again.
H15: There is a positive relationship between the stimulation of the sense of smell and word-of-mouth.

43.4 Research Methodology

Data collection was carried out in the laboratory of the School of Health of the Polytechnic of Porto. To obtain empirical data, a quantitative study was carried out, translating opinions into numbers and formulating hypotheses in order to classify the relationship between variables, to ensure the reliability of the results. The data collection was carried out through primary sources. To this end, the method of laboratory experimentation was applied through team observation. The data collection method used was the MP35 data acquisition unit to record the electrodermal skin responses of the volunteers when exposed to certain sensory stimuli on the websites. The MP unit receives the signals and converts them into digital signals that can be processed using a computer.

43.5 Data Collection (Questionnaires)

All volunteers were given a few minutes before starting the test, to familiarize themselves with the MP unit and to record their electrical conductance signal without being exposed to the websites and their stimuli. The data collection unit contains two sensors to which "Isotonic Recording Eletrd Gel" is added so that the electricity from the skin is correctly collected. The sensors were connected to the volunteers via the middle finger and index finger of their right or left hand (if the volunteer was right-handed they were connected to the left hand, and if the volunteer was left-handed they were connected to the right hand, so the other hand was free to navigate the websites).

During the time that volunteers were browsing each of the five websites, the minutes in which they encountered the sensory stimuli present on each website were manually recorded, and then both the number and range of responses were added.

43.6 Pre-test

For each of the five senses to be studied, based on the literature review, two possible websites that could be used in the tests with volunteers were selected. As such, for each sense, it was necessary to identify which of the two websites was the most appropriate and obtained the most electrodermal responses. To do this, pre-tests were conducted on two volunteers. The purpose of the pre-test was to analyze the responses to two different websites by each of the senses (except hearing) under study. The website with the most skin electro-conductance responses by each of the senses was chosen for data collection.

43.6.1 Websites for Testing Visual Stimulation

Two e-commerce websites were chosen for the pre-test: the Adidas website (https://www.adidas.pt/) and the Asos website (https://www.asos.com/), for their image characteristics, for containing product videos, for their design, and for their reputation. After analyzing the data from the pre-test, by the highest number of responses obtained, Adidas was the chosen website for data collection. To stimulate sight, the magnification of some images and viewing of product videos were considered.

43.6.2 Websites for Testing Auditory Stimulation

The chosen website was Harley-Davidson's (https://www.harley-davidson.com). The brand's website contains several videos that demonstrate the sensations provoked by experiences on motorcycles, accompanied by their characteristic sound and background music. To stimulate listening, the brand's storytelling videos and the response to the magnification of some images were also considered.

43.6.3 Websites for Testing Taste Stimulation

Two e-commerce websites associated with food products were chosen to conduct the pre-test. The online store Pedaços de Cacau (https://pedacosdecacau.pt/) and Arcádia (https://arcadia.pt/), as both have enticing product photos and appealing descriptions on all their products. Analyzing the pre-test data, the Pedaços de Cacau e-commerce was the website chosen for data collection because of the higher number of responses obtained. Taste stimuli, magnification of images of chocolates of all kinds, and reading detailed product descriptions were considered.

43.6.4 Websites for testing Olfaction Stimulation

In the pre-test, the following were analyzed: the fragrance category of Zara Home's online store (https://www.zarahome.com/pt/), for having a part of its online store dedicated to fragrances accompanied by descriptions that refer to the consumer's imagination; and the online store of the brand Lemon Jelly (https://www.lemonjelly.pt). Taking into account the results obtained in the pre-test, the e-commerce website chosen to test the smell stimulus in this study was the Lemon Jelly footwear one. Smell sensory stimuli were considered to be the visualization of images with lemon and the images of lemon with movement. Zooming of the shoe images was also considered.

43.6.5 Websites for Testing Touch Stimulation

One of the e-commerce websites considered was the one that sells the Ipod Touch (https://www.apple.com/pt/ipod-touch/) because it was considered by the author to be appealing to the sense of touch. The other was the e-commerce website Tecidos.com.pt (https://www.tecidos.com.pt/), which was chosen for the pre-test not only because the name of the store indicates something tangible (the fabric), but also because the website presents several images of each product and complete descriptions (weight, material, touch sensation, among others). The product descriptions, the enlarged images of the fabrics, and the click on "Tecidos A-Z" were considered touch stimuli.

43.7 Sample

Focusing on individuals in the European Union, a study conducted by Eurostat [19] with data from the year 2018 on the use of Information and Communication Technologies by households and individuals, found that in the 12 months prior to the survey, seven out of ten internet users made online purchases during that period. Taking into account the data from 2017, the study considers that the number of e-shoppers is growing and had the largest increase in the 16–24 and 25–54 age groups, with 18% of the second age group stating that they had made more than 6 to 10 online purchases in the 3 months prior to the study.

In Portugal, 75% of the respondents say they have used the internet in the 12 months prior to the study, and 37% admit to having shopped online. According to a study on online shopping frequency worldwide, conducted as of October 2018, 20% of online shoppers revealed having purchased physical products in an e-commerce on a weekly basis and 31% revealed buying once a month online [20].

Taking into account the presented data, and the fact that 25 years allows for some purchasing power, the age group chosen for data collection ranges from 25 to 54 years because it is the group with the highest growth of e-shoppers and also the most active when it comes to buying online.

43.8 Analysis of Satisfaction, Repurchase, and Word-of-Mouth Results

As mentioned before, the participants of the study browsed the websites and accomplished the indicated tasks. So, to understand if there is a connection between the stimulus of the senses and consumer satisfaction, possibility of repurchase, and positive word-of-mouth, at the end of each website the participants answered a questionnaire that aimed to assess consumer satisfaction [21], the possibility of buying again [22] and positive *word-of-mouth* [23, 24] with response options on a Likert scale.

To assess consumer satisfaction on websites, the questions asked were based on a study by Smith and Bolton [21].

To understand if users would buy from the website again, the statements in the questionnaires were based on a study by Schoefer and Diamantopoulos [22].

To analyze positive word-of-mouth, the statements in the questionnaires were based on a study by Blodgett et al. [23] and Maxham [24].

43.9 Descriptive Analysis of Website Satisfaction

Regarding the satisfaction with Adidas' website, which aimed to stimulate the sense of sight, the overall experience consists of: 77.8% of the respondents said they were satisfied, 11.1% very satisfied, 5.6% neutral and 5.6% dissatisfied.

To the question that sought to understand the opinion about the work done by this website, most respondents (61.1%) said that the website did a good job, 22.2% say it was very good and 16.7% remain neutral in their response.

For the question about the feeling toward the overall experience, most of the volunteers (66.7%) said that their experience on the website was happy, 22.2% remained neutral in their answer, 5.6% said it was very happy and 5.6% say they felt unhappy with the experience.

Overall, respondents were satisfied, think the website did a good job, and that they had a happy experience.

In the case of satisfaction regarding the Lemon Jelly website, which was intended to stimulate the sense of smell, to the question "Given your previous experiences, how do you feel about the overall experience on this website?": 44.4% of the volunteers said they were satisfied, 27.8% neutral, 22.2% very satisfied, and only 5.6% dissatisfied with the experience on the Lemon Jelly website.

To the question "Taking into account your previous experiences, how do you feel about the work done by this website?": 44.4% pointed out that, for them, the website did a very good job, 27.8% considered the work to be good, 22.2% remained neutral in their answer and 5.6% considered the work to be poor.

For the question "Given your previous experiences, how do you feel about the overall experience on this website?", half of the respondents (50%) revealed that they were happy, 22.2% very happy, 22.2% neutral and 5.6% felt unhappy.

In an overall view, individuals felt satisfied, considered that the website did a good job, and was happy.

Regarding satisfaction with the Tecidos.com.pt website, which aimed to stimulate the sense of touch, to the question about satisfaction with the overall experience on the website, 38.9% of the volunteers responded that they were satisfied, 33.3% had a neutral opinion, 22.2% were dissatisfied and only 5.6% felt very satisfied.

To the question about the "work done by this website?", there were 44.4% neutral answers, 27.8% considered that the work done was good, 16.7% and 11.1% said the work was poor and very poor, respectively.

To the question that sought to evaluate the "feelings toward the overall experience on this website?", 61.1% of the respondents (the majority) revealed a neutral opinion, 27.8% felt happy and 11.1% felt unhappy.

In an overall perspective on the individuals' opinion, about 1/3 were satisfied with the website experience but the majority of responses were neutral for both the work done by the website and the feeling toward the overall experience.

About the satisfaction with the website Pedaços de Cacau, which proposed to stimulate the sense of taste, the majority (55.6%) of the volunteers responded to be satisfied with the overall experience on the website, 38.9% were very satisfied and only 5.6% expressed a neutral opinion.

Regarding the work done, 44.4% stated that the website did a very good job, 33.3% considered the work good, 16.6% had a neutral opinion, and 5.6% considered the website poor.

About the feelings regarding the overall experience on the website Pedaços de Cacau, 44.4% of the volunteers felt happy, 38.9% were very happy and 16.7% had a neutral opinion.

Overall, about the respondents' opinion, they felt satisfied, considered that the work done by the website was very good, and felt happy with the experience.

About the satisfaction with the Harley-Davidson motorcycle website, which intended to stimulate the sense of hearing, 44.4% of the respondents considered themselves satisfied, 22.2% very satisfied and 33.3% kept their answer neutral.

Regarding the work done by Harley-Davidson, 44.4% of the volunteers consider that the website did a good job, 38.9% consider the work done was very good and 16.7% have a neutral opinion.

About the feeling related to the website experience, 44.4% of the volunteers felt happy, 38.9% said they were happy, 11.1% very happy and 5.6% neutral.

The general opinion of the volunteers was positive since there was satisfaction with this website as well as they consider that the work done by the website was good, and they felt happy with the experience that the website gave them.

43.9.1 Sensory Stimuli Versus Number of Responses

To understand the average responses of individuals to sensory stimuli, a descriptive frequency analysis was performed and is presented in Table 43.1.

Regarding the visual stimulus on the Adidas website, the average number of responses to the two stimuli presented is 2.78. When it comes to Lemon Jelly and smell, the enlargement of the shoe images got an average of 2.22 responses, the images with lemon (the most important stimulus in the sense of smell) got an average of 3.89 responses and the moving images got an average of less than one response. In stimulating the sense of touch, tissue image enlargements on average got 2.56 responses and tissue reading got 2.17. The taste e-commerce website, Pedaços de Cacau, obtained 1.89 average responses to the stimulus in the magnification of images with chocolates and 2.94 in the reading of product descriptions. Finally, Harley-Davidson scored the best, with 4.83 average responses to the stimulus on viewing the video and 1.22 on viewing images of motorcycles.

Overall, with the exception of the moving images on the Lemon Jelly website, all volunteers responded on average more than once to the stimuli, with the Harley-Davidson video having the highest number of responses to stimuli achieved.

Table 43.1 Average responses to sensory stimuli

		ADIDAS_ Zoom_ Images_ N_ Responses	ADIDAS_ Viewing_ Video_N_ Responses	LEMON_ Zoom_ Shoes_N_ Responses	LEMON_ Images_ Lemon_ N_ Responses	LEMON_ Images_ Movement_ N_ Responses	TECIDOS_ Zoom_ Images_N_ Responses	TECIDOS_ Descriptions_ N_Responses	CACAU_ Zoom_ Images_ N_ Responese	CACAU_ Descriptions_ N_Responese	HARLEY_ Video_N_ Responses	HARLEY_ Photos_ Motorcicles_ N_ Responses
N	Valid	18	18	18	18	18	18	18	18	18	18	18
	Omission	0	0	0	0	0	0	0	0	0	0	0
Average		2.78	2.78	2.22	3.89	0.67	2.56	2.17	1.89	2.94	4.83	1.22
Median		2.00	2.00	2.00	4.00	0.00	1.50	1.50	1.00	3.00	4.50	1.00
Asymmetry		0.591	0.791	0.763	0.688	1.208	1.512	0.466	1.582	1.112	1.324	0.288
Standard error of the asymmetry		0.536	0.536	0.5036	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
Kurtosis		−0.923	−0.889	0.535	.233	0.299	1.806	−1.334	2.716	2.525	2.199	−0.884
Standard error of Kurtosis		1.038	1.038	1.038	1.038	1.038	1.038	1.038	1.038	1.038	1.038	1.038

43.10 Hypothesis Validation

It was assessed whether there were positive correlations between sense stimulation and consumer satisfaction, word-of-mouth, and repurchase intention. To do this, Pearson correlations (for parametric data) were performed for samples that follow a normal distribution, and Kendall's Tau-b (for non-parametric data) for when this is not the case. The results were considered statistically significant for a 5% significance level ($p < 0.05$). For each of the hypotheses below, the p-value and the magnitude of the effect (correlation value) will be reported.

In the statistical analysis, it was possible to validate the hypotheses, and it was found that there is positive relationship, H1, and H15 (see Tables 43.2 and 43.3). It was also found that there is negative relationship in hypotheses H4, H6, and H9 (see Tables 43.4, 43.5 and 43.6). Regarding the other hypotheses, it was verified that there is no relationship.

There is a positive relationship between satisfaction with the overall experience on the Adidas website and the number of responses to sight stimulus through video (H1) since the magnitude of the correlation is 0.527 for a significant p-value of 0.025.

There is a positive relationship between the measure of positive word-of-mouth related to intention to recommend to friends and the breadth of responses to the sense of smell (H15) ($R = 0.482$, $p = 0.043$). There is no significant relationship with any other measure of positive word-of-mouth.

When the person is stimulated through sounds, in the case of the present study video and sound (H4), there is a negative correlation between consumer satisfaction and the amplitude of responses to the stimulus as the magnitude of the correlation is -0.533 for a significant p-value of 0.023.

There is a relationship between the measures of positive word-of-mouth i.e., recommend to friends ($R = -0.624$, $P = 0.006$), tell friends to test the product/service ($R = -0.495$, $P = 0.037$) and make positive recommendations ($R = -0578$, $P = 0.012$), and the amplitude of responses to the listening stimulus (H6). The correlation magnitude values are less than zero, which indicates a negative relationship between

Table 43.2 Correlation between stimulation of the sense of sight and consumer satisfaction

		SIGHT_ General_ Experience	ADIDAS_ Zoom_ Images_N_ Responses	ADIDAS_ Zoom_ Images_ Amplitude	ADIDAS_ Viewing_ Video_ Amplitude	ADIDAS_ Viewing_ Video_N_ Amplitude
SIGHT_ General_ Experience	Pearson's Correlation	1	0.105	0.152	−0.057	0.527*
	Sig. (bilateral)		0.679	0.548	0.821	0.025
	N	18	18	18	18	18

* There is a relationship between the two variables; i.e. to see if they are correlated.
** Correlation is significant at the 0.01 level (2-tailed)

Table 43.3 Correlation between stimulation of the sense of smell and word-of-mouth

		SMELL_Recommend_Friend	SMELL_Say_Friends_Test_Service	SMELL_Positive_Recommendations	LEMON_Images_Lemon_N_Responses	LEMON_Images_Lemon_N_Amplitude	LEMON_Images_Movement_N_Responses	LEMON_Images_Movement_Amplitude	LEMON_Zoom_Shoes _N_Responses	LEMON_Zoom_Shoes_Amplitude
SMELL_Recommend_Friend	Pearson's Correlation	1	0.837**	0.835**	0.158	0.018	−0.125	0.111	0.264	0.482*
	Sig. (bilateral)		0.000	0.000	0.531	0.945	0.621	0.662	0.289	0.043
	N	18	18	18	18	18	18	18	18	18
SMELL_Say_Friends_Test_Service	Pearson's Correlation	0.837	1	0.701**	0.116	−0.013	−0.217	0.035	0.095	0.322
	Sig. (bilateral)	0.000		0.001	0.647	0.960	0.388	0.890	0.707	0.193
	N	18	18	18	18	18	18	18	18	18
SMELL_Positive_Recommendations	Pearson's Correlation	0.835**	0.701**	1	−0.057	−0.385	−0.389	−0.198	0.201	0.210
	Sig. (bilateral)	0.000	0.001		0.821	0.114	0.11	0.432	0.425	0.404
	N	18	18	18	18	18	18	18	18	18

* There is a relationship between the two variables; i.e. to see if they are correlated.
** Correlation is significant at the 0.01 level (2-tailed)

Table 43.4 Correlation between stimulation of the sense of hearing and consumer satisfaction

		HEARING_ General_ Experience	HARLEY_ Video_N_ Responses	HARLEY_ Video_ Amplitude	HARLEY_ Photos_ Motorcicle_ N_ Responses	HARLEY_ Photos_ Motorcicle_ Amplitide
HEARING_ General_ Experience	Pearson's Correlation	1	−0.186	−0.533*	−0.275	−0.366
	Sig. (bilateral)		0.460	0.023	0.270	0.135
	N	18	18	18	18	18

* There is a relationship between the two variables; i.e. to see if they are correlated.
** Correlation is significant at the 0.01 level (2-tailed)

the variables, i.e., for greater positive word-of-mouth the smaller the amplitude of responses to the listening stimulus.

There is a relationship between one of the measures of positive word-of-mouth, i.e., making positive recommendations ($R = -0.622$, $P = 0.006$), and the number of responses to the taste stimulus (H9). The correlation magnitude value is less than zero which indicates a negative relationship between the variables. There is no significant relationship with the remaining word-of-mouth measures.

Concerning the study, it was possible to draw a set of conclusions, namely:

- It was possible to realize a relationship between the stimulus of sight and consumer satisfaction and between the hearing stimulus and consumer satisfaction. However, the relationship between the stimuli and consumer satisfaction happens in reverse order because one is positive and the other one negative.
- It was also perceived, with this study, that there is no relationship between the number of responses and the amplitude of responses.
- It was also possible to verify relationships between positive word-of-mouth (recommend to friends, tell friends to test the product/service, and make positive recommendations) and the amplitude of responses to the listening stimulus. However, these are negative relationships since the more significant the positive word-of-mouth is, the smaller the amplitude of the responses to the listening stimulus.
- The same was found between the positive word-of-mouth in the area of making positive recommendations and the number of responses to taste stimulus. There was definitely a positive relationship between the measure of positive word-of-mouth related to the intention to recommend to friends and the amplitude of responses to the sense of smell.
- Despite only verifying a positive correlation between the stimulus of sight and consumer satisfaction, and the hearing stimulus and consumer satisfaction, all the senses stimulated in the volunteers managed to obtain electrodermal responses. Thus, it is perceived that it is indeed possible to stimulate the consumer's senses

Table 43.5 Correlation between stimulation of the sense of hearing and word-of-mouth

		HEARING_ Recommend_ Friend	HEARING_ Say_Friend_ Test_Service	HARLEY_Positive_ Recommendations	HARLEY_ Photos_ Responses	HARLEY_ Video_ Amplitude	HARLEY_ Photos_ Motorcicles_ N_Responses	HARLEY_ Photos_ Motorcicle_ Amplitude
HEARING_ Recommend_Friend	Pearson's Correlation	1	0.738**	0.741**	−0.181	−0.624**	−0.101	−0.140
	Sig. (bilateral)		0.000	0.000	0.471	0.006	0.689	0.580
	N	18	18	18	18	18	18	18
HEARING_Say_ Friend_Test_ Service	Pearson's Correlation	0.738**	1	0.870**	−0.261	−0.495*	−0.102	−0.045
	Sig. (bilateral)	0.000		0.000	0.295	0.037	0.687	0.860
	N	18	18	18	18	18	18	18
HEARING_ Positive_ Recommendations	Pearson's Correlation	0.741**	0.870**	1	−0.207	−0.578*	−0.060	−0.084
	Sig. (bilateral)	0.000	0.000		0.411	0.012	0.812	0.741
	N	18	18	18	18	18	18	18

* There is a relationship between the two variables; i.e. to see if they are correlated.
** Correlation is significant at the 0.01 level (2-tailed)

Table 43.6 Correlation between stimulation of the sense of taste and word-of-mouth

		TASTE_Recommend_Friend	TASTE_Say_Friends_Test_Service	TASTE_Positive_Recommendations	CACAU_Zoom_Images_N_Responses	CACAU_Zoom_Images_Amplitude	CACAU_Descriptions_N_Responses	CACAU_Descriptions_Amplitude
TASTE_Recommend_Friend	Pearson's Correction	1	0.632**	0.632**	−0.359	−0.260	−0.150	−0.006
	Sig. (bilateral)		0.005	0.005	0.143	0.298	0.552	0.981
	N	18	18	18	18	18	18	18
TASTE_Say_Friends_Test_Service	Pearson's Correction	0.632**	1	0.850**	−0.424	−0.128	−0.131	0.053
	Sig. (bilateral)	0.005		0.000	0.079	0.612	0.606	0.835
	N	18	18	18	18	18	18	18
TASTE_Positive_Recommendations	Pearson's Correction	0.632**	0.850**	1	−0.622**	−0.043	−0.131	0.049
	Sig. (bilateral)	0.005	0.000		0.006	0.865	0.616	0.847
	N	18	18	18	18	18	18	18

* There is a relationship between the two variables; i.e. to see if they are correlated.
** Correlation is significant at the 0.01 level (2-tailed)

even though these may not be, in the end, related to their level of satisfaction with their experience in e-commerce.

As mentioned, it was possible to draw a set of conclusions from the study that could serve as a basis for other studies.

43.11 Conclusions and Future Work

E-commerce has grown and enabled the globalization of small and large companies, allowing them to reach the entire world through the internet. The consumer has become informed, curious, demanding, and impatient. Between high competition and consumer demand, it becomes imperative for companies to develop their customer-focused online presence, considering that this experience should provide a truly sensational service that encourages the consumer to tell other people about it. Overall, online consumer satisfaction is composed of a set of positive experiences when making a purchase.

Sensory marketing can be a path to create dynamic, exciting, and rewarding online experiences by engaging the consumers' five senses, making the purchase process register in their memory as a positive experience.

The inferential analysis allowed us to conclude that: (a) There is no relationship between the number of answers and their amplitude; (b) Sight and hearing are related to satisfaction in reverse order; (c) Sight and hearing relate to satisfaction in reverse order, as one is positive and the other negative; (d) If nothing is significant apart from sight and hearing senses, it must be considered that in truth, all stimuli were visual and audible. In fact, we wanted people to associate images or text with the sense of touch, taste, and smell. The achieved effect may be so small that it can fail to be verified in such a small sample and although there is no correlation, there are responses to stimuli.

This study had some limitations. The main one being the fact that it was not possible to build a website from scratch, which made it impossible to control the changes that were taking place in the websites, made by their owners. As such, it was necessary to adapt the studies as these changes were detected in the design and functionality of the brands' websites. Another limitation was the time it took to collect data in the laboratory, more than 18 h since each experiment took about 1 h.

For the future, it is suggested that other tests be carried out on each of the senses, within the scope of neuromarketing methodology, in order to reach more concrete conclusions about the influence of sensory marketing on the shopping experience and online consumer satisfaction, such as measuring the salivation of the volunteers for testing the sense of taste. Given the almost non-existent studies in this area, it is crucial to continue to investigate and try to understand the advantages of sensory marketing as a driver of experience in an e-commerce website.

Currently, marketing excellence is directly linked to customer experience, whether in product creation or website design. Sensory marketing is related to this concept by enhancing that experience, not only by offering a complete experience but also by attracting the public's attention, being already a strategy used by several companies around the world. This study initiates a path for the investigation of sensory marketing in e-commerce, thus joining the discovery of providing positive experiences to consumers in an online environment. Furthermore, it encourages companies to stimulate more than one sense at a time by making consumers react, according to their emotional impulses.

At the management level, it is important to note that consumers connect to brands through emotions, whether positive or negative and therefore companies need to engage with their target audience. Betting on a sensory marketing strategy is a way for any company to arouse emotions in its target by creating a long-term relationship. The greater the involvement of the senses, the more likely it is that customers will remember the brand/products in the future. The relationship between sensory marketing and a company's customers translates into innovative experiences, long-lasting relationships, and the possibility of registering the brand in consumers' memories.

In order to implement a company's online sensory marketing strategy, brand characteristics must be translated into dynamic, exciting, and rewarding sensory experiences.

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Chapter 44
Sharing Tourist Experiences Via Streaming—Case Study of Live Electric Tours

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Abstract The digital evolution has had a valued impact on tourism, changing the perspective of destinations and products experiences for potential tourists, through media and technology. Being live streaming an example of this phenomenon, it allows anyone to share a travel experience, ensuring that it can be viewed by a spectator at a long-distance, influencing its creator and consumer in different perspectives on a social level. To the potentials of live streaming, it adds the capability of this feature as a promotional tool, by using different social media platforms that ease communication between tourists, tourism businesses, and potential customers. This paper focuses on analyzing the feature of sharing tourist experiences via streaming in the tourism organizational environment of Live Electric Tours. It is a descriptive single case study, using three semi-structured interviews with the founder and CEO of Live Electric Tours and two of its employees as evidence. The results of this study suggest that the feature of live streaming was introduced to the company due to the need to bring something new to the market and to respond to the trend of new tourists. From the consumer perspective, the feature is seen as an extra tool and not a deciding factor or extra motivation when choosing the service, even though it's positive feedback. Also, it was confirmed the potential of live streaming as a promotional tool for the company and different destinations visited.

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44.1 Introduction

The rooted presence of digital in the daily life of contemporary society began to be reflected in tourism [1]. Since 1990s tourist experiences have changed, influenced by media and technology, considering them as mediators that ease the sharing of experiences. It is no longer necessary to be present in a physical place to experience a tourist event [2], as stated by Reino and Hay [3] "technology is changing the way tourism destinations or products are presented to the consumer" (p. 2).

Tourists started a different interaction with tourist destinations, either by creating content or consuming it, with the support of digital resources, such as live streaming technology, a "creative opportunity for engaging with tourism". This aspect of changing interaction with tourism assists multi-tasking smart tourists interested in blended tourist experiences [1] (p. 213).

Live streaming is considered a way of communication, which consists of a real-time transmission of audio and video over the internet, according to Thorburn [4]. Live streaming is increasingly popular among younger generations in different areas such as education, gaming, and TV. It was initially used as a way of sharing events and it was adapted to share the personal life of its users, disseminated on platforms that make content available via streaming [1].

In the context of tourism, live streaming allows a streamer to share a travel experience by publishing its content, ensuring that it can be viewed by a spectator at a long-distance [1]. This type of consumer-generated media (CGM) plays a mediator role by allowing others to access the experience virtually as reported by Tussyadiah and Fesenmaier [5].

According to Deng et al. [1], live streaming related to tourism, or live streaming tourism (LST), is still an area of study to be explored, despite the increase of its use in sharing travel experiences.

This article aims to analyze the feature of sharing tourist experiences via streaming in the tourism organizational environment of Live Electric Tours, considering the following research questions, (i) What motivated the introduction of the live streaming feature?, (ii) What is the impact of the live streaming feature on customer decision? and (iii) What is the role of the live streaming feature as a promotion tool? Consequently, a case study of the company Live Electric Tours was carried out, using three semi-structured interviews with its founder and CEO and two employees as evidence.

The present paper is structured in five Sections. After the introduction, a brief description of the theoretical background, followed by Sect. 3 with the research methodology used, Sect. 4 exposing the analysis and discussion of the results. Finally, we close the paper with conclusions and future work in Sect. 5.

44.2 Theoretical Background

The introduction of the theoretical background is presented at two levels, the perspective of live streaming tourism experience and live streaming tourism as a promotional tool, descriptions are shown below.

44.2.1 Perspectives of Live Streaming Tourism Experiences

Integrated in the digital revolution [6], the Industry 4.0 is considered an emerging concept and "an umbrella term for new industrial paradigm that embraces a set of future industrial developments regarding Cyber-Physical System, Internet of Things (IoT), Internet of Services (IoS), Robotics, Big Data, Cloud Manufacturing and Augmented Reality" and is "enabling an intelligent manufacturing environment" [7] (p. 1207). Being Internet of Things (IoT) defined by Vermesan and Friess [8] as a "concept and a paradigm that considers pervasive presence in the environment of a variety of things or objects that, through wireless and wired connections and unique addressing schemes, are able to interact with each other and cooperate with other things or objects to create new applications or services and reach common goals", by allowing "things to be connected anytime, anyplace, with anything and anyone" (p. 8). This Industry 4.0 phenomenon, together with the development of the internet and technological devices, is reflected in the tourism sector currently considered in an "era of Tourism 4.0", marked by the change in the behavior of tourists, tourist companies and the destinations themselves, directed toward a "smart perspective" [6] (p. 460).

According to Vermesan and Friess [8], tourism deals with the progress of digital technologies in the areas of multimedia and social media, which allow new access to destinations. In this perspective, there are two ways of sharing video tourism: pre-recorded, in which the video is filmed, saved, and later shared on a platform such as social media, and live sharing, or live streaming, where the video is shared in real-time, also on social media platforms.

The live streaming communication has the ability to ease cultural interactions and identities, through the experiences of live streaming tourists with tourist destinations [1], providing a "sense of destination presence", by easing tourists a better precession of the destination, obtaining more information about it, whether from its landscape or elements such as "history, culture, climate, and environment" [10] (p. 9). Thus considering it as social practice, by recording experiences, which allows a stimulation of social positions and identities demonstrated throughout the streaming. It can be defined as a substitute form of socio-technical tourism, through real-time visual sharing and the consumption of blended experiences. It is, therefore, important in the evolution of tourist experiences, by allowing destinations and experiences to be created, consumed, and shared [1]. Deng et al. [1] states seven perspectives of the LST (Table 44.1).

Table 44.1 Perspectives of live streaming experiences and their meaning:

Perspective	Meaning for live streaming experiences
Presence	Allows the virtual presence of the viewer, ensuring that they have “contact” with the transmitted environment
Time	Being broadcast in real-time allows live streaming tourists to follow the live streamer’s tourist experience at the same time
Space	Provides the existence of a virtual or online third place [11]
Performance	The role of the live streamer seen as a performance
Authenticity	Possibility of being more authentic than other visual media, since it is live and not editing can allow a more authentic visualization of the experience (e.g., events, places, and people)
Storytelling	A good story shared by the streamer can guarantee the viewer a good precession of the ongoing experience
Social interaction	There is an interaction between the viewer and the publisher of the content, for example through comments. This will ease the blended tourism experience, as the viewer will be able to guide the streamer during the trip, demonstrating a co-presence [12]

Based on his seven perspectives (Table 44.1), Deng et al. [1] also presents a conceptual model of the components that make up the LST, both from the perspective of live streamers and the perspective of live streaming tourists.

Considering that the live streamer is recording the live streaming video, being physically present on-site, and mobilizing, it ends up transmitting storytelling, performance, and authenticity [1].

In the live streaming process, viewers will have a blended experience (physical and virtual) and contact with social identity matters and para-social interactions, while virtually there, watching a video [1].

44.2.2 Live Streaming Tourism as a Promotional Tool

According to Reino and Hay [3], in terms of tourism marketing, the use of the internet has become an advantageous tool by attracting new customers. As so, user-generated content (UGC) shared on platforms such as YouTube has been influencing the image of tourists about the destination or product they intend to visit or enjoy, “by connecting directly with tourists”. Social media such as YouTube, Twitter, and Facebook ease communication between tourists, tourism businesses, and potential customers, becoming tourist sellers of the destination or product they comment on by sharing their experience. Tourists have shown greater interest in this type of sharing, as a source of information, since they “are more interested in real and authentic experiences” (p. 2).

YouTube allows the freedom that tourists want since through their research, they can easily access to specific reviews, activities, and advice. Hence the perspective that "tourists do not want to be sold to destination or product, rather they want to be active in creating their own experiences, based on the experiences of like-minded others" [3] (p. 8).

Considering these changes in the tourism landscape, tourism organizations demonstrate a difficulty in adapting, as they want to adapt traditional campaigns (TV and cinema) produced by advertising agencies, to new channels such as YouTube, making them insufficient for their potential clients. Reino and Hay [3] suggests "hiring" youtubers to produce videos for these same organizations, stating that success in using new media depends on a balance between three sources: induced, organic and autonomous. It is not enough to publish traditional promotional adverts. In other words, "the trick for tourism organizations is to make tourists believe that what they are seeing is real" (p. 9).

In a study by Tussyadiah and Fesenmaier [5], dedicated to understanding the role of online video sharing, published by real travelers online, as a mediator of tourist experiences, it was proven that these same videos "have the potential to affect touristic experiences" (p. 37). They can be used as a motivating tool for future tourists, by bringing pleasure through the imagination created by the viewer, about the destination they intend to see or even by reliving past experiences. It works as "powerful as media of ''transportation" within the concept of virtual mobility" by easing access to the destination in a "realistic and imaginative way", demonstrating the importance of interactions between those who publish and those who visualize (p. 37).

According to Alpestana [13], the current context, the Covid-19 pandemic that spread at the beginning of 2020, came to anticipate trends such as "the greater use of digital resources in the dissemination of cultural content". Streaming shares are, therefore, a tool for promoting destinations "and a complement to the on-site visit" (p. 220).

44.3 Methodology

Considering that this study aims to analyze the feature of sharing tourist experiences via streaming in the tourist organizational environment of Live Electric Tours, the following research questions were considered, (i) What motivated the introduction of the live streaming feature?, (ii) What is the impact of the live streaming feature on customer decision? and (iii) What is the role of the live streaming feature as a promotion tool?. We understood a qualitative methodology, supported by the case study method, as the best approach, since the study's expository practice is carried out in a real context. As [14] states, "a case study is an empirical investigation that investigates a contemporary phenomenon within its real-life context" (p. 32), allowing its use to contextualize a study phenomenon.

A descriptive single case study is presented, in other words, the complete description of the phenomenon under study, within its context, using as source of evidence three semi-structured interviews with the founder and CEO and two employees of Live Electric Tours.

44.3.1 Live Electric Tours

Live Electric Tours is a Portuguese start-up in the tourism sector, which offers electric car rental services. It is based on two offers, 100% electric Twizys for two people, equipped with free internet, GPS audio guide, and a live camera, which allows customers to share their entire trip, live, or record for later access and also offers different routes and free parking. And high-end cars—Tesla, for six people, with a private driver [15].

The tours can be self-guided, targeted to two clients. Group tours are planned for situations such as team building, meetings, conferences, and other events, with the possibility of these tours being combined, that is, a tour that includes an electric car, speedboat, and walking tour. They also offer a private tour service, in high-end cars—Tesla [15].

The creation of Live Electric Tours was motivated by personal reasons. With the founder's interests focused on tourism and electric vehicles, he realized in his travels that "I couldn't find any solution that would get me to know a city in a simple, fast, autonomous, economical way (…) and also sustainable".

As the issue of sustainability is a major matter for the company, operating with 100% electric cars and being winners of an award for the best start-up in the world in the area of sustainability by the World Tourism Organization, they intend to become a company "completely sustainable, whether at an environmental, economic, or social level", currently considering themselves "at 90% of this path".

After being created in 2017, they expanded their operations motivated by the ambition of business growth and being close to their customers, providing them with "different experiences, in different cities". They expanded from Lisbon to Évora and Porto, following to Sintra, Funchal, Porto Santo, Bonaire, Malaga, Rome, and Ostuni, cities were chosen by the strong tourist flow they present, being recommended for 100% electric cars and relatively small, which allows a "very immersive experience" for their customers.

Considering the target audience of Live Electric Tours, they are mostly targeted online, through its website, and by its sales partners such as GetYourGuide.

In the pre-pandemic period, the main focus of the company's action was not in a specific city but, with Covid-19, the focus increased in the Portuguese capital, Lisbon, as the company was forced to restrict its normal services in some cities. In addition to this obstacle, Covid-19 stopped in 2020 the launch of the franchise of Live Electric Tours, which would have "an expansion plan of more than ten national, international and intercontinental cities", but they are still motivated to follow this path. It is also presented as a consequence of Covid-19, a difference in the company's customer focus, as before the pandemic most customers were foreigners, with the trend reversing to a focus on Portuguese customers.

Live Electric Tours has a diversity of institutional partners, such as Portugal Ventures, Turismo de Portugal, Turismo de Lisboa, Turismo do Porto and Região de Turismo do Alentejo, among other public and organizational institutions, which add value and credibility to the company.

The use of Twizys in the service provision is justified by their small size, which causes the least possible impact on urban circuits, circuits where the company operates, also for allowing easy parking, in addition to the fact that they are electric. The option of private tours, which use Tesla brand vehicles, was born out of demand from a niche market, customers with higher purchasing power who wanted longer, more comfortable, and autonomous tours.

The other technological features implemented in the car, such as the GPS audio guide, and offers such as free parking have been introduced in the service since its creation. However, other offers such as combined group tours were introduced later, considering customer demand and also thinking about how Live Electric Tours could add more value to the customer experiences.

44.3.2 Description of the Methodology Process

As already mentioned, this study case used as source of evidence three semi-structured interviews with the founder and CEO and two employees of Live Electric Tours.

The interviews were conducted via videoconference, on July 12th and 16th, 2021, recorded with authorization from the three interviewees and lasted an average of 30 min for the interview with the founder and CEO and 10 min for each interview with the two employees of Live Electric Tours.

The content of the interviews was transcribed and later interpreted through a collaborative software for qualitative analysis, webQDA.

44.4 Analysis and Discussion of Results

When asked "As for the live streaming feature on tours, what was the origin of its use?", the company's founder and CEO explained that the introduction of the live streaming feature on Live Electric Tours services was based on the need to bring something new and disruptive to the market. As he says, "the fact that we entered the market only with electric vehicles and the provision of pre-programmed tours in GPS audio guide, was not enough distinctive for us to distance ourselves from our competition". After analyzing the market in which they operate, the company realized the tendency of new tourists that wanted to "always stay connected and share their experience in real-time", presenting as an example the popularity of Instagram stories and shared vlogs, "in our vehicles, while tourists can get to know the city, they can also share the experience live to social media". That is in line with the statement by Deng et al. [1], regarding the popularity of live streaming, adapted to the sharing of the personal life of its users, which changed the interaction with tourist destinations. Questioning whether the live streaming feature has made the company more competitive in the market in which it operates, the founder and CEO affirm “the live streaming feature has given us the possibility of being the first and only company in the world, in the tourism sector, to have this kind of feature. And this has made us a disruptive and technological company and without a doubt, compared to all others, we are a few years ahead in offering the customer a technological, connectivity and sharing experience, which nowadays is still very hard to find”.

The name of the Live Electric Tours company, whose term “Live” has a direct association with the live streaming feature, led to the question, “Do future customers associate the term with the feature, when they have a first contact with the company name?”, the three respondents answered that there is no first assumption. Also consider the impact of using the term on the decision of potential customers when choosing Live Electric Tours services, respondents agree that it will not impact the choice of services, as there is no assumption of the term, ending up just being a “pleasant surprise when they get to know” the possibility of live streaming on tours.

Understanding the perspective of customer choice in general, with the question “Do you consider the live streaming feature a decisive factor or an extra motivation, when customers are deciding to choose your company?”, it was concluded that the feature is not a decisive factor nor an extra motivation individually, in the choice of services. Two of the interviewees believe that it is the set of features and services provided by Live Electric Tours, such as free internet, pre-programmed tours, and GPS audio guide, that motivate potential customers to choose the company, “there is no comparison between our offer and others, that is, what we offer for this price is very, very different”. Also in this context, the generational issue is presented by two of the interviewees, as the younger audience is more attracted to this feature than the middle-aged audience, who will prefer to just record the experience and not share the live streaming, being also motivated by the issue of sustainability and being able to get to know the city in a simple, fast and autonomous way. Or rather than a niche audience with a higher purchasing power, which values the convenience and autonomy of the services. Such statements confirm the growing popularity of features among young people, highlighting a distinction between generations [1].

As stated by Deng et al. [1], live streaming is important to the evolution of tourist experiences, as it allows destinations and experiences to be created, consumed, and shared. This impact is confirmed by highlighting in the interviews carried out the possibility of sharing the experience on social media, with family and friends, as the main reason for using the live streaming feature. One of the interviewees also mentions the popularity, especially in 2019, of making live streaming as one of the triggers for its use. Another contributor also references social media professionals who have already used the company’s service, such as youtubers and vloggers, see the feature as a support tool in their work.

The question “What is the feedback on the use of live streaming, from your customers?” was presented, and it was concluded a positive feedback of the feature. Although according to Employee 1, “it is not usual in tourism to have this tool and so they present some surprise, later on, at the end of use, they find it interesting and nice afterward to keep that memory of the experience", with this possibility of remembering the experience being a subsequent stage of live streaming.

Finally, with the question "Do you consider live streaming a promotion tool driven by customers?" based on the studies by Reino and Hay [3] and Tussyadiah and Fesenmaier [5], the role of live streaming feature as a promotion tool was confirmed, in this case for the company itself. This promotion takes place, for example, through the publication of the live on the Live Electric Tours page, which is shared by customers, reaching their followers, friends, or family. One of the interviewees also presented the matter of live streaming as a means of promoting the regions where the experiences take place.

44.5 Conclusions and Future Work

With this study, we were able to understand the role of live streaming in the tourist context of the Live Electric Tours star-up, understanding its feature as a disruptive and technological factor, which allows the company to stand out in the market, making it more competitive and differentiating from its competitors.

The possibility of live streaming was introduced at Live Electric Tours due to the need to bring something new to the market and to respond to the trend of new tourists wanting to always be connected and share their experiences in real-time. However, in the consumer context, the feature is seen as an extra tool and not a deciding factor or extra motivation when choosing the service. The motivation for its use varies according to the generation that uses it, highlighting the youngest as the most enthusiastic about its use, differentiating itself from middle-aged customers and from niches with a high purchasing power. Despite the prospect of being an additional service, live streaming has very positive feedback from customers.

The capacity of the live streaming feature as a promotional tool for the company and also for the regions where the experiences take place was also confirmed.

As for a future work proposal, is suggested different analysis, one more focused on the relationship between live streamer and live streaming tourists, when using the live streaming service, one of the uses of live streaming as an exclusively regional means of promotion and also an analysis of the impact of live streaming tourism during the pandemic, for tourists, tourist companies and destinations.

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Chapter 45
Youth Generations, New Technologies, and a New Kind of Tourism—Trends and Challenges

Inês Braga, António Abreu, and Ana Paula Afonso

Abstract This investigation is based on the trilogy of Youth generations, technologies and tourism, and its objective is to carry out a theoretical reflection on the theme, bringing together scientific information from different countries, which allows for a characterization of the new trends in tourism that is increasingly manifested digitally, requiring a close intrinsic relationship with technologies and implying new tourist experiences on the part of individuals, namely the youth generation. The methodology used is a literature review covering themes on the evolution of mass tourism toward a New Tourism or Post-Tourism, the use and impact of new technologies in the context of the offer of tourist experiences, in the research and publication of information in social media by new tourists, with a focus on the Youth generations. A characterization of the generations of Millennials and Post-Millennials is made, tracing their respective profiles, taking into account their way of acting in social media in the current tourist context. The User-Generated Content (UGC) is highlighted, whose information is related to the tourism experiences lived by young people and shared by them on social networks, information, and communication channels with growing impact and alternatives to those that disseminate paid information and published on the net. In the final considerations, some of the most important conclusions of the research are taken up again. Some recommendations are reinforced in these matters collected in the research and which can serve as a reflection and alert so that the stakeholders involved in this new tourism can obtain better performance and results.

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45.1 Introduction

At a time when all over the world, most citizens have a lifestyle in which technologies are a sign of progress and are part of their daily lives, strongly conditioning them (for better or for worse), we think it is opportune to reflect on them, from the perspective of their use by the youth generations in the context of current tourism.

Thus, the objective of this investigation is to make a theoretical reflection based on investigations carried out in different countries and that explore the subject under analysis.

As for the adopted methodology, it consists of reviewing the literature, integrating a theoretical approach that bridges empirical studies on various types of practical realities, in a close theoretical-practical relationship that is stimulating from a scientific point of view.

Regarding the structure of this work, after the introduction, a theoretical framework is made that will initially address the evolution of Tourism toward a New Tourism or Post-Tourism, in which new technologies play a crucial role in a new and creative experience of new tourists and the success of tour operators and other agents related to them. Next, the generations of Millennials and Post-Millennials are characterized, focusing on their behavior and expectations in relation to social media in the tourist context. Following this subject, the impact of User-Generated Content (UGC) is emphasized in the context of youth tourist experiences.

Finally, the final considerations reinforce some of the most important conclusions arising from the investigation. Through the selection of some results of the analyzed research and that correspond to good practices in the field, we seek to gather and reinforce recommendations that serve as inspiration for improving the performance of the different stakeholders involved in the current international tourism scenario, reconfigured and dependent on technologies to get more success. Finally, for all this, we think we have contributed to the characterization of a new kind of tourism, close to e-tourism, which requires, on the part of all stakeholders involved—travel agencies, tourist content editors, and official bodies linked to tourism—awareness and change.

45.2 Theoretical Framework

45.2.1 New Tourism and New Technologies

Thanks to the information and knowledge society in which we live, the ways of living, working and enjoying leisure time have been changing due to several factors, including technologies.

Technological evolution has allowed tourism companies to restructure their operations and processes in order to take advantage of emerging technologies such as Virtual Reality, Augmented Reality, and QRcode. These technologies made it possible to help tourists find parking, navigate public transport, find accommodation, restaurants, and tourist attractions, serving as an aid to providing information and favoring interactivity [1, 2].

Monaco [3] states that in the context of the evolution of society in general, in the western world, tourism has also evolved, with new realities and tourism practices due to globalization, progress in transport, and due to the impact of the constant presence of communication tools.

Dujmović and Vitasović [4] reflect on the transformations that tourism has undergone, since its emergence, following the Industrial Revolution and industrialization. They refer that tourism, with the democratization of travel and leisure, has become fundamental to the economy, conditioning social and political aspects and highlighting the changes that have taken place from modern to post-modern culture. Based on concepts proposed and developed by other authors, they reflect on "post-tourism" and "post-tourists" who are opposed to "mass tourists", who are passive consumers of tourist products, while post-modernity tourists are active participants in creating the tourist experience. What characterizes post-tourism is the valorization of the individual role of the tourists, their motivations, and various experiences.

Through technologies, individuals can experience a new type of tourism, which, in some cases, does not require physical travel to nearby or distant locations through physical travel. This situation allows people to enjoy the attractions comfortably, free of charge, and, in certain situations, with greater security, through videos and virtual reality, in the time and space chosen to view the desired tourist products. Since these experiences can be done in everyday life, the boundaries between daily routines and tourist activities are blurred. Thus, this is a process designated as "dedifferentiation", according to the post-modern view, in contrast to the concept of "differentiation"—difference, distance between everyday and tourism experiences—that characterized the modern, standardized and inflexible tourism. In short, people, in the post-modern era, can have tourist experiences, wherever they want, whenever they want, as long as they have access to the internet and technological devices that enable them to access the digital content made available.

A concrete situation that shows the impact of this new technological reality and that contributes to the development of new cultural and creative products in tourism takes place in China, in Forbidden City. In a research conducted by [5], several case studies of virtual artistic installations exhibited in an exhibition hall that allow interaction with the public through the so-called new generation of information technology are presented. Focusing on mobile technology, the authors analyze the suitability of this technology for the development of these products and how to use them in the best way for a better development of the cultural and creative tourist product. Several examples illustrate very well how these new technologies are exploited, such as the GIF (Graphics Interchange Format) that give dynamism to the figure of the Emperor Yongzheng, or the mini-programs based on Wechat—Rap of Emperor Yongle, in which through the H5 it is possible to lock a competition held by both the Forbidden City and Tencent. And an app based on both iPhone and Android platforms, which is used to virtualize the online exhibition hall. There are still iPhone apps and iPad apps used to display painting collections, allowing the public to get a glimpse of the elegant life of a palace of the Qing Dynasty. Also, iPhone and Android platforms allow visitors to view the digitalizing of famous paintings or the architecture of the Forbidden City.

In summary, in the scope of theory and good practices explained here, some ideas should be taken from this innovative case study whose authors highlight the great advantages of mobile technology and its mobility, which allows overcoming spatio-temporal limitations and becoming part of the daily lives of individuals. Of note are other potentials such as increased access or interfaces for the consumption of cultural and creative products by consumers, as well as the possibility of enriching the promotion of cultural and creative contents thanks to the growing deployment of installed advanced technologies on mobile platforms. The new tourism industry must therefore invest in varied, creative, and dynamic digital products, actively involving post-tourists and motivating them to consume this new kind of products.

45.2.2 Millennials and Post-Millennials and Their Involvement in Social Media Within Tourism

Having made this general framework on the new characteristics of contemporary tourism and its strong relationship with technologies, we intend, then, to analyze the behavior of certain age groups of the young population in front of this new tourist reality shaped by technologies and the challenges it presupposes. Thus, we will start from the results of a comparative study among young Italian web users from two different generations—Millennials or Generation Y (individuals born in the period 1980–1995, approximately) and Post-Millennials or Generation Z (individuals born between 1996 and 2010, approximately) (Monaco [3]. It is interesting to note that some results obtained from the two groups are similar, while others diverge.

Starting by highlighting some of the differences found in this research, Generation Z youth base their decision-making for purchases and reservations on information researched on the net, they consult online friends, and use social media contacts in plenty for sharing information about personal experiences. The way they communicate is mainly through instant messaging and chat apps and mobile devices such as smartphones and tablets are almost exclusively used. As for Millennials, in addition to mobile devices, they make greater use of personal computers and, for information research and decision-making on purchases, they both use the internet and communicate through more traditional means such as the telephone or magazines. Although they have great confidence in information retrieved online, face-to-face communication still weighs heavily on their choices and they rely more on friends or family than on information from websites [3].

Another difference pointed out by the author concerns the UGC, as Millennials, despite reading comments online, are less likely to produce their own comments, while post-Millennials are more likely to leave comments, revealing a way to be proactive. As prosumers (consumers and producers of information), they even become part of the tourism sector, as they convey information that is often recognized as more reliable than that disclosed by tour operators or suppliers of goods and services.

We will now highlight some of the similarities found between the two generations under study, one of which is the care that all these young people have, when they get information in advance on the internet, by consulting review sites about accommodation or restaurants, like Booking or TripAdvisor, and it is worth noting that they even change their plans when they read negative comments. Another common aspect between Generation Y and Z is the growing trend in the tourism sector to promote collaborative consumption, such as on the AirBnB portal, which aggregates information on the demand and supply of short-term stays, allowing interactions between its customers. Likewise, through new technologies, both groups have the opportunity to experience a customization of their tourist experiences, according to their tastes, requirements, and expectations of getting to know something different from mass tourism.

Also in the research conducted by Hysa [6] in Poland, the frequency with which different generations use social media is analyzed, as well as the importance of including it in a tourism marketing strategy, influencing people to visit certain locations. Four generations are analyzed—Baby Boomers as well as Generations X, Y, and Z, but here we will highlight some general results but especially those that characterize the behavior of Generations Y and Z. These are the ones that most identify with this reality of proximity with technologies, being the ones that most use social media, as it will occur in the society called Society 5.0, the one that will use social media in everyday life, in general. Thus, new challenges for a new type of tourism arise, as the collection of information about the activity on social networks allows knowing the preferences and behaviors of different generations, creating personalized and innovative solutions that can contribute to sustainable tourism.

Focusing now on some of the results of this study, it is noteworthy that there are no differences in social media behavior between the four generations, in the vacation planning phase, with regard to the following objectives: (i) trip planning, (ii) knowledge of the history and culture of tourist sites, (iii) information about obstacles in the intended tourist sites, and (iv) establishing relationships with the local community.

We will then select different results only between Youth generations. Thus, Generation Y young people claim to use social portals a few times a day, content communities once a day, and cooperation networks once a week. As for Generation Z youth, they also claim to use social portals a few times a day, as well as content communities (more than Generation Y); as for cooperation networks, they claim to use them a few times a week (more than Generation Y).

Generation Y clearly differs from Generation Z regarding the behavior related to decision-making based on positive and negative comments, these comments being more important for Generation Z and there is also a higher frequency in the rental of short-term apartments (eg. Airbnb) by Generation Z.

Also, regarding Generation Z, two Portuguese empirical studies applied to tourists of this generation and led by [7, 8] focuses on the influence that technological resources have on the degree of satisfaction of this generation with the destination tourism, in the phases prior to the trip and during the trip toward a certain destination. Here, too, it is proven that technologies are an integral part of Generation Z's life and that they, as well as the use of the internet, are decisive in researching travel information, bookings, and payments during its preparation.

Below, we highlight some results of the study carried out by the aforementioned authors [7]. As for hypothesis 1—"technological resources influence the degree of satisfaction in the pre-trip phase", there is a statistically significant positive relationship between the dimension "Global importance of online information" and the dimension "Relatively Global Satisfaction to the destination", meaning the results that individuals with greater global satisfaction with the destination attribute more importance to the dimension "Global importance of online information". Detailing some results, there are statistically significant positive relationships between the variables "Importance of information about destination sites", "I have a positive opinion", "I recommend", "I intend to visit the destination in the next 2 years" and "I will consider the destination in my next trips".

Regarding hypothesis 2—"technological resources influence the degree of satisfaction in the phase during the trip", relationships are analyzed between "Evaluation of overall satisfaction with the destination", "Assessment of the use of the following types of applications and/or available information on the internet during your tourist experience in Porto" and the "Assessment of the use of proximity device technology". The statistically significant differences found prove that overall satisfaction with the destination depends on applications and/or information on the internet during the tourist experience, as well as on payment services to consume at the destination. Therefore, these results corroborate what is said by other authors—online information is an essential element for tourists and contributes to their satisfaction in relation to the destination.

According to the results obtained, the authors of this study draw some recommendations that point to necessary changes to be adopted by the tourism sector, among which we highlight the role of DMO's Destination Marketing Organizations (OMD). In order to ensure the satisfaction of consumers/tourists, these organizations must ensure the constant updating of online information and the updating of technologies in the tourist destination, in various sectors such as accommodation, transport, restaurants, and attractions in general, since post-millennials show more satisfaction before the trip and during the trip, the more information available through the technologies.

45.2.3 The Importance of the UGC in the Context of Youth Tourism

Taking into account the importance that social media has for young people, we will focus our attention on the impact of UGC in today's tourism, a kind of word-of-mouth that occurs mainly in the digital environment. To this end, we start from the definition of UGC made by [9], as being the Media content generated by common users of information—the general public—and not by professionals paid for the purpose and whose distribution is mainly done on the Internet. It should be noted that, with the advent of Web 2.0, the role of the common consumer changes, becoming an active publisher of informational content and having the power to communicate with a mass audience, being able to influence it. The authors refer to examples of UGC creation and consumption sites, among others, YouTube, MySpace, Facebook, Wikipedia.

We now highlight the importance of the UGC in the context of youth tourism in an investigation carried out with young Indonesian millenials, domestic users of ecotourism sites. Kaihatu et al. [10] propose an investigation model based on three hypotheses—universalism value, horizontal collectivism, and UGC—which positively condition the sample under study, in the context of its adherence to ecotourism experiences. The results point to a positive relationship between universalism and predisposition to ecotourism. As for the combinations of UGC/horizontal collectivism, they are significant, concluding that higher levels of UGC and horizontal collectivism increase the effect of universalism on the predisposition to ecotourism.

For the tourism sector, some important changes and challenges to be retained come from this research regarding the promotion of tourist products among these young people who value universalism and horizontal collectivism. Thus, (i) aspects related to novelty, ethics, nature and cultural awareness should be emphasized (ii) there should be an investment in the education of eco-tourists, (iii) there should be recourse to the use of hashtags on social networks or the media paid/sponsored social network to identify and attract these young people, (iv) content managers should be aware that young people of this generation like to search for information, seek advice and encouragement on social networks, communicating with their peers, homophiles, that is, colleagues like them and who they believe are the ones who transmit the most reliable information (v) managers should work with public influencers, followed by millennials, through the sponsorship of influencers who would visit ecotourism destinations to share their experiences and photos in the social networks, (vi) managers must motivate millennials to resort to social networks to share their tourist experiences, through incentives such as discounts, vouchers and prizes [10].

Another investigation conducted in Korea by Bae and Han [11] considers the substantial influence of Generation Y in the hospitality and tourism sectors to predict that this generation accepts UGC sites as trustworthy, a situation supported by the validity of one of the main hypotheses of this study—that these young people accept an agreed-upon cultural model of online hotel review. A practical implication that should be drawn from the results of this study is that it is important to take into account the need to increase the reliability of UGC sites, an effort that must be made by the teams that manage them, which can administer a regular assessment of the factors of reliability perceived by the group participants.

Still on the UGC and although there is no specific focus on young people thinking that youth generations are also covered in the conclusions drawn from a pioneering research carried out in China by Han et al. [12] on the role of social media in activating pro-environmental norms among tourists, we will now emphasize some of its most important points. We refer the proposal of a hypothetical model that advocates that the pro-environmental social norms of tourists, personal norms, and the pro-environmental travel UGC engagement directly affect the pro-environmental behavioral intentions of tourists, with environmental awareness and environmental responsibility being two antecedents of personal norms, pro-environmental travel UGC engagement, and social norms.

It is important, first of all, to define what the authors understand by "pro-environmental travel UGC" as environmental dialogues generated by users of social tourism networks and that is part of a communication aimed at persuading users of these social networks, influencing their attitudes and behaviors. Taking into account the current context of social media, the passive consumption model of information, through static web pages, is no longer practiced and gives way to the positive commitment of users in online conversations with friends, family, other travelers, contributing to what some authors call collective intelligence and knowledge communities.

One of the conclusions reached in this study is that UGC engagement, in addition to providing useful information, has the advantage of creating an online community, and the more tourists involved in pro-environmental UGC, the more likely is to be associated with pro-environmental social groups that will contribute to spread this type of content on their own networks. The authors also concluded that environmental awareness and environmental responsibility are two motivating factors for UGC pro-environmental engagement, that is, people with more concern for the environment and those with greater personal responsibility tend to participate actively in online activities. Another conclusion that we wish to highlight, based on the results obtained, is that when individuals perceive that they have greater responsibility for the environment, in addition to consuming pro-environmental information online, they actively generate UGC with the aim of exerting influence together others in relation to pro-environmental intentions.

This study rethinks tourism management, as encouraging active participation in tourism-related social media to discuss pro-environmental issues will enrich pro-environmental travel UGC, further activating tourists' environmental norms and increasing their intentions to act more pro-environmentally.

45.3 Final Considerations

From this research, it is important to emphasize that in the current information and knowledge society, in which the digital paradigm prevails, tourism does not escape the inevitability of dealing with new technologies, which, when properly used, are crucial for the success and competitiveness of the hotel sector. They are undoubtedly ubiquitous in current trends in tourism today or Post-Tourism, representing an opportunity for tour operators and other related agents, as well as a challenge within the scope of adopting new and appropriate digital marketing practices in the tourist context.

If, in the past, the time and space in which tourist experiences were lived were distinct from the time and space of individuals' daily lives, nowadays, through technologies, these borders are blurred, allowing those who open themselves to new consumption experiences tourists take virtual trips and enjoy, inspiring tourist experiences in everyday space and time, without having to travel.

Next-generation mobile technology is increasingly used for the presentation and promotion of tourist realities, allowing enormous flexibility in its use and generating interactivity with users. As such is usually a motivating factor for them, tourism and creative industries should explore this reality, seeing it not as an obstacle but as an opportunity to expand and be more competitive, thus facing new challenges.

Having selected a certain segment of the population—youth generation—as the object of our study, its characteristics—similarities and differences—and the way they behave according to new tourist realities of which technologies are an integral part stand out.

Through the presentation of empirical studies in different countries, the importance of social media and UGC in tourism is highlighted, a form of word-of-mouth that appears on the net and which is based on the empowerment that is given to information users in cyberspace, with the emergence of Web 2.0. Thus, since they are no longer passive consumers of the information present on the net and have the possibility of being consumers and producers of it (the so-called prosumers) they start to edit the contents of their tourist experiences, through texts, photos, videos on social media, working as a kind of marketers. They not only share the aforementioned contents but, as consumers of information, they also tend to prefer to consult the referred social networks, in which information is shared from their peers, whom they often tend to trust more than in the content managers websites of tour operators. Thus, it is noteworthy that, for this reason, the latter should pay attention to the quality and timeliness of the digital information they publish, and should be governed by standards of transparency and meeting the tastes and expectations of these young people linked to social media, as their satisfaction with the tourist experience seems to be related to the quality of information available on the net. And also because millenials like to use social networks, content managers should not ignore this reality and should encourage them to share their tourist testimonials, through financial and other incentives.

It should be noted that the power of persuasion that the UGC conveys, insofar as the young people who use them are influenced by each other, can serve important causes such as the defense and practice of sustainable tourism. On the other hand, content managers can take advantage of this permeability that young people have to be influenced, sponsoring, for example, influencers followed by them, so that they could share their testimonies of ecotourism experiences on social networks.

In conclusion, there are new ways to experience the current tourism, which is no longer massified and implies several challenges that involve offering products, services, and information in a much more customized, flexible, creative, and interactive way, through new technologies, serving best individual interests and expectations. It is a tourism that coexists with and depends on social media, which presupposes new strategies to assert itself and requires different consumption behaviors. It is a tourism that must be aware of the different profiles of tourists, in this case, young people who, in their daily lives, increasingly depend on technologies for everything, who interact, communicate, influence and are influenced by their peers on social networks. Therefore, people and institutions linked to tourism today must use the same "weapons" to win over their young customers and succeed. Finally, for all this, we think we have contributed a little to the characterization of a new kind of tourism, close to e-tourism, which requires, on the part of all stakeholders involved—travel agencies, tourist content editors, and official bodies linked to tourism—awareness, and changes to achieve better results.

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Chapter 46
Sports and Cultural Tourism at Vila Real: WTCR Car Racing Case Study

Maria Inês Ribeiro Basílio de Pinho and Ana Catarina da Silva Rodrigues

Abstract This investigation presents a case study on the influence of the tourist impact that the car race World Touring Car Cup (WTCR), in the Vila Real International Circuit, has on the city, a place traditionally known for its Cultural Tourism. In fact, after the Troika Crisis, and until the COVID pandemic emerged, Portugal was experiencing a boom in Tourism, particularly on the coast and in cities like Porto, Lisbon, Cascais, or Braga. Aware of this situation, the cities of the countryside start defining strategies to take advantage of this favorable wave for tourism, opting for areas where they would have more diversity offer. Given this, it is proposed Cultural and Sport Tourism as the best options for Vila Real city. Thus, it was decided to understand the connection that sport has with tourism and culture. For this purpose, the case study methodology and quantitative technics were used, for a better understanding of the connection of the concepts, in the perception of the public that traveled to the city to watch the races and the event in general, as well as the public that obligatorily attended the races for living in the city and/or on the circuit route and those audiences who watch the event via online transmission. It is intended, therefore, to understand the dimension of the Cultural and Sports Tourism that is experienced in the city, attending its social, cultural, and economic impacts, and if it has been rising according to the growth of the event and its internationality.

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46.1 Introduction

The present investigation presents a case study, carried out from the WTCR event, which takes place at the Vila Real International Circuit, on the connection of the sport-tourism concept.

It was considered, in this research work, to analyze the importance of sports tourism and Cultural Tourism in the city, through this case study methodology and using a questionnaire as a quantitative technic.

In fact, and despite the pandemic, in 2021 Portugal continues to be considered the best European destination for the fourth consecutive year. Indeed, since 2017, the World Travel Awards (which prizes a series of awards in the economic sector of Tourism) sees this country as a destination with unique characteristics and a reason to visit. This recognition brings added responsibilities, demanding qualification of destinations, innovation, and entrepreneurship in the supply and an adequate preparation of Human Resources, in view of the strains of an increasingly sophisticated and rigorous demand. At a more specific level of this classification as an excellent destination, there are also cities such as Braga, Porto, and Cascais or some areas of the country such as the Algarve, Madeira, and the Azores.

Little by little, municipalities on the coast or inland, in the mainland or insular country have joined this phenomenon, seeking in its unique and specific characteristics the secret to maintain such a high ranking.

Indeed, this exploratory research will try to demonstrate that Tourism is an important sector in the country, not limited to areas such as Beach Tourism or Business Tourism, and that the countryside can also be highlighted, investing in new, equally profitable areas that are not only the Cultural or Nature.

So, why not talk about Sport Tourism?

As soon, this survey presents a case study, carried out from the car race WTCR event, which takes place at the Vila Real International Circuit, on the connection of the Sport Tourism concept.

It is intended, therefore, to understand and analyze the connection that these variables have for the creation of tourism in the city and the impacts that arise in it, and in its citizens.

Since this is an exploratory study, the following research questions were defined:

- Is Sports Tourism a good tourism strategy for the city?
- What Cultural, Social, and Economic Impacts have the WTCR in the city of Vila Real?
- Do both tourist typologies mutually enhance each other?

Considering the above, this work will begin by reviewing the literature on the concepts of Sport Tourism, Cultural Tourism, and social, economic, and cultural impacts. To then define the methodology of investigation of the data obtained and analysis of results, concluding that Vila Real is a city of Sports Tourism and Cultural Tourism that has an impact on the city at a social, economic, and cultural level.

46.2 Literature Review

46.2.1 Cultural Tourism

Cultural Tourism, in a more literal way, would only be considered for cultural and educational reasons, but a purely touristic trip may join, even if as a secondary, the cultural part.

According to Bonink and Richards [1] and Pérez [2], there are two elementary approaches to understand the concept of Cultural Tourism. The first is understood as a perspective of places and monuments. In other words, this interpretation would be fundamentally quantitative and would focus on the activities and motivations of cultural tourists. Second, a conceptual perspective that questions why and how people see and practice Cultural Tourism, considering the principles and ways of tourism to be important, and not so much the products, thus applying a more qualitative approach.

It is known that Cultural Tourism produces, sells, and consumes the present, and not just the past [3] as it is from the present that it attributes values to cultural legacies. To justify this statement, the ICOMOS Cultural Tourism Charter [4] defines Cultural Tourism as an irreversible social, human, economic, and cultural fact. As a part of tourism, Cultural Tourism has as its main objective the knowledge of monuments, historical and artistic sites, or another element of cultural heritage, which is understood as a kind of refuge to boost tourism. As a producer of past and current experiences Cultural Tourism perpetuates the protection of the regions of their cultures, in addition, it also plays the role of rehabilitation of local and cultural identities. With this, a strengthening of cultural identity is generated, which stimulates the worldwide appreciation of the cultural elements of each community in a globalized world [5].

According to ITB [6], tourism in European cities increased 20% in 2019 and with it the interest of residents and temporary residents, (respectively, visitors, tourists, and workers) for Cultural Heritage. With this increase, cultural offerings have grown, once cities compete for their attention [7].

46.2.2 Sport Tourism

Sport Tourism is an economic and social activity that crosses tourism with sport where the economic aspect is emphasized from sports [8].

Although tourism and sport have always been separated, in recent years they have been increasing. Sport Tourism is then a market niche that has an important contribution to increase the participation of sports in society and thus stimulate the local economy. This aspect is common to the concept of Cultural Tourism, making it possible to foresee the possibility of articulation between the two concepts.

In another way, that definition is understood as all forms of active or passive participation in a sporting activity in which people need to travel from their home or workplace to participate in sport-related leisure activities [9].

Here, tourists who travel to practice the sport stand out as well as those who want to observe it. The notion of sports events tourism is also defined by Ferreira and Silva [10], consisting of the movement made by individuals who wish to participate in an event that only involves sport, not wanting to participate in another type of competition. According to Àvila and Baía [11], sports events are included within Sports Tourism, insofar as any of these exhibitions are carried out, in each location, which seeks to increase the number of visitors, at the same time as articulates with a series of sectors of society. In this way, the brand and image of the city that hosts the event are reinforced, especially if the event is of long duration. Indeed, the longer the duration (number of days) of the event, the greater the number of tourist services to be provided and, consequently, the greater the economic return [12]. From another perspective, Cho et al. [13] refer that the city's atmosphere can generate a certain sporting environment, speaking of sports nostalgia. For it is this nostalgia that constitutes a firm factor in the motivation of individuals who want to revisit the destination or the nostalgic city where they had a good experience, whether in terms of entertainment, of getting to know the sports team live; of socialization; personal or collective identity or the environment itself.

Ritche and Adair [14] report that sports tourism incorporates three major behaviors: participating in events; observing them or visiting them. Activities will be passive when the events are observed or active when the visitor participates in them. Likewise, they can take place outdoors as well as in their own spaces built for the purpose. Visitors' satisfaction will depend on the offer of the places and will manifest itself in the expenses incurred, as well as in the return to the place in future editions.

46.2.3 Sports Events Impacts

According to Fonseca [15], a sports mega-event is an event with a great global impact, which attracts millions of people, companies, and sponsors. Since a sports event must appear as a social event, attracting the attention of people, public and private entities, success, or failure can be measured by its social impact. Mega-events are managed by several phases, which according to Goldblatt [16], a sports event must contain five phases, namely: Research, Design, Planning, Coordination, and Evaluation. To verify these ideologies, Drucker [17] and Carvalho [18], states that it is essential for the manager to exercise five functions, namely: Determination of objectives, Organization, Motivation and Communication, Development of standards, and Training of human resources.

Sports mega-events have been, in recent times, the basis for the tourist growth of a place. Thus, the promoters of events of these characteristics highlight the "new money" that "awakens local economic activity" [19]. The dimension of the economic impact is determined by the characteristics of the sporting event, whether in terms of space and time, given that, UK Sport [20] suggests that it is feasible to differentiate the impacts in events arranged for the competitors themselves and the events directed toward the public. The mediation of governments in “Sport Tourism” takes on a position of various dimensions, as the relationship between Sport and Tourism has become an emerging phenomenon today” ([21, 22]).

Regarding the social impact, sport manages to create connections between different peoples, cooperating for the transmission of culture and values, becoming an eloquent aspect for the knowledge of new countries and different histories, thus generating a cultural exchange. As stated by Ferrand [23] and Dias [22] the spectacle can distinguish itself, but also constitute a vehicle for the transmission of values and representations.

As in the economic and socio-cultural impacts, and according to the same authors, it is possible to verify the positive and negative points felt. As positive facts can be highlighted the increase of cooperation, the appreciation of traditions or of the new experiences and the introduction of new ideas. These positive aspects increase the local valuation, foster a greater enthusiasm during the event, and create cultural tolerance. As negative facts can be considered the increase of insecurity, the lack of privacy, the changes in social structures, the cultural clashes, the acculturation, and the changes in the lifestyle. Socialization, from a cultural perspective, reveals that the population interactions that are established are essential for the entire process. In this sense, there is a relationship between three concepts, culture, sport, and socialization. In this comparison of culture and socialization, it is possible to find a relationship between the two concepts for sport versus culture and socialization through sport, as culture and socialization for sport, and as culture and socialization through sport [24].

Besides the sport-tourism link, which was considered a leisure activity, according to Peixoto and Sousa [9], it is a phenomenon that moves millions of spectators around the world, creating a common thread for the economy. This concept incorporates three main behaviors: participating in the activities and the event, attending, and visiting it [25].

Events directly related to tourism are projected as unique opportunities for cities because in addition to contribute to the local economy, they support events that also contribute to the national economy. This is because, whoever travels to attend the event, in addition to traveling, will necessarily have to stay and consume local products.

In this case, the “Corrida de Vila Real” has been active since 1931, but only in 2015 does it officially become an international competition, with the WTCC (which since 2018 has become WTCR), held at the Vila Real International Circuit. As of this year, the city began to receive more audiences, data that the FIA released, and in 2019 the audience at the event was 200,000 spectators, 11% more than in 2018, as shown in Fig. 46.1.

Fig. 46.1 Information taken from data obtained by the FIA, provided by the municipality of vila real

46.3 Methodology

46.3.1 Data Collection and Analysis

To answer the research questions, the case study methodology and the questionnaire quantitative technique were used. The quantitative technics are considered adequate in this investigation since it requires the elaboration and analysis of an investigation into the impacts of the WTCR, the tourism strategies and the fact of the sports tourism might potentiate the Cultural Tourism of the city in the participants' idea. This technic is used due to its more objective character, which allows us to acquire a more in-depth collection of information on the topic in analysis using only a few multiple-choice questionnaires, being able to evaluate the results presented in graphs. Since it constitutes a direct analysis of the results, it generates observations and demonstrations about a certain group, giving an assertive approach to the data achieved [26].

In this case, the methodology is used to obtain results with precision, so that in the end the impacts that affect the creation of Tourism of the sporting event under study are understood, directing the surveys to the public. To carry out the study, a population destined for the event in question was used.

Data were collected through a questionnaire carried out between 15th of September 2020 and 30th of June 2021. The questionnaire was written based on the literature review and before being implemented, a pre-test was carried out, introducing the changes that proved to be necessary. The questionnaires were distributed through the social networks of Instagram and Facebook, following a google forms model, and were intended for the audiences participating in the WTCR and the audiences who watch the event via online transmission.

Based on statistical data provided by the organizing entity, and using a formula from the statistical material, in the end, the sample's number corresponds to 383 individuals. However, due to some difficulties, as the event was canceled during COVID-19, the survey had to be carried out online, and thus it was only possible to obtain 337 answers.

46.3.2 Sample Profile

After the implementation of the questionnaire is possible to characterize the profile of the sample noted in this survey.

In other words, 72% of the participants are male and 28% female. Regarding residence, most respondents are inhabitants (41.5%) or natives (34.7%) of Vila Real. However, it is observed that there is at least 1% of the public from the regions such as New York, Switzerland, Luxembourg, and Angola, and even 18.8% visitors from other municipalities in Portugal such as Porto, Famalicão, or Sabrosa.

Respondents are between the ages of 16 and over 65 (97.4%), with a prevalence between 26 and 55 years (73%). Also, regarding their profession, 38.9% are employees; 30.6% are civil servants; 14.2% are self-employees and 10.7% are students.

Considering the question of how many times watched the races, 59.3% answered they have attended all the editions since the event became known as the WTCC and only 9% answered that they did not attend any edition.

Besides this, the public that attends the event has been increasing since 2015 when the circuit was classified as international and some started participating only when it became international because there was more sharing, or so even for being younger population.

The city of Vila Real offers some accommodation that is not enough for events with the size of the WTCR. This could explain the decrease in overnight stays in the city in recent years. However, when questioned, the audiences confess not to choose to sleep in the city (51.3%) or when they do it, they will stay in friends' accommodations.

46.4 Data Presentation and Analysis of Results

The research questions for this survey are:

- Is Sports Tourism a good tourism strategy for the city?
- What Cultural, Social, and Economic Impacts have the WTCR in the city of Vila Real?
- Do Cultural Tourism and Sports Tourism mutually enhance each other?

The question 1 idea is confirmed when the contributors answer to the following issues:

- Does the WTCR motor racing generates economic, social, and cultural impacts in Vila real?
- Does it create value for the city?
- Does it create value for the local population?

The results of these questions are shown in Fig. 46.2. As it is possible to observe, the 337 responses obtained confirm that, in the opinion of the study sample, the event generates economic, social, and cultural impacts (88%), creates value for the city (92%) and for the local population (85%).

To understand how this happens and in what sense they interpret these questions, interrogations 2 and 3 arise, whose results are mirrored, respectively, in Figs. 46.3, 46.4, and 46.5.

In a more specific way, the answer to question 2 is summarized in Figs. 46.3 and 46.4. The answer to question 3 is approachable in Fig. 46.5.

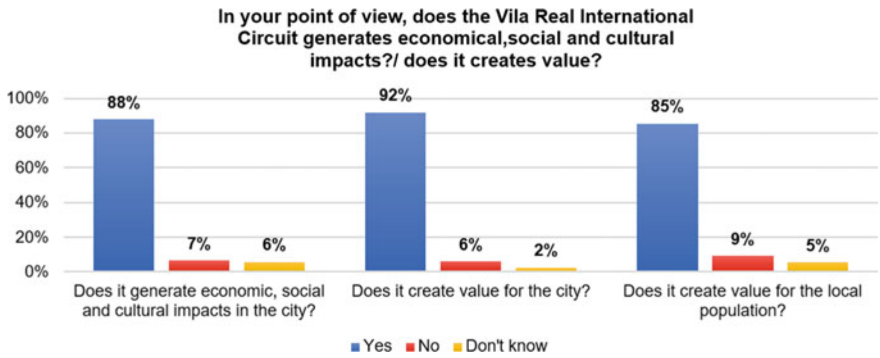

Fig. 46.2 Impacts and value creation perceptions according to the investigation sample

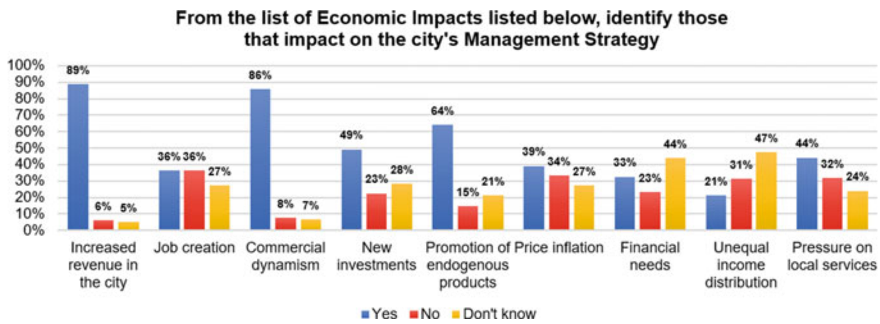

Fig. 46.3 Economic impacts list according to the investigation sample

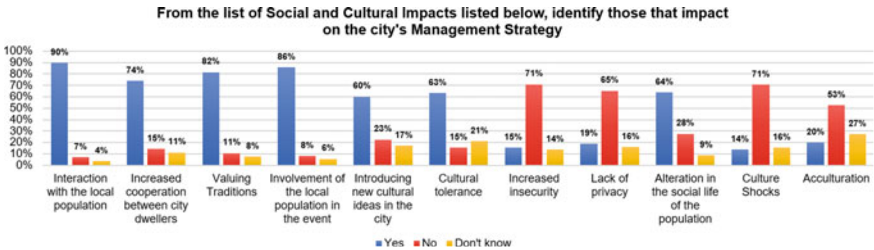

Fig. 46.4 Social and cultural impacts list according to the investigation sample

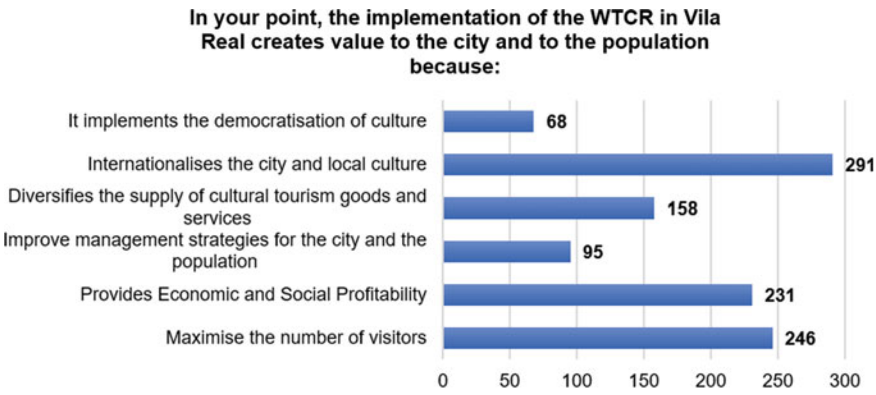

Fig. 46.5 Value creation in a city perspective and in local population perspective according to the investigation sample

Thus, in Fig. 46.3, the perceptions that the sample has regarding the typology of the economic impacts generated by the event are clear. Here it is possible to observe that most agree that the event increases the city's revenue (89%) and boosts commercial activity (86%). In a way, it encourages the production of endogenous products (64%), deducing that there may be some pressure on local services (44%), new investments (49%), and price inflation (39%), despite in the last three points gains the sum of the negative answers, (respectively, 32, 23, and 34%) with those who "do not know" the situation, (respectively, 24, 28, 27%) (in total, respectively, 56, 51, and 61%).

Two aspects stand out at this point:

- on the one hand, the study sample does not know if the event involves financial needs (do not know = 44% and no = 20%) and if it entails unequal income distribution (do not know = 47% and no = 31%) and
- on the other hand, the study sample attributed the same number of answers "yes" (36%) and "no" (36%) to the fact that the event generates employment, implying that, in the idea of these individuals, it does not encourage the creation of jobs and demonstrating the lack of knowledge of these individuals, that the event's

programming takes place throughout the year instead of sporadically, which could constitute a generating factor of employment.

From the reading of Fig. 46.4 and in the perspective of the sample under study, the WTCR has more impact on the city at a social level than at a cultural level.

Indeed, and from their perspective, the event provides interaction with the local population (90%); increases cooperation among city dwellers (74%); involves the local population in the event (86%) and, in a way, introduces changes in the population's social life (64%).

However, despite valuing local traditions (82%), respondents affirm, although a smaller percentage, that there is the introduction of new cultural ideas in the city (60%) and that there is Cultural tolerance (63%).

Praise is given to the organizational part of the event for the fact that the sample mentions that with the implementation of the event there is neither an increase in insecurity (71%) nor in the lack of privacy (65%). This praise extends to local populations when they refer to the non-occurrence of difficulties due to possible cultural clashes (71%) and issues of acculturation (53%) that the event may bring.

Finally, the answers to question 3 are shown in Fig. 46.5.

Reading this figure shows that the WTCR, from the perspective of the sample under study, creates value both for the city and for the local population. And this is because:

- Internationalizes the city and local culture (86.4% or 291/337)
- Maximizes the number of visitors (73% or 246/337);
- Provides economic and social profitability (68.5% or 231/337).

However, it does not improve city and population management strategies (28.2% or 95/337) nor does it implement the democratization of culture (20% or 68/337).

Likewise, it contributes little to diversify the offer of cultural tourism goods and services (47% or 158).

Despite this, and in response to question 3, it is possible to perceive the existence of a potential both in terms of Sport Tourism and in terms of Cultural Tourism that, if better articulated, could create value at the local economic, social, and cultural level.

46.5 Conclusions

Considered as the best European destination and the best choice by European consumers in 2017, 2018, 2019, 2020, and 2021, Portugal has been showing itself in terms of tourism. Tourism in Portugal has contributed to the GNP, through the revenue and business generated, both in terms of accommodation, restaurants, and local commerce. This happens regardless of whether we talk about Beach, Business, Nature, Culture, or Sports Tourism.

This fact then creates the need for a greater offer, which implies investment in infrastructure which, in turn, entails work. On the demand side, concerns lie in the need to discover the causes that lead tourists to participate in the event and the effects that the trip and its economic, political, environmental, social, and cultural characteristics had on it.

It should be noted that this last point is not defined as the objective of this investigation, although throughout this work it has been realized that this happens and that it could be used as a clue for further investigations.

The aspects highlighted above demonstrate the need that cities currently must create a positive image which, in turn, implies demonstrating that it is not only a good place to live, work and invest, but also to promote local attractions or specific events.

Within these, and in the case of Vila Real, it was noticed that the WTCR Automobile circuit is a good example, representing a Sport Tourism Product offered by that city.

In addition to this, it was realized that the implementation of this type of event has impacts on economic, social, and cultural levels, enhancing other branches of tourism such as Cultural Tourism and Nature Tourism.

The study did not prove to be conclusive that Sports Tourism encourages Cultural Tourism at this time, revealing however that there are driving factors that need to be improved to reverse the situation. This implies that, in a first phase, the local government of Vila Real will dialogue with the local Cultural Tourism entities and with the local Sports Tourism entities headed by the WTCR.

In addition, there was a lack of investment and job creation in these areas which, in the same way, would increase the potential in terms of Cultural and Sport Tourism identified with this research paper.

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Chapter 47
The Governance System of Portuguese Higher Education Institutions—the Challenges of the Future and the Relationship with Quality Questions

Olímpio Castilho and Maria de Lourdes Machado

Abstract The enormous challenges currently facing Portuguese Higher Education Institutions (HEIs) lead to the need of preparing a network reorganization, which must be rethought. The last major reform took place with the entry into force of Law No. 62/2007 of 10 September, which approved the new Legal Regime of Higher Education Institutions (RJIES) in Portugal, and with what their institutional governance changed. The Legal Regime is unique for public or private, university or polytechnic institutions, although variants have been established depending on their nature (public/private, university/polytechnic). In addition, for the first time, the foundational public higher education institutions (HEIs) were created. The purposes of this article are the concepts of New Public Management (NPM) and the new challenges that will soon arise in HEIs, such as the decrease of the number of Portuguese students, the reduction of public funding and small involvement with society, poorly responding to the evolution of knowledge that occurs, increasingly, outside the scope of higher education, and the consequent need for a network reorganization that respond to these challenges. Nevertheless, quality issues will be analyzed as they must be taken into account. Quality is the most evident governance approach, necessary in HEIs. Thus, the view of NPM and the main challenges that the system will have to face will be analyzed. Finally, the conclusions were drawn.

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47.1 Introduction

Higher education (HE) in Portugal has undergone significant changes in the last decades, particularly since 1974. In this article we intend to note the evolution of Portuguese legislation since then, going through the most recent reform of 2007, which introduced significant changes in the management of HEIs, particularly public ones.

Equally, the link between governance and quality assurance has been highlighted, which may lead to the need to introduce changes in the former in order to improve the latter. In any case, governance has become essential for improving quality across components of higher education. Therefore, we will make a brief approach to the challenge that this connection poses.

Before the conclusions, we will discuss the challenges facing Portuguese HEIs, particularly the four that seem particularly important to them.

47.2 The New Public Management and Its Contribution to the Governance of Higher Education Institutions

Since the late 1980s until 2007, the year in which the new Legal Regime for Portuguese Higher Education Institutions (RJIES) was approved through Law No. 62/2007, of 10th September, the governance system of Portuguese HEIs was regulated by three legal diplomas: Law No. 108/88, of 24th September, for public universities, Law No. 54/90, of 5th September, for polytechnic HEIs and Decree-Law No. 16/94, of 24th January for private HEIs. The three were quite different from each other and from RJIES, that unifies (spite of not completely) the three regimes [4, 8, 22, 24, 25]

It is a fact that, not only in Portugal but also in many countries, the governance of HEIs has undergone considerable changes over the past few decades. As well Donina and Paleari [9] explained, like with the thinking of [10], the idea created was that universities and other HEIs were inefficient, ineffective, and very bureaucratic. And that, one of the reasons for this, was the collegial governance model, according to which the decision-making process was centralized and controlled by the respective ministry, with little autonomy for universities, which ended up transforming their organizational level, making their (internal) organic units play a secondary role, acting as mere coordination units [27], (R. [30], (P. [1, 14, 29].

And so it was, to a large extent, also in Portugal until the approval of Law No. 108/88, of 24th September, which put into force what can be considered the first law to enshrine the autonomy of universities. As well as Donina and Paleari [9] said, in this model, there were no external members to integrate the university administration or, when they existed, as they were merely optional, they constituted a minority, leaders had little power and were mainly chosen to represent those who elected them.

Approximately after 1983, with the work of [6], the impacts of reforms of the higher education system in Europe began to be profusely analyzed. And these reforms led to an adaptation of the missions and objectives of HEIs, following the methodology of New Public Management (NPM), [2, 9, 28].

Effectively, this methodology or the principles on which it is based, influenced when they did not even determine, the reforms of the HEIs governing bodies that were taking place [5, 31].

On the other hand, the governance systems have to attend to the different actors that can contribute to the good management of the HEI, articulating their rights and responsibilities, whereby they cannot fail to consider the relationship between these actors or interested parties (*Stakeholders*). Brunner and Ganga [3] outlines in this regard the HEI management system, in the form of a framework in which he distinguishes:

(a) interested parties, composed of external members, including sovereign and other public authorities and internal members, such as teachers and researchers, students and non-teaching workers;
(b) types of institutions that integrate the system, such as universities and other non-university higher education institutions, their organic units, such as Faculties, Schools, Institutes, their territorial organization;
(c) management model, with its leadership, structures and procedures, organizational policies, strategic plans, and decision-making process;
(d) forms of participation of internal members in the management of institutions involving questions that require an answer, such as "Who?", "How?", "When?", "Where?" And "To what extent?" is it participation; and also;
(e) internal management in its administrative, financial (budget), personnel, and other resources.

Let's see, then, the main practical results obtained with the NPM regarding the governance structures of universities in the following three dimensions, as Donina and Paleari [9] suggest: Attribution of decision-making power, selection method for the institutional leadership (rector), and university board composition. Starting with the first, the attribution of decision-making power, Kretek et al. [19] emphasize the importance of decision-making authority/power insofar as they condition the role to be played by the leadership of the university and its various boards. But, from the beginning, it is important not to forget that the legislation that regulates the functioning of the HEIs in different countries varies a lot because, while in some the law provides a detailed description of the management structures (German, French, Austrian as well as some Swiss cantonal HE laws provide for a detailed description of decision- making issues and powers of the bodies at every level of the university), in others that is much more vague or leaves the HEI statutes to define these structures (case of Norwegian HE law) [19, 31].

Kretek et al. [19] point out that there has been a change not only in the authority relationships between ministries and universities but also in the governance or management structures within universities, involving, for example, authority relationships between the rectors and government authorities involved in the decision-making process. Thus, in almost all European countries the transformation of the university in the intended direction involved changes to the internal management structures.

Krücken and Meier [20] refer that the reforms of the HEIs placed control of the decision-making process in the central management boards to transform universities into a strategic organizational actors. This implied strengthening the leadership power of the university's rector and board with respect for traditional collegiate academic management bodies [19]. It went from an election system (*bottom/up*) to a nomination system (*top/down*), with reinforcement of the internal hierarchy and vertical coordination. We thus witnessed what can be called *verticalization of the management bodies*, affecting the structural configuration of the university, simultaneously with a reinforcement of competencies, previously exercised by the supervisory ministry.

As Kretek et al. [19] point out, university councils became involved in decisions regarding strategic planning, as well as the budget and, in some cases, the selection/designation and even subsequent supervision of the leadership body, in a very variable degree from institution to institution.

All of these changes have been profusely referred to in the literature [12].

This is how academic senates begin to be abolished or lose skills, in some cases becoming consultative representatives.

To conclude this dimension, it should be noted that, in some countries such as Portugal, Sweden, and Finland, HEIs can gain an independent status, becoming a public company or public foundation managed by private law rules.

As will be noted, the foundational model will guarantee greater autonomy and flexibility in certain areas, such as finance, asset management, recruitment, and personnel management.

Of course, there are also some constraints as pointed out by Donina and Paleari [9] and Heitor and Horta [15]: potential deficiencies are identified, including the lack of management skills to manage an institution as specific as the HEIs, as well as the difficulties in dealing with the uncertainties to which teaching and non-teaching staff are subject, in the transition from civil servant status to that of foundation workers.

Moving on to the second dimension, that of the selection method for choosing the top leadership (rector/president), it should be remembered that while in the continental European management model the rector/president was elected from among HEIs professors, in the model of global NPM reform he should be appointed by the university (or HEI) board).

Ferlie et al. [11] refer, precisely, to this change as one of the consequences of the application of the principles of NPM to higher education.

Even so, some countries came to admit that HEIs could choose between the two (Norway's case). And, for some, the case of Christensen et al. [5], this was done to overcome the waves of protest that arose against the reforms that aimed to end the elective method, allowing, despite everything, not to question the others reforms inspired by the NPM model.

As mentioned Ferlie et al. [11] and Gornitzka et al. [12] the reform advocated by the NPM did not only imply changing the model of choice of the rector/president (from election to appointment), but also a "professionalization" of the position through which academic leaders from outside the institution or even the academic system would be chosen.

In other words, not only the professors of the HEI but also of other HEIs, national or foreign, or the managers coming from the business sector with relevant experience in the management area.

Despite this possibility, existing in some countries such as the United Kingdom, Norway, and Portugal (in this, as for "*individuals of recognized merit and relevant professional experience*", they are only admitted to polytechnic institutions, according to article 86 of the RJIES), Gornitzka et al. [12] warn of the difficulty of a candidate outside the HEI being selected.

Finally, with regard to the third dimension, number, and composition of the HEI board, it should be remembered that in 2007, OECD [27] was calling critical attention to the inefficiency of the governing authorities of continental European universities, derived from also slow and inefficient decision-making process, caused by the excessively large number of members and the absence of external members.

The same happened with many experts, who drew attention to this factor: the configuration of the HEI board in terms of the number of members, composition, rules of election or appointment affected the role and the performance of the body in terms of management [7, 19], among others.

For this reason, in Europe, through the NPM reform model, there was a reorganization of the management bodies of the HEIs which includes, in some cases, the creation of new ones.

So, as mentioned by Donina and Paleari [9], the number of members of the administration was reduced, particularly that of those who had the competence to take strategic decisions in the HEIs that followed the European continental model.

Following recommendations aimed at eliminating a weakness detected in British universities, relating to a high number of members and the absence of a majority of external members as pointed out by Kim [18] and Kretek et al. [29], the Organization for Economic Co-operation and Development (OECD) ultimately evoke these recommendations [27], and has suggested that the ideal number of members of the governance body should be located between 12 and 25 members, with a majority of external members.

In some countries, such as the Netherlands and Austria, it was established that the top management body should be made up only of external members [7], with the majority remaining only a specific or minimum number, as was the case in Portugal.

Notwithstanding this common orientation, many differences continued to exist, namely in the competence to appoint the members of the HEI board which, in some cases, is from the responsibility of the Minister and external members and in others is from the rector/president or the academic senate, not to mention the mechanism of election of some and co-optation of others [19].

47.3 The Relationship Between Governance and Quality Questions

In the twenty-first century, governance and quality in higher education have become important and key issues. In fact, authors such as Kennedy [17] stressed that higher education governance is a key issue of the twenty-first century. More recently, Hénard and Mitterle [16] studied the relationship between governance and quality assurance and how governance has become a crucial issue in higher education, and to what extent quality is now linked with governance issues. Governance has become essential for improving quality across components of higher education as stated by Heitor and Horta [15], Hénard and Mitterle [16], "Governance has become a major leverage tool for improving quality in all aspects of higher education". Therefore institutions need to improve their governance and align the governing model in order to meet challenges as quality.

HEIs need to create efficiency and effectiveness. Nevertheless, several respected scholars contend there is an increasing emphasis on mechanisms of NPM (Gregory and Machado-Taylor [13]; Marginson and van der Wende [23]); quality issues [33] and the link between governance and quality [16].

In our days HEIs have to attend to multiple stakeholders and purposes, a competitive and market-driven environment. Claims for transparency and accountability are increasingly important elements in the governance. The core question is the need to respond to increasing student diversity—socially, culturally, and academically; employers and society demand. Therefore, the need to work and raise quality standards and to make those standards more explicit to internal and external stakeholders. This presents challenges to the governance of HEIs in applying quality concepts [21].

Quality refers to the processes that the institution uses to maintain and develop the quality of its activities. Thus, the purpose of the quality assurance system is to ensure that the objectives of the institution can be achieved [32]. However, HEIs must carefully plan the processes based on the pedagogical regulations and standards, the management approaches are essential to improve the institutional performance and ability to respond effectively and efficiently to new demands (as most recently the Covid-19 pandemic). These management approaches lead to the need for a consistent governance system. Crucial governance features are needed.

Portugal as a member of the European Union is under the scrutiny of quality [26]. Thus, is imperative to align higher education governance to the development needs of quality improvement.

47.4 What Future for the Portuguese HEIs?

Several challenges now arise for Portuguese HEIs, some of which will increase in the course of the decade about to begin. For space reasons imposed on this article, only the following four are now referred to:

(a) Decrease in the number of Portuguese students attending higher education;
(b) Decrease in public funding, at least in real terms;
(c) Weak involvement with society, responding poorly to the evolution of knowledge that occurs, increasingly, outside the scope of higher education system;
(d) Increase the development of quality assurance in higher education and in adapting to common European standards.

Effectively, despite the forecast that, in international terms, the number of students will continue to increase, in line with what has been happening since 1975, when the number was just over 40 million when it is predicted that in 2030 may be more than 400 million, specifically for Portugal the number of young people is expected to decrease by around 14% between 2020 and 2030. If there are fewer young people, there will naturally be fewer candidates for higher education, at least by entering the 1st Cycle.

Therefore, it will become indispensable for HEIs to seek new audiences, that is, to look for older students who are still with insufficient or no higher education diplomas, attracting them to obtain a higher degree, as well as promoting a policy of substantial reinforcement of internationalization, with more offer for international students, where those from CPLP countries (Community of Portuguese Speaking Countries), particularly from Brazil, may constitute an important source of recruitment.

This strategy, in addition to allowing the number of students to be maintained or strengthened, will also make it possible to reinforce the financing of the HEIs, contrary to the trend of decreasing public funding. In fact, particularly through international students, who generally pay a much higher fee than Portuguese or European Union students, the available budget can be substantially reinforced.

To better overcome all these constraints and allow HEIs to continue to actively participate in the search for knowledge, serving the society in which they are involved, more than has been happening in recent years, where the most advanced knowledge has been obtained out of context of the HEIs or with insufficient involvement of them, it is essential to actively involve the whole society, bringing the various *players* into the HEIs, leading them to participate, in an effective and diverse way, in their management. The truth, however, is that this desire is not achieved by mere decision of their own, but by a real change that alters the feeling of worthlessness that persists, more often than not, by the entities that accept to get involved in the activities (and even management) of HEIs, which causes low effectiveness and efficiency in this participation.

However, in order to achieve this, it is important to restructure the network of HEIs, change the legislation and regulation that manage higher education system and the management of HEIs in Portugal, in line with what is advocated by the NPM, as explained above.

47.5 Conclusions

In Portugal, since 1974, particularly since the late 1980s and early 1990s, there has been an evolution in the management of HEIs. The legislation has evolved, making it possible to identify two very different regimes: the current one (RJIES, approved by Law No. 62/2007, of 10 September) and the three that preceded it (Law No. 108/88, of 24th September, for public universities, Law No. 54/90, of 5th September, for polytechnic HEIs and Decree-Law No. 16/94, of 24th January for private HEIs).

The evolution to the present clearly had the influence of NPM, which appeared in the United Kingdom in the 1980s of the last century. Changes in the allocation of decision-making power, a selection method for choosing the top leadership (rector/president) and the composition of the IES board should be taken into account.

The challenges facing the HEIs for the decade now beginning (namely, decrease of the number of Portuguese students attending higher education; reduction of public funding, at least in real terms; weak involvement with society, responding poorly to evolution of knowledge that occurs, increasingly, outside the scope of higher education; and increase the development of quality assurance in higher education and in adapting to common European standards), will require the continuation of reforms in Portuguese HEIs.

This article is limited by the lack of qualitative data on the performance of HEIs. Therefore, we are carrying out a research based on the institutional assessment reports of A3ES, the Portuguese higher education assessment and accreditation agency.

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Chapter 48
Poverty, Culture and Illiteracy: A Recipe for Poor Performance Among the Bakgalagadi and Basarwa Children in Phuduhudu

Veronica Margaret Makwinja

Abstract Botswana is concerned about the continuously escalating failure rate of children in basic education [grades 1–12], despite the introduction of technology in some schools. The efforts made have no significant change in the performance of children in schools. Basarwa and Bakgalagadi children live in abject poverty and rely solely on government's handouts such as food baskets. Inequality and extreme poverty are prevalent in both rural and urban areas. The Basarwa and Bakgalagadi in the Kgalagadi desert have no opportunities for employment or resources they can utilize to change their economic status. The Kgalagadi areas are rich in wildlife, but there is no economic gain from the available natural resources and most of their basic needs are provided for by the government. The culture of the Basarwa is unique in that they speak various indigenous languages and are a very closely-knit ethnic group. Some children leave boarding schools to return home to their parents because they miss their families, and this affects their performance. Most of the Basarwa and Bakgalagadi parents are illiterate and do not value education. Factors leading to poor performance have been established. This study utilized qualitative research methods in one Basarwa settlement area as a case study to establish why Basarwa children failed to complete their education.

48.1 Introduction

48.1.1 Failure and Illiteracy

Botswana is concerned about the escalating failure rate of children in basic education [grades 1–12] year after year. The country has continued to attempt to meet the international standards of education and incorporate technology in education. However, despite all these efforts, there has not been any significant change in the performance

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of children in schools. One of the major issues affecting the Basarwa and Bakgalagadi children in abject poverty. Most of these communities rely on government's handouts such as food baskets. According to the World Bank Report of 2015, there is high inequality in Botswana with a high level of extreme poverty, especially in rural areas but now becoming more significant in urban areas. Although the country tried to improve the welfare of its people in the 2000s, there is still disparity in income, wealth, and living standards remain among various socioeconomic groups. The level of inequality is the world's third-highest, behind South Africa and Seychelles.

The Basarwa and Bakgalagadi in the Kgalagadi desert have no opportunities for employment or resources they can utilize to change their economic status. Even though most of these areas are rich in wildlife, there are no economic entities utilizing the available natural resources to create employment for the population. As mentioned above, most of their basic needs are provided for by the government.

The culture of the Basarwa is unique in that they speak various indigenous languages. The Bakgalagadi speak Sekgalagadi a language close to the official Setswana language spoken in the country by 80% of the population. Both communities live in close proximity and are very closely-knit ethnic groups. Parents find it difficult to detach from their children in cases where the children have to study in places far away from their settlement areas. Some children who go to boarding school far away from home leave school and walk long distances to return back to their parents. Others drop out of school without cause because they miss their families. This affects their performance in schools or leads to loss of progression through the school system.

Most of the Basarwa and Bakgalagadi parents are illiterate. It is a challenge for them to support their children to value education. When the children leave school without reason, they do not encourage them to return to school. Coupled with their love for their children, to them, it is an advantage for their children to be with their families.

48.2 Importance of Education

An educated nation is the cornerstone of any economy and is the most important factor for the development of human civilization. Botswana has for years invested highly in education to enable all its citizens an opportunity to learn. However, there are challenges of poor performance among the children despite the interest of the government to see its people become internationally competitive. The National Development Plan 10 (2009–2016) reflects on the country vision 2016 that advocates, "An educated and informed nation" that it does not only encourage enlightenment it additionally enhances national productivity, innovation and competitiveness, and productive human resources, deployment of human resources to address unemployment, poverty and other social issues.

When people are educated they can reform and transform the society; which is needed in the Basarwa and Bakgalagadi communities. According to—Botswana's literate rate for the 15 years is estimated at 88.5% (CIA Factbook, 2017). It is important to analyze the form of literacy referred to. There are observations made through research and national reports that Botswana's education system does not prepare children to be ready for the world of work. Blom et al. [1] recommended that secondary education needs to instill the 21st-century skills and vocational skills demanded by employers. Blom and company suggested that there was need to reform the education system through more student-centered learning; emphasis on the 21st-century skills within the curriculum and assessment procedures such as learning to learn, teamwork, communication, problem-solving, and the encouragement of commitment; and (iii) the introduction of multiple educational pathways—a combined vocational and academic senior secondary education track in Botswana.

48.3 Poverty and Education

The wealth of a Botswana citizen traditionally is measured through the number of cattle and small stock they own. Several Batswana own cattle and have established cattle posts and farms where they keep and care for their livestock. Some of these breeding areas have occupied the land that was originally for the Basarwa and Bakgalagadi; which leads to the communities' losing ownership of the land and working for the rich livestock owners. "The Tribal Grazing Land Policy (TGLP) was introduced to facilitate the modernization and improvement of a negative impact on the land right" (Nengwekhulu, p. 354). TGLP has infringed upon one of the fundamental human rights of the Basarwa and non-stockholders. They themselves [the Basarwa and Bakgalagadi] herded or still herd the cattle owned by other communities and relegated them to servitude and poverty.

According to Ntsabane and Ntau [6], Basarwa has been denied the right to access community structures to express their needs and views regarding land, representation, and conditions of their children's education, which is of utmost importance to them.

> The Basarwa show typical indigenous people's problems of marginalization, poverty and social deprivation. (p. 41)

48.4 Income Inequalities in Botswana

Although Botswana is heralded as democratic it is highly capitalist. Karl Marx criticized the capitalist economy with its social inequalities that it dehumanized and perpetuated a cycle of poverty, inequality, and alienation of the poor class (Raza et al. [8]). Botswana is a model economy despite its high-income inequalities among families and communities. Poverty is a reality in both rural and urban areas due to lack of employment opportunities or … Although according to the 2009/10, 54.3% of the poor reside in rural areas, compared to 65% in 2002/03. The share of the poor living in urban villages increased from 27.1% in 2002/03 to 37.0% in 2009/10, and the share of the poor living in the cities increased from 7.9 to 8.6%. According to the Central Statistics Office (CSO) study to produce the country's first Poverty Map has uncovered pockets of poverty at district level according to which Kgalagadi, Ghanzi, and Ngamiland have the highest concentrations of severely poor households in Botswana.

A system that was popular in the past known as "ipelegeng", meaning self-reliance where community members worked for food in return for de-stumping the land, building houses for the teachers, classrooms, small dams, construction of rural roads has been revived (Ntseane & Solo, 2007). Recently the system is used to alleviate high rates of unemployment and poverty in both rural and urban areas. Unemployed community members in both rural and urban areas are now engaged in small ipelegeng activities such as weeding around roads, cutting grass, picking up litter in and around homes, and some still construct government buildings. Not everyone is supportive of this system. To some, it perpetuates the spirit of over-dependence on the government and zero contribution to economic development.

48.5 Diamond for Development

Botswana depends on diamonds for its development. Ironically some of the diamond mines are within the settlement areas of the Basarwa and Bakgalagadi, but these areas tend to be the least developed. The only developed area would be the mining town at the expense of the local areas that the mine is in. This denies the communities around the mining areas to benefit from resources within their localities. Most of the money from the diamonds has provided opportunities for development in cities, towns, and large villages of the country where very few Basarwa and Bakgalagadi community members can be found. Moffat [5] echoes that economic growth needs to be complemented among others by a significant rise in living standards and more equal distribution of resources, income, and opportunities for sustainable and long-term development.

Poverty has now become a serious problem in areas closest to the mining areas that communities around rely on government handouts; from food supplies to provision of shelter through a scheme by the present President Dr. Seretse Khama Ian Khama that requests the Botswana community to participate in the improvement of the status of the poor by providing decent accommodation.

48.6 The Effect of Poverty on Education

Poverty affects the performance of children in schools. If a child goes to school unfed, he/she will not concentrate or participate in the activities in the classroom. It has been observed that indigenous communities are living in widespread poverty, illiteracy, malnutrition, absence of safe drinking water, and sanitary living conditions (Joshi [3]). According to Lacour and Tissington [4], poverty directly affects academic achievement because the child would lack appropriate resources to succeed. The further stated that there was a correlation between low socioeconomic status and low achievement. The economic situation and poverty are regarded as the foremost factors impeding the opportunities to access the school education (Joshi [3]).

Among the Basarwa and Bakgalagadi, the reality is that poverty has become an intergenerational pattern. If a child lives under unstable and stressful environments in early childhood, this leads to poor academic readiness and behavioral issues, culminating in higher dropout rates, crime convictions, and teen pregnancies. If children do not receive adequate nutrients during their early years of development it affects their cognitive development from the prenatal stage through adulthood. Today more than ever, education remains the key to escaping poverty, while poverty remains the biggest obstacle to education for the Basarwa and Bakgalagadi communities. The children from these communities have tremendous potential to succeed and it is essential that the government provides the right combination of education and interventions to help improve the status of the communities.

48.7 Culture and Education

The Basarwa and Bakgalagadi are a closely-knit community that loves and care for one another and do not appreciate separation. When the Botswana government introduced education in these communities, it provided hostels or living quarters with the hope that the children would be cared for and appreciate the effort made to make them comfortable. However, in most cases, the children felt stifled and preferred to run away from school and go back to their communities. When these children made it home there was no attempt from the parents to send them back because to the parents it was natural that children must be with their parents. The Basarwa live in bands where they practice a type of "primitive communism" that aims to promote the survival of the band (Pridmore [7]). The bands have been broken since the government moved the Basarwa and Bakgalagadi communities from their places of birth such as the Central Kalahari Game Reserve (CKGR) and re-settle them in small communities outside their natural environment. These communities used to co-exist with wild animals and preserve the environment using their indigenous knowledge. They knew when and how to hunt or gather in such a way that they do not deplete their environment.

Pridmore states that bands are both open and egalitarian communities in which neither men nor women are exploited and among which members may freely migrate. When Basarwa parents think about their children being punished in school it makes them protect their children more, hence allowing them to play truant and leave school to return home. The Botswana government could think about providing flexible, less formal mobile and schools that could meet the high mobility culture, the closeness of the Basarwa and Bakgalagadi as families.

48.8 School Environment

As mentioned above the government has provided hostel living quarters for the Basarwa and Bakgalagadi children. However, the living conditions in hostels are usually reported to be non-conducive. There are high rates of dropout, and the government officials at times would be forced to visit the villages or settlement areas looking for the children and sending them back to school. This is an expensive exercise for the children. According to an opinion letter written to one of the Botswana popular newspapers in 2004 indicated that "while boarding schools help to meet the educational needs of some children, there are a series of problems that require urgent consideration". The scholars, Molefe, Nteane, Pansiri &Weeks indicated that boarding schools throughout the world are it is assumed to provide better academic opportunities for pupils. However, in their paper, they insinuated that that was not the case for children from remote areas in Botswana. For example, the hostels lacked basic facilities such as electricity, slept in rooms with broken windows, doors, and locks. The children could not study at night and had no planned recreational activities.

The children were prone to abuse by community members since movement within the hostels was free leading to young girls falling pregnant. Some children had no adequate winter clothes to wear in the cold Kgalagadi desert where temperatures would go below 0. The food provided for the children was not sufficient and children gathered for firewood from the bush to ensure there is cooking done. Hostels were overcrowded that some students slept in a dining room, was poor ablutions which caused conflict between the school authorities and the students.

48.9 Community Illiteracy

For a long time the Basarwa and Bakgalagadi were denied access to education even during the times when the government reformed its education system through the first President Sir Seretse Khama's 1977 Education for Kagisano (Education for Social Harmony) which pursued to increase educational opportunities and perpetuated the 4 national principles of democracy, development, self-reliance, and unity; the 1994 of the Revised National Policy on Education (RNPE) that aimed at providing quality education and training, and equipping learners with skills to enable them to enter into self-employment as well as create an opportunity for lifelong learning. The denial of access was perpetuated by lack of monitoring, evaluation, and accountability by educators, communities, and interested stakeholders to ensure that Basarwa and Bakgalagadi children attend school and complete their studies. There were very few parents in these communities who understood the value of education and persuaded their children to go to school. "Human capital is not equivalent to people per se, but is dependent on their acquiring skills and knowledge and performing productive services" (p. 173). Employers who kept Basarwa and Bakgalagadi families working for them neglected to send them to school hence increasing illiteracy among these communities. According to the UNESCO report when there are high rates of illiteracy among adults, it increases the socioeconomic vulnerability which leads children experiencing the same. This is why it is still difficult up to date for most children from these communities to have an appreciation for education.

Illiterate adults never find employment due to low levels of knowledge and expertise, hence perpetuating poverty. The adults have limited awareness of their rights and duties impacting their health, hygiene, nutrition, economics, and social integration and cohesion (UNESCO Report). When parents are uninvolved in their children's education, the latter are more likely to display behavioral problems, have poor grades, repeat school years, and even discontinue their formal education (Carneiro et al. 2007).

48.10 Methodology

48.10.1 Theoretical Framework

The phenomenological paradigm was used to collect data from the community members. Lester (n.d.) describes phenomenology as a deep gathering of information and perceptions through inductive, qualitative methods such as interviews, discussions, and participant observation, and representing it from the perspective of the research participant(s). The Researcher was concerned with understanding the experiences of culture, poverty, and illiteracy from the Basarwa and Bakgalagadi perspectives. Since the participants were used to interpret the music, dance and drama this emphasized the importance of personal perspective and interpretation.

A contemporary indigenous research paradigm was used based on the indigenous research methods purported by various experts. According to Chilisa [2] social science research must embrace paradigms that involve spirituality in respect of communal forms of living that are non-western but based on relational realities and forms of knowledge other than the conventional western viewpoint.

The Researcher carried out the study in Phuduhudu. Phuduhudu is a village in Kgalagadi District of Botswana that started as a settlement area. It is located in the northeast part of the district, in the Kalahari Desert, and it has a primary school. The population was 482 in the 2011 census.

A sample is a smaller (but hopefully representative) collection of units from a population used to determine truths about that population (Field, 2005). The Researcher samples were as follows from each cohort;

- 1 class in standard 1;
- 1 class from standard 4;
- 1 class from standard 7

The Researcher engaged random sampling to choose the above. A random sample allowed a known probability that each elementary unit was chosen. All the names of the classes in the standards and from chosen were written, folded, mixed up thoroughly in 3 different envelopes, and then one class was picked at a time. In this case, every name had an equal chance of being picked.

Three teachers teaching the chosen classes were interviewed through the snowball sampling, identified according to the standard that was sampled. A social worker dealing with issues of poverty will furthermore was interviewed.

The School Head and the chief in Phuduhudu primary school were interviewed. Snowballing was used to identify parents of the children who completed the questionnaire and they told stories and danced depicting poverty, culture, and illiteracy. The parents danced and data was collected as interpreted by the elderly people identified within the communities.

Parents whose children participated in the study were interviewed. In Botswana at times children are temporarily fostered by either relatives or friends because of necessity. For example, if parents feel that one of their relatives or friend lives in a place with a good school, a child may be sent over to live with relatives to attain the best education. In Phuduhudu there were no fostered children.

48.11 Findings

48.11.1 Socioeconomic Status/Poverty

All the participants, the school head, the social worker, the chief, parents, and the children concurred that poverty was rife among the community, and it affected the children's well-being and their learning. The social worker confirmed that about 90% of the families were registered under the government's poverty eradication scheme. They were supplied with clothing, food, toiletry, uniform and the only source of employment was the poverty eradication program known as *Ipelegeng (self-reliance).* Most of the homesteads were built for the orphans, the poor, and the disabled through the poverty eradication scheme and they [orphans] accommodated other family members.

The Botswana government attempted to alleviate poverty among the community but due to lack of knowledge of caring for livestock, some of the Basarwa families either slaughtered the livestock to eat or sell to purchase alcohol and marijuana.

The social worker was concerned about alcohol abuse and teenage pregnancy that they exacerbated poverty.

Social worker: "no maturity; when a reaches puberty, they feel the child is mature; no age limit". There were grade 6 young girls who were married that when they left school they became wives to some elderly men. This affected their performance because at times they would be tired and fail to concentrate in class-leading to poor performance.

The children interviewed echoed the lack of food in their homes, and only got to eat at school; that they slept on the floor and shared blankets with their siblings, and usually received food rations, school uniform and stationery from the social services department. There were limited employment opportunities in the village to sustain the community.

Most of the children walked to school daily, some barefooted if the social service department delayed with the supplies. Before coming to school the children had to collect firewood and water from public standpipes since most of the community members did not have access to modern amenities such as proper homes with fitted kitchens.

48.11.2 Culture

It was established that in the Basarwa and Bakgalagadi's culture education was valueless. Instead, they [Basarwa and Bakgalagadi] preferred to spend most of their time playing and with family. The families did not accept the separation of children to boarding, hence most of the children high school to return home and parents were apathetic about it. However, there were a few children who listened when he counseled them about the value of education.

Other issues that emanated from the study were lack of leadership in families or communities such that a chief was chosen from a different tribe to ensure order in the community. Basarwa were originally hunters and gatherers who lived freely as bands and were not governed by one strict rule. Therefore, it is a challenge to be inhibited from doing at any time they feel it is necessary.

The chief would identify some of the children with potential to succeed and persuade them to continue studying by accommodating them in his home so they could at least pursue grade 10 or even gave some gifts of livestock as incentives.

"It is difficult to detach people from their culture".

48.11.3 Poor Parental Supervision

There were allegations of poor parental supervision of children. The children were free to stay in other people's homes for over long period of time without any parental concern or some women handed over their children to their biological fathers and forgot about them.

48.11.4 Illiteracy

The school in this community was from grade 1–7. Most of the children dropped out of school in grade 10 and would return to their community and prefer to work for the poverty alleviation program with their parents that pays as little as 50USD monthly. The school-going children did not have any mentors to assist them to understand challenging concepts or complete homework despite having siblings who had completed grade 10. Almost all the parents were illiterate and spent most of their time at drinking places. Child neglect was very rampant and there were cases of children left children unattended, or to fend for themselves.

Social worker: "in the Sesarwa culture, leaving children unattended is a normal practice. When told that it is wrong according to the law, the response is non-chalant".

Most children indicated that their parents or siblings never visited the school to check their progress, or assist them with school- work. In most cases, the children were challenged by the language barrier as most lessons were taught in English and Setswana. This led to demotivation, lack of interest, and playing truant.

48.12 Recommendations

The government of Boswana could identify the natural resources within the community, identify and utilize the indigenous skills the Basarwa/Bakgalagadi possess such as bead making from ostrich eggs and other plant seed, develop a cultural village to showcase their dance and music skills to attract tourists. The government could identify overseas markets for the produced products.

The government has recently indicated the importance of teaching children in their mother tongue. This effort could help the children to understand their culture better, understand concepts better and motivate children to learn unlike presently when teaching is in English and Setswana-the 2 official languages.

Instead of separating elementary and higher schools, it would be profitable to establish unified schools to enable the Basarwa children to continue learning in their communities instead of migrating to other villages.

Since among the community there are a few literate ones who have completed grade 10, these could be employed as assistants in the schools to encourage their children to attend school. They could be engaged as interpreters of the English language to the indigenous Sesarwa and Sekgalagadi languages. They could be tasked to ensure regular attendance, completion of homework, set study groups in their homes, or other activities that could enhance learning.

Poverty, culture, and illiteracy have a high impact on the education of children. Children who live in poverty face various challenges in conceptualizing ideas due to poor mental and physical development. It is difficult to perform to the expected standards when one is hungry, disheveled and receives limited or no support from his/her parents due to their illiteracy level. Parents have low educational expectations and aspirations for their children because they do not understand the value of education. The Basarwa and Bakgalagadi are closely knitted families and find it difficult to separate from their children. The culture of migration is still engraved within the communities; and when children leave school to join their families, none of the elderly members of the communities feel the responsibility to encourage the children to return to school. As the children continue to return home they fail to complete their basic education let alone find their place in tertiary education institutions and are unlikely to obtain jobs good enough to alleviate poverty. They fail to get social recognition they deserve, suffer from low self-esteem, display little autonomy, and possess little ability for critical thinking (UNESCO, 2006).

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Chapter 49
Sustainable Tourism Planning and Development in a Cross-Border Destination: The Eurocity Chaves Verín

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Abstract Tourism activities which have the highest environmental, economic, and social benefits are more sustainable. However, when the destination considers that it is still an emerging destination, it does not consider its sustainability at all levels, being only on the agenda little more than the environmental policies of solid waste and saving of natural resources. The aim of this study is to analyze the sustainable management of a border destination: The Eurocity Chaves-Verín. Sustainability is the new trend for several sectors of economic activity, without ceasing to be also for tourism. Tourism is very important for the regions, must be developed and preserved to ensure its viability over time, improve the living conditions of populations and ensure the preservation of their most valuable resources. The methodology used in this study is the qualitative methodology, through the realization of semi-structured interviews. The present study aims to understand if the management of the border destination—Eurocity Chaves Verín (ECV) foresees all the pillars of sustainability: economic, socio-cultural, and environmental, with the purpose of raising the awareness of the destination agents to the importance of sustainable management in all the pillars of sustainability, in time and space, even when it is considered that the need does not exist yet.

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49.1 Introduction

The management of destinations lies in the collaboration between all its agents, both public and private entities. The development of tourism enhances the best of two worlds, on the one hand it takes advantage of the environmental and heritage resources existing in the destination to obtain economic benefits, but also preserves in time, its unique and differentiated resources, providing a sustainable social, cultural, and environmental development. Tourism is thus born of tourism products created from the unique resources existing in destinations, which give rise to a diversified offer capable of promoting it and maintaining its competitiveness over time. However, it is necessary to ensure its economic, social, cultural, and environmental sustainability. There is an emerging need to think about the management of destinations in advance at the level of its sustainability, so that its own growth is made with these concerns.

The development of the tourism industry contributes positively to the tourist destination and provides benefits and prosperity to the residents of the destination place. Also, in the destination under study, tourism is very important for its development because it is an inland destination, which needs development that provides better living conditions for its population and at the same time can promote and preserve local culture and heritage.

In chapter 2 the literature review presents some Guidelines for a Sustainable Planning. In these guidelines we can verify that it is essential to integrate Tourism in the planning, that sustainability also to supports and develops local economies, providing, also, the region with qualified human resources.

The objectives of sustainable tourism aim at economic, environmental, and sociocultural aspects. As for the economic aspects they aim to ensure the economic viability of the destination for its residents with job creation and social equity. Regarding the environmental aspects, they foresee to maintain and promote the preservation of the environment with an effective waste management. The sociocultural aspects of tourism aim to provide the welfare of the community and meet the expectations of visitors.

The impacts of tourism on sustainability are felt at the economic level, where they are usually positive, however, are also known already in tourist destinations wide negative environmental impacts and sometimes irreversible in the environment. Hence the importance of tourism planning is to ensure the sustainability of the destination without depleting its resources and without looking only at economic benefits.

Another way to ensure the destination's sustainability is through community involvement since tourism can generate economic benefits for the population, especially in less developed inland regions as is the case of the ECV. Several authors highlight the importance of community involvement in tourism as a means of improving the standard of living of residents. Chapter 3 describes the methodology used for the analysis of the study and the scientific literature that was the basis for the creation of the semi-structured interviews, presents the research question, and the general and specific objectives. Chapter 4 presents main results considering the integrative categories of the interviews and Chap. 5 presents the conclusions of the study.

49.2 Literature Review

49.2.1 Sustainable Development

Talking about sustainability in tourism makes sense when associated with its sustainable development. Tourism resources are limited, and their use must be increasingly careful to ensure that they are passed on to future generations. The concept of sustainable tourism has developed and matured over the last three decades in an approach that aims at sustainable environmental, economic, cultural, social, and political development through changes in behavior and social systems. In the early 1970s of the twentieth century, the first United Nations Conference on the Human Environment, chaired by the UN Secretary General took place in Stockholm. It produced an action plan for the environment based on a global environmental assessment program—Earthwatch [1]. 1987 marked another important milestone in the move towards human environmental sustainability: the Brundtland Report "Our Common Future" by the World Commission on Environment and Development (WCED). One of the main objectives of the commission was to help define shared perceptions of long-term environmental issues and the appropriate efforts needed to deal successfully with problems of protecting and improving the environment. The document defines sustainable development as follows: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [2]. In 1992, the Earth Summit (Conference on Environment and Development) was held in Rio de Janeiro, and this conference established a framework for sustainability in the form of a broad strategy for action known as Agenda 21. The outcome of the conference was also a document containing the fundamental principles on which state socio-economic development policy should be based considering environmental conditions, the so-called Rio Declaration, which contains 27 principles defining rights and duties of nations in terms of sustainable development. In 1992 the hotel industry launches an International Hotel Environment Initiative (IHEI), designed to reduce the impact of visitors on the environment. In the same year, the UK-based Tourism Concern group established its own guidelines and began actively lobbying the private sector to take more account of the need for sustainable planning, following the guidelines in Table 49.1.

At the beginning of the twenty-first century, the idea of sustainable tourism has become more popular among the public, notably by the private sector, i.e., travel and tourism businesses. The United Nations Environment Program (UNEP) launched its Sustainable Tourism Initiative for tour operators. This was followed by the UN declaration to designate 2002 as the International Year of Ecotourism. Subsequently, a World Summit on Sustainable Development was held in Johannesburg (also called

Table 49.1 Guidelines for sustainable planning

Use resources in a sustainable manner
Reduction of excessive consumption and waste
Maintain diversity
Integrate tourism into planning
Supporting local economies
Involving local economies
Consult stakeholders and the public
Staff training
Responsible tourism marketing
Conducting research

Source Tourism concern (1992), adapted

"Rio+10"). This initiative emphasized for the first time the importance of sustainable development in tourism. In addition, also another World Ecotourism Summit was held in Quebec in the same year. Other industry-related organizations such as the World Tourism Organization (UNWTO) or the World Travel and Tourism Council (WTTC) have contributed to the principles of sustainable development, which aim to minimize the damage to the environment, wildlife and local populations caused by tourists and the industry. Together with the Earth Council, they encourage the industry to lead the way in preserving the environment in the areas in which they operate. The future, it will show, if there is a real will, among governments, to implement the global strategies and actions defined more than a decade ago.

In 2015 the 2030 Agenda was defined, consisting of 17 Sustainable Development Goals (SDGs). The 2030 Agenda is a broad and ambitious agenda that addresses several dimensions of sustainable development (social, economic, environmental) and promotes peace, justice, and effective institutions.

49.2.2 Sustainable Tourism

Sustainable tourism is defined as all forms of tourism activities, management and development that preserve natural, economic, and social integrity and ensure the maintenance of natural and cultural resources. Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various segments of niche tourism.

The main objective of creating a sustainable tourism strategy for a given region is defined as the result of increasing the number of tourists, considering the principles of sustainable development. This objective can be achieved through the realization of specific objectives, such as:—coordination of all stakeholders in tourism development in the region;—inventory of tourism products of the region;—consideration of the interests of local communities and the environment in the definition of the tourism product.

It is also essential to create a marketing plan, which allows the evaluation of marketing and perception of the product by potential buyers; define a clarifying strategy on the vision, mission and activities developed; create a common brand of the region and develop tools capable of assessing progress in the implementation of the strategy [3]. Sustainability is defined in the economic, environmental, and socio-cultural contexts, with the objectives of sustainable tourism defined in these three contexts in Table 49.2.

Table 49.2 Sustainable tourism objectives

Economic aspects of sustainable tourism	
Economic profitability	• Ensuring the viability and competitiveness of regions and enterprises to achieve long-term viability
Local prosperity	• Maximize the economic benefits of tourism to the local community, including tourist spending in the region
Quality of employment	• Increase the quantity and quality of jobs associated with the tourism sector, in the local community, including wages, working environment and employment opportunities without discrimination
Social equity	• Ensuring a fair and equitable distribution of the social and economic benefits deriving from tourism
Environmental aspects of sustainable tourism	
Physical integrity	• Maintain and build up the quality of landscape, in urban and rural areas, to prevent ecological and visual pollution
Biological diversity	• Promotion and protection of the environment, natural habitats, and wildlife, to minimize the impact of tourism on the environment
Effective waste management	• Minimize the use of rare and non-renewable resources in tourism development
Clean environment	• Minimization of water, air, soil pollution and reduction of waste production by tourists and tour operators
Socio-cultural aspects of sustainable tourism	
Community well-being	• Build community well-being through social infrastructure, access to resources, quality, and prevention of the environment away from social corruption and resource exploitation
Cultural richness	• Maintaining and developing the cultural heritage, local culture, customs, and exceptional nature of the host community
Meeting the expectations of visitors	• Provide a safe and enjoyable tourism experience that will meet the needs of tourists and be available to all
Local control	• Authority to plan and make decisions in the management of tourism by local communities

Source [3], adapted

A reputation for being sustainable adds value to brands and resorts and strengthens their market position. However, the introduction of sustainable development principles is an expensive process, which can be profitable in a long-term perspective [3].

49.2.3 The Impacts of Tourism on Sustainability

It is essential for the tourism sector to respect the principles of sustainable development since tourism depends directly and indirectly on natural resources and their quality. However, tourism activities contribute to both positive and negative effects in all three contexts of sustainability.

The economic impact is widely recognized in the development of tourism in a country or region. It is a key economic opportunity to increase revenue and employment. However, if tourism is not developed and managed in a responsible way, considering local needs and concerns, the real economic benefits can be substantially reduced compared to what is expected. The three main economic benefits of tourism are the reduction of unemployment, infrastructure development and financial and non-financial revenues for the region. These results provide an increase in the purchasing power of the families, as well as an infrastructure development that is beneficial to all economic sectors, which in addition to including roads and other communication routes also includes social and cultural development infrastructure, such as restaurants, bars, hospitals, theaters, cinemas, entertainment centers, among others. Through spill-over effects, tourism affects most sectors of the economy [4]. When analyzing the economics of tourism, the positive impacts seem to outweigh the negative ones as they focus mainly on the benefits that tourism can bring to a particular location.

In addition, government spending on tourism infrastructure, such as sanitation, roads, airports, or health facilities, may mean less investment for basic services for the local population. Another potential cost of tourism activity is the expense of dealing with air and water pollution generated by tourism activities, pollution-related diseases, and increased cost of living for the local population. Price inflation of goods and services can also be noted in the peak season.

Tourism can have broad negative and sometimes irreversible environmental impacts on the environment. In some more extreme cases, long-term environmental degradation can destroy the characteristics that once attracted tourists to a place, leading tourism operators and their customers to abandon the older destination in favor of new, undamaged ones. Poorly planned tourism can lead to landscape degradation and biodiversity loss through conversion of natural habitats and damage to coastal areas, natural spaces, among others [3]. Tourism contributes to the imbalance of the water balance, generates waste produced by tourism businesses and tourists themselves. Transport, used for tourist destinations, has a major global impact through carbon dioxide emissions, whether from aircraft or other forms of transport, which contribute to induced climate change.

Although tourism can lead to environmental costs, it can also be a source of benefits to the environment, noting that revenues generated thanks to the tourism sector can contribute significantly to the preservation and enhancement of natural areas. It is not simple, the process of disengagement of the concepts of social and cultural sustainability, because the union of the two implies the constant struggle for the improvement of the quality of life of populations and the idea of ensuring them social justice and dignity without trying to interfere in cultural expression with the intention of changing it in an unnatural way [5]. Tourism can effectively result as a vehicle for sustainable community development, contributing to equity and greater social justice [6]. According to the authors, this happens when tourists become interested in learning about the society they visit and participate in development activities and projects with the residents of the host area. Such actions lead to greater cohesion to a particular cultural identity and have the power to transform the vision of social injustice of visitors, stimulating new actions aimed at reducing inequalities [6].

For [3] there are three main aspects that make up the tourism industry and its impact on sustainability, namely transport, accommodation, and the purpose of the trip. Tourism can harm local communities by interference of outsiders in the local society of the destination, but on the other hand tourism can help to preserve cultural heritage by rebuilding and revitalizing historical sites to attract more visitors. Applying the principles of sustainability is the best way to preserve tourism destinations from social, cultural, and environmental degradation. Proper tourism planning can also increase revenue and be a source of wealth for the local community. Tourism operators can attract capital from banks and investors, so tourism can be seen as an easy way to access capital. Sustainable tourism development depends on the involvement of all stakeholders such as the community and political leadership to ensure broad participation and consensus in decisions [3].

Sustainable tourism can strengthen the appreciation of local identity, and promotion of the destination. Likewise, local social development will be the result of tourism promotion in a region, associated with the preparation for the reception of visitors: education, health, safety, transport, among others, viewing tourism from a multi-dimensional perspective, considering all aspects of sustainability [7]. Sustainable tourism is also important at the planning level. The strategic planning of tourism, from the point of view of the public sector has several formats and scales and refers that the approaches on the strategic planning of tourism are [8]: Boosterism; economic planning oriented to the tourism industry; the physical, spatial and territorial focus; the community-based planning, and the planning of sustainable tourism [9]. Their main characteristics are presented below in Table 49.3.

Table 49.3 Tourism strategic planning

Focus	Description
Boosterism	Dominant tradition in tourism planning, rather simplistic, since it thinks that all tourism development is essentially good and automatically generates benefits for the recipients of tourists
Tourism-oriented economic planning	It seeks economic growth, job creation, regional development. And it underlines the potential of tourism, used by governments, as a corrector of economic and territorial imbalances, in alliance with business groups
The physical, spatial and territorial approach	Seek a rational management of tourism development and natural resources. Plan the use of land as a way of environmental protection. Minimize the negative environmental effects of tourism, control the physical and social burden of tourism and limits to social and cultural change
Community-based planning	Focuses on the effects of tourism and the involvement of communities in decision-making on tourism development to avoid unnecessary hold-ups. It is concerned with the welfare of the receiving population, which is important for the image that tourists take away from destinations. Tourism development should meet the needs of locals and visitors at the same time, so that everyone wins from tourism
The planning of sustainable tourism	Ensuring the sustainability of tourism activity in a safe, environmentally friendly manner, without depleting resources or damaging cultures and societies. Ensuring equity, combating poverty, coordinating, and controlling tourism activity in the long term, minimizing the negative effects of tourism. Therefore, the management of tourism effects is a priority over the market economy, something that will always be in conflict at different scales and contexts

Source [9], adapted

49.2.4 Community Involvement in the Development of Sustainable Tourism

Community involvement in tourism is seen as a tool for sustainable development of the sector. It is a way to involve the whole community, allowing an effective participation in tourism, to obtain direct benefits. Tourism is determinant in the development and competitiveness of a given community that has natural and cultural tourism potential [10]. When tourism development encompasses local communities benefiting them economically, especially in less developed inland regions as is the case in Eurocity Chaves-Verín (ECV), several authors highlight the importance of community involvement in tourism as a means of improving the residents' standard of living. Numerous case studies around the world demonstrate that tourism can significantly improve the livelihoods of communities and contribute to socio-cultural and ecological protection if it is planned and developed properly through comprehensive and genuine community participation [11]. Based on the literature, communities are aware of the economic, socio-cultural, and environmental benefits that tourism development can bring to communities. However, it would be necessary to measure this benefit in in-depth interviews and focus group discussions with relevant stakeholders to further triangulate and validate the measurement items. The research findings suggest that communities are currently aware of the tourism sector and its benefits, particularly its economic impact in generating additional revenue through creating employment opportunities, inducing cultural exchange, and stimulating the entrepreneurial skills of communities [11].

The tourism industry can help promote culture and protect the environment, as well as contribute to the prosperity of local communities. The protection of the environment is central to the promotion of tourism because tourism depends on the quality of the environment. Currently, tourists of all types and classes are highly sensitive to environmental conditions and pollution. There is even a possibility that environmental conditions are responsible for declines in tourism [12]. Sustainability in tourism implies an overall positive balance between the environmental, socio-cultural, and economic impacts of tourism, as well as the positive impacts of visitors on each other. Thus, tourism activities that have the highest environmental, economic, and social benefits are more sustainable. Sustainable tourism is tourism that implies unlimited long-term maintenance of the resources on which it is based [13].

49.3 Research Methodology

In this article, the qualitative methodology was selected. This methodology allows for an open, non-prescribed design of semi-structured interviews, in which the number of participants is not very large, but with the particularities inherent to the quality and scope allowed for in the interviews. Data are obtained through the words of the answers recorded at the time of the interview and later transcribed, and there were situations in which there were interviewees who preferred to answer in writing, given the pandemic situation. This methodology has recognized potentialities, allowing interviewees to detail and deepen their answers with the desired openness [14]. The methodology used in this research includes two moments. It begins with the literature review, i.e., the theoretical study of the existing specific literature to understand the themes and concepts necessary for the development of the study. This is followed by the development of the model used for application to the case study: Eurocity Chaves Verín (ECV). In the present case, the qualitative methodology was used, using the technique of exploratory scientific research by conducting semi-structured interviews divided into two large groups. The first group included institutional representatives, directly involved in the management of the destination, and the second group, included local entrepreneurs, local hoteliers, and a tourism company.

The sample, for the interviews, was selected, considering the managers of the destination local entities, ECV, Intermunicipal Community Alto Tâmega, Municipality of Chaves, Municipality of Verín. As for the selected business entities, it was questioned to the ECV Entity, which business entities provided their Destination Monitoring surveys. These entities were contacted, and the interview was carried out, except for a hotel entity in Verín, which did not show availability in time for its realization (see Tables 49.4 and 49.5).

This article aims to understand if the destination is effectively promoted as a sustainable destination, and if this concern is transferred to the destination itself. For this purpose, the question to be answered is the following: Eurocity Chaves-Verín promotes a sustainable border tourism destination? The research general objective is to understand the potential of the border region ECV as a sustainable tourism destination. Main specific objectives are to understand what are the positive/negative

Table 49.4 Interviews with the destination management entities

No. interviewee	Entity	Representative	Interview date	Interview duration
E1	CIM Alto Tâmega	First secretary	18/06/2020	In person 31:35
E2	Eurocity Chaves Verín	Executive secretary	24/06/2020	In person 53:29
E3	Municipality of Chaves	Vice president	10/07/2020	Live 01:07:02
E4	Chaves tourism office	Councilor for tourism	10/07/2020	In person 40:05
E5	Monterrei tourist office	Information technician	14/08/2020	Written reply
E6	Municipality of verín	Vice president	22/09/2020	Via zoom 18:20
E7	Tourism office of verín	Councilor for tourism	22/09/2020	Via zoom 14:24

Table 49.5 Interviews conducted with companies at the destination

No. interviewee	Entity	Representative	Interview date	Interview duration
E8	Hotel premium chaves	Director	26/06/2020	In person 15:40
E9	Authentic	Manager	06/07/2020	Via zoom 26:42
E10	Petrus hotel	Director	10/07/2020	In person 42:13
E11	Parador de Monterrei	Director	28/09/2020	Written reply
E12	Parador de Verín	Director	28/09/2020	Written reply

impacts that the development of tourism can bring to the ECV and to understand the choice of quality over quantity in destinations.

The research design that gives rise to the questions posed in the interview design is the European Tourism Indicators System. This System is specifically intended for tourism destinations and was built with the purpose of monitoring the management and promotion of the sustainability of a tourism destination. The system consists of a structure of 27 core indicators and 40 optional indicators. The basic principle of this system is the notion that responsibility, ownership, and decision making are shared. The motivations for monitoring tourism destinations, provides improved information for decision making; effective risk management; prioritization of action projects; benchmarking performance; increased community buy-in and support for tourism stakeholders; improved visitor experience; increased final/cost savings; increased value per visitor [15].

To obtain some of the answers needed for this study, we will use this tool: European Tourism Indicators System, selecting some of the indicators provided, to answer some questions proposed to analyze.

49.4 Results

The Integrative Categories of the Interviews are generated to analyze the answers to the questions discussed with the interviewees.

The following tables present a summary of the evidence from the interviews in the main categories to the Destination Management Entities and the Business Entities regarding the major category Sustainability in the Destination (Tables 49.6, 49.7, 49.8).

Table 49.6 Integrative categories of the interviews

Large category	Main categories
Destination sustainability	Public policy for sustainable tourism
	Sustainable tourism management in tourism enterprises
	Quantity and quality of employment
	Tourism supply chain
	Social/community impact
	Protection and enrichment of cultural heritage, local identity and resources

Table 49.7 Summary of evidence from interviews in the main categories to destination management entities

Main categories	Evidence from interviews
Public policy for sustainable tourism	"Sustainability is very important in the region, we are competing with other destinations, we have to create an economically sustainable destination, and offer services that are environmentally friendly, our destination is characterized by nature tourism, it has excellent environmental conditions, so the products we offer have to be very environmentally friendly and thus ensure the economic, social and environmental sustainability of the destination. All our projects have to ensure this sustainability, not least because they are projects approved by the European Union, and the European Union has social, economic and environmental sustainability as one of its priorities" (E2). "Directly in the tourism sector we have no programs in the area of defense and protection of resources, whether water, soil and forests… tourism has no negative impact that forces us to take care of sustainability in an evident way" (E3). "There is a concern about sustainability and that is why I was talking earlier about carrying capacity, the worst thing that could happen to us is to be invaded by a very large number of tourists who then cannot enjoy the quality of the destination. The first thing we need to know is to have a perception of how many people we can have in the territory visiting us every moment so that the territory can respond with quality, and then to be able to maintain this level of quality over time—I would say that this thought exists, instruments that I know of, I think they are not defined, they will be some day" (E1)
Sustainable tourism management in tourism enterprises	"The master plan is focused on what the sustainability of the destination foresees. The monitoring project is the control project of these sustainability components" (E2)

(continued)

Table 49.7 (continued)

Employment	"Responsibility measures cannot be mandatory, defined by us, the inter-municipal community. I would say that it is up to each of the actors of the region to implement these types of measures. We have a mix between groups linked to the local hotel and restaurant industry with large national and international groups and the standards are international. They have social responsibility principles inserted in their action programs, when we look at the more national groups this also happens, depending on the dimensions, we have the premium hotels, they have several hotels in the country. But we also have hotel units, in a more family-oriented perspective, where these procedures are not always easy to implement" (E1)
Tourism supply chain	"The companies buy local products from local and proximity producers. We have programs to support local production of cattle and pigs, we have a municipal program in the agricultural area, namely for beekeeping and with the "pastel de Chaves"" (E3). "The biggest challenge in tourism, now, is the improvement of operators as very relevant, we as an inter-municipal community do the promotion and training and organization, but then someone has to sell, I would say that we have good operators in the territory, but perhaps not in sufficient number. The operators tend more and more to make a cross between what is the destination and the destination's products, and therefore, I would say that this is in progress, increasingly better, because those who come to the destination, do not want to eat a meat that is not from the destination, when the destination has two certified meats, or a certified potato, the tourist wants to eat the certified potato, or the olive oil that is known worldwide, they want to use that oil. It is a network" (E1). "Local products should be part of the strategy to capture tourists, we have a very important gastronomy, and tourists end up taking local production products such as food products and wine" (E7)

(continued)

Table 49.7 (continued)

Social/community impact	"The impacts are of economic development, it represents more tourists, who extend their stay, higher added value tourists, who spend more money, different tourist profiles, the spa tourist spends more money, the nature tourist spends less. What we want is to have an offer for residents and tourists, and we want tourists to stay longer, spend more and better" (E2). "The negative impacts arose with the decrease in tourism due to Covid-19, which caused impacts at the level of the installed economic structure, such as restaurants and hotels, but also food supplies, entities that provide services, butchers, wine sellers. It shows that although they say the tourism sector is a tertiary sector, it is not, tourism is a tertiary, secondary and primary sector, there are activities in the primary sector that are tourism activities such as in tourism activities where tourists participate in cultivation and harvesting activities, tourism has multiplier effects" (E3). "Almost all of them are positive, first because we have the right characteristics to be an alternative destination to mass tourism, we have a lot of adventure sports in the region. We have many trails within the region, so for those looking for adventure sports, we have a lot to offer. I do not see negative aspects" (E7)
Protection and enrichment of cultural heritage, local identity and resources	"Yes, this material heritage (castles, fortifications, archaeology) exists, but I have no data on whether stakeholders are aware of it or not" (E2). "Identity, is perhaps the most relevant factor of all, I would say that perhaps there is no plan, but there is a lot of concern in maintaining the identity. Those who visit us understand, those who want to visit us, still don't have that in a very clear way. Those who visit us understand, because there is a very transversal way of being in Trás-os-Montes (not only Alto Tâmega), which is based on the idea of being among those who are, and which is a very affable way of being able to receive others" (E1). "The monumental network of Verín is catalogued and has a specific protection by the heritage. The information is available to tourists, the Verín plans have all this information regarding heritage" (E7)

Table 49.8 Summary of evidence from interviews in the main categories to business entities

Main categories	Evidence from interviews
Sustainable tourism management in tourism enterprises	"In the Paradors… objectives are defined viewing sustainability and management optimization" (E12). "Yes, of course within what is required, the hotel doctrine is very focused on the common good" (E8). "Spain's sustainable tourism strategy 2030 proposes the use of local products that can complement the tourist experience and improve their quality of life, such as water from mineral-medicinal properties or the Atlantic diet. The commitment to technology and digitalization is another crucial component in this plan, in that it seeks to develop a tourism intelligence strategy in which information can be obtained for the sustainable management of the territory" (E11). The environmental sustainability and quality measures implemented "are energy saving, moderate water consumption, waste separation, care in green areas, good sustainable practices, elimination of plastics, amenities made from recycling, elimination of paper" (E12)
Employment	"Yes, in the summer we always hire extras" (E10)
Tourism supply chain	"In macro agreement by our central services for the entire Network of *Paradores* the regional products and services used are the supply, procurement, cultural, religious and tourism services, in a percentage of 50%" (E11). "The products are all from here the smokies, the vegetables, we do not bring anything from outside" (E8). "We promote fundamentally the local commerce; the offers are always with regional products" (E9). "Almost everything" (E10)

(continued)

Table 49.8 (continued)

Social/community impact	“They are very positive, when the destination is worked with awareness” (E9). “At this moment, I only think of the positive aspects, and there are many, starting with the economic aspect, keeping people here, if there are tourists there is work and wealth is generated. Negative aspects would only happen in a long time if we had mass tourism, the destination is not massified and it has quality, which we need to know how to take advantage of” (E8). “The risks that can arise from the tourism sector are perfectly controlled if there is a regularization designed to meet both the expectations of the tourist and the environmental aspect, for this, the infrastructures must be available to enable this to happen. The fact that tourism brings an economic benefit is evident for everyone, but having a destination perfectly identified in all the above-mentioned values has an impact that the place is a reference increasingly motivating a continuous improvement adapted both to the needs that may arise and to the adaptation to the environment and the demand originated” (E11). “The positive impacts are many for the city” (E10)
Protection and enrichment of cultural heritage, of local identity and resources	“Tourists are aware of the fairs …, dynamic to present local products. We had a congress here at the hotel … we invited some local producers who put displays here with their handmade products (olive oil, jams, wine) …, we always have some products on display, and I like to present the wine, honey, jams and olive oil of the region” (E8). “The rehabilitation of Monterrei Castle as a Tourism Parador. The Paradores allow to enhance the identity of some unique buildings recovering the cultural heritage and, on the other hand, bet on the building the resources that a place can make available to people according to or their socio-demographic status” (E11). “I would like to see it at a broader level” (E10). “In the smuggling paths we foresee sustainability, at an environmental, social and economic level, we want to make the tourism product known without massifying it, preserving its identity and the local people” (E9)

49.5 Conclusion

The implementation of sustainable tourism principles presupposes:—An optimal use of environmental resources which are a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.—Respecting the socio-cultural authenticity of host communities, conserving their built and living cultural assets, heritage, and traditional values, and contributing to intercultural understanding and tolerance.—Ensure viable, long-term economic operations, providing distributed socioeconomic benefits to all stakeholders, including stable employment and wealth-generating opportunities and social services for host communities, contributing additionally to poverty alleviation [16].

Sustainable tourism development requires the informed participation of all stakeholders, as well as strong political leadership to ensure broad participation and consensus building. Achieving sustainability in tourism is a continuous process and requires ongoing assessment of impacts, introducing preventative and/or corrective measures where necessary. Sustainable tourism must also maintain high tourist satisfaction and ensure a meaningful experience, increasing tourists' awareness of sustainability issues and promoting sustainable tourism practices among them.

Sustainable tourism concerns particularly important aspects such as competitiveness and social responsibility in tourism enterprises, the opportunity to participate in tourism for all citizens, good employment opportunities in the sector and whether tourism activities benefit the local community.

Direct benefits result from tourists' spending at the destination, such as their food, souvenir purchases, excursions, and tour operators to local suppliers, including hotels and local transport companies. Indirect benefits include the expenditure incurred by direct tourism actors, such as hotels, through food purchased from local farmers and factories. Maximizing the use of local products can increase indirect impacts, meaning that a destination needs fewer tourists to generate the same economic benefit. One of the main problems of tourism, for local people and the destination, is when they do not benefit from tourism, for example services used in tourism are produced and purchased outside the country or region. Sustainable tourism is therefore of great potential for the regions and their unique resources, and can even be an exclusive factor, capable of providing differentiating experiences, thus competitive for companies and the destination.

There is no plan and policy for sustainable tourism development in the destination. If it existed, it should include issues related to environment, society, quality, health, and safety, and set clear targets with established timeframes and be developed with the participation of all relevant stakeholders [15]. There is a concern around sustainability often referred to environmental level and the use of products of the region, but it is not necessary to act since tourism has no negative impact on the region. Tourism businesses take measures for environmental sustainability, and mention that there is still no massification that requires acting in this direction. However, sustainability is not only the preservation of environmental resources. It is recognized as the satisfaction of customers at the destination. Tourism development is determinant for the regions, it creates wealth and employment, but it is necessary to preserve resources through rational management of tourism development to minimize the negative environmental effects of tourism, control the physical and social burden of tourism and limits to social and cultural change [17–21]. It is necessary to meet the welfare needs of residents. Tourism development should serve to meet needs of locals and visitors at the same time, so the management of tourism effects is a priority over the market economy [22–24].

The choice of quality over quantity in the destination seems to be a reference and differentiation of the same. The existing resources in the region, such as Culture, Heritage, Nature, Gastronomy, and the potential of the water element, can ensure the creation of unique products, differentiators, defined for market segments with high quality standards.

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Chapter 50
The Intangible Cultural Heritage as a Creative Tourism Product. The Masks of Trás-os-Montes

Cristina Rodrigues, Dália Liberato, and Elsa Esteves

Abstract Many regions of the world and in particular Portugal, are associated with products, symbols, crafts, and traditions. These associations help to build the identity image of places and the perception we have of them as tourism destinations. This article aims to present theoretical reflections on the potential of intangible cultural heritage for the construction of creative tourism products, in an inland region of Portugal, with a particularly rich and dynamic tradition in socio-cultural terms. The study applies to Terras de Trás-os-Montes, where it is believed that several tourism products, of creative basis, may emerge from the Tradition of Masked: an ancestral intangible cultural heritage, common to several municipalities of the region. Using the qualitative methodology, the interview method was applied, to understand the perspective of individuals with relevant knowledge about the issue. The results presented, link Tradition to the enhancement of cultural identity, the development of tourism activity, the focus on creative tourism, and the dynamics of cross-border cooperation. These themes highlighted the importance and the positive contribution of this cultural heritage, internally, to the resident community and externally, to the tourism market.

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50.1 Introduction

Given the geographical scale of the area under study, it is important to reflect first on the importance of synergies and municipality cooperation. When talking about a regional tourism destination, it is extremely important to consider and listen to all stakeholders in tourism development, which goes beyond the administrative division of a given municipality. “The exploitation of synergies is carried out through cooperation between public and private entities involved in tourism activity, where it becomes relevant an active business class with strong partnership mechanisms that allow the development of collaborative projects which benefit the regional destination and that defends the development of investments aimed at the tourism destination, instead of several municipalities” separately [1].

This cooperation principle is related to the process of integrated tourism development that occurs when there is articulation and cooperation between tourism businesses, local community, visitors, technicians, politicians, and other stakeholders in the sector [2]. The realization of an integrated tourism offer provides combined tourism products, with a good relationship between their promoters, according to a tourism governance that involves all the agents [2]. Transporting this idea to inland territories, tending to be rural, as is the case of the region under study, the development of integrated tourism requires a strong involvement of stakeholders and local communities in the planning, implementation, and evaluation phases, rather than uniform solutions, provided by centralized policies and out of touch with the particularities of the territories [3].

The Intermunicipal Community of Terras de Trás-os-Montes, in its official website, includes tourism in its strategy, which is the main thematic area of the Collective Efficiency Strategy (EEC) of PROVERE Terras de Trás-os-Montes in 2016. This is justified by the “capacity of the sector to induce innovation factors in the local economy and take advantage of the intangible value of a set of endogenous resources related to biodiversity, natural resources, protected areas, traditional crafts, culture and tradition, the uniqueness of places and their communities…” [4]. In the light of the above, it is concluded that the region identifies its tourism potential through several own resources and attractions, appealing to the contemporary tourism market.

As this article shows, culture and tradition are particularly relevant to the typology of creative tourism. It is very important to allocate tourism to these territories, as it generates wealth and diversifies their economy, enhancing and boosting all the resources that can be used for tourism. For these regions, creative tourism is especially suitable, given its sustainability concept. In this context, the research question arises: “How can a creative-based tourism offer be developed and implemented, considering the identity, the interests of the region, and its tourism competitiveness?”.

From this analysis, the study aims to understand the potentialities of the Masked Tradition and its viability for the development of creative tourism in the Terras de Trás-os-Montes region. There are two important aspects that guided the study: (i) the interests of local communities, that have this Tradition; (ii) the tourism competitiveness of the region, stimulating the creation of strategic and value-added tourism supply. Regarding the structure of the article, the first part analyzes literature that relates the cultural heritage and the typology of creative tourism. The case study is presented, with a brief explanation of its context and its suitability to the purpose of the research. It is followed by the methodological background, presenting the research objectives, as well as the methodological options followed to achieve them, and finally the results and conclusions.

50.2 Literature Review

50.2.1 Cultural Heritage and Creative Tourism: A Beneficial Relationship

One of the OECD reports on tourism, specifically Tourism and the Creative Economy, which addresses the creative economy in tourism, indicates that creative industries have the capacity to stimulate the development of tourism activity, offer creative content to tourism experiences, support innovative approaches and strategies, as well as influence the image and perception of destinations. "Linking tourism with creative industries offers interesting opportunities to develop and diversify tourism products; revitalize existing tourism products; use creative technology to develop and enhance the tourism experience; add atmosphere and novelty to places; overcome the limitations of traditional cultural models" [5]. In the same line, a report on the cultural and creative sector in Portugal portrays culture as a competitiveness factor, an ally of regional, local, and urban development strategies. Specifically, the heritage, either in its material or immaterial form, has assumed a prominent place in these strategies. The globalized world we live in requires an increasing exploration of competitiveness and, in this perspective, culture can be used as an argument for dynamism and attractiveness [6].

This portrait of creativity and culture concerns the typology of creative tourism, whose first definition appeared in 2000: tourists and visitors who can develop their creative potential through active participation in workshops and experiences that provide varied learning and are characteristic and identifiable of the destination where they are [7]. Thus, creative tourism is understood as an emerging typology that responds to the latest motivations and interests of tourism demand. These experiences provide knowledge and contact with ancestral ways of life, valuing the local culture and heritage, which greatly enriches the tourist experience [8]. "Creative tourism is an innovative approach to tourism, whose main inputs include intangible cultural heritage and the culture of the host communities of tourism destinations" [9].

From these reflections, we can conclude that the practice and consumption of tourism have evolved in the last two decades, moving from a predominantly passive look and attitude to a more active and interested attitude in the daily life of destinations and their communities. With the perception of globalization, the tourism market has felt a growing need for different proposals than the traditional, requiring new approaches "the extraordinary has become harder to find in traditional forms of tourism consumption" [10]. Creative resources are now used to generate distinctive identities, offering regions and cities symbolic advantages in a market that is increasingly competitive and thirsty for novelty. Creative tourism approaches, enhance the development of new narratives, meanings, and identities in tourism destinations [10].

One of the common reflections about creative tourism products relates to not adapting or misrepresenting everyday life for the tourism market, highlighting that it should be perceived through the real local routine and spontaneously, not through planned or altered activities for tourists [11]. "Do not cook special food for them; they should eat what you eat. Do not do activities for them; just take them to your activities. If you are a farmer, they should work in agriculture; if they stay with a fisherman, they should go fishing" [11]. This shows that in creative tourism the tourists should be involved, in a real and authentic way in the lifestyle of the residents, only in this way they can understand and appreciate the true identity of the destination and experience it. Another reflection has to do with the relationship between residents and tourists. Tourists look at residents as "teachers" and "friends" from whom they learn about the culture of the place in a daily context [11]. This contrasts with more conventional typologies of tourism, where the resident does not play a relevant role or feels more submissive to tourism demand. This situation of proximity makes the residents themselves feel involved and important in the tourism process, making them more comfortable and receptive to the interaction with the visitor. However, for this to happen, high levels of participation and interaction are required, tourists need to be culturally interested and attentive. As the learning and experience of tourism depend on the actions of the resident and the tourist, this is a form of tourism that allows an equal and balanced position between hosts and visitors [11].

In the literature, creative tourism appears several times linked to cultural tourism, but the differences between them are significant. Regarding the type of resources, the difference between the two typologies is essentially in the nature of them, in cultural tourism the physical/tangible resources are very relevant, unlike what happens in creative tourism, where the most central to the tourist experience is the intangible culture. The difference between the types of activities has mainly to do with the form and degree of involvement of the tourist, and the activities of creative tourism appeal much more to the immersive participation of the tourist. According to the consumption model, it can be said that in cultural tourism the acquisition of the service and its analysis can be somewhat distant, less personal, and less effective, contrasting with the creative tourism where there is greater involvement and reflection of individuality and personal interests. Considering the target market, the difference lies in the scale of consumption, with cultural tourism tending to be more massified than creative tourism, which in turn is limited to a small number of people. As far as the benefits for cultural heritage are concerned, cultural tourism has proven in several moments and again in various contexts that it can be harmful to heritage interests due to unbridled consumption. This is not evident in creative tourism, either on the part of operators or on the part of "creative tourists". Finally, there are also some differences in sustainability, such as the ability of products to regenerate. In the case of cultural tourism, as the base are the buildings, there is no such capacity, unlike what happens in creative tourism, where the base is the experiences, in other words, the experience of activities [12].

Since people are a decisive element in the flowering and manifestation of creativity, the type of socio-cultural and economic environment where they live influences, however, to a great extent, the type of creativity, either in its content or its form" [13]. Applying this to tourism and in particular to creative tourism, it can be concluded that the spatial context of individuals influences and impacts their perception and attitude toward the development and creative enhancement of places. This leads us to reflect and question whether there are regions or territories more suited to creative tourism. In the literature, it is possible to understand that there are mainly two currents. The one that creative tourism makes more sense in urban contexts or, by opposition, in rural contexts. However, there is also evidence that it can flourish successfully in both contexts. Creative tourism initiatives have emerged in a wide variety of places, including large cities and rural areas [11]. Creative tourism can be a particularly useful strategy for small places, as it is based on personal interaction, between tourists and residents, and the immersive experience of place [11]. Smaller places should not try to imitate creative development models of big cities but should find their own creative model based on their endogenous resources, local empowerment, and creativity" [14].

Although this typology has gained prominence on urban stages, specifically cities, this has been gradually changing [15]. The growing recognition of artists, creators, and creative entrepreneurial companies as potential residents and entrepreneurs who energize rural areas, is an opportunity to rethink the contribution of creative activities to the economic development of such areas [15]. These activities, where creative tourism practices fit in, are considered as the future of small communities. There are two strands of development: community cultural development (emphasizing social roles) and economic development (from economic impacts to attracting and promoting creative businesses) [15]. Although there may be less potential for expansion and significant economic growth in the business fabric, due to issues such as remoteness from decision-making centers and low population density, there is definitely potential for the number of "CCI" (Cultural and Creative Industries) enterprises to grow in these peripheral regions [16].

On another scale, the cross-border, it is also possible to verify the importance of tourism for cooperation and territorial development. When the subject is tourism development in inland regions, it is impossible not to mention border tourism, which is fundamentally characterized by networking and cooperation between two territories/destinations of neighboring countries, which through a strategic and sustained vision, offer complimentary tourism products and experiences. The cities of Chaves, in northern Portugal, and Verín, in Galicia, Spain, which form a Eurocity, are a recurrent example of border tourism. "For such cooperation to be advantageous, it is essential that, in terms of tourism, it involves the diversity that complements the

Fig. 50.1 Examples of masks from Terras de Trás-os-Montes region. *Source* Adapted from "Diário de Trás-os-Montes" "Caretos from Trás-os-Montes" in International Festival of Iberian Mask

two regions. If the cooperation process aims at a broader perspective of development and economic growth, tourism will naturally emerge as an important activity to be developed in common cooperation projects and is sometimes considered as the activity that initiates institutional cooperation agreements between territories in multisectoral terms" [17].

Border tourism and the issue of cross-border cooperation is relevant for this study, since, the Masked Tradition is also lived, in different ways, by some provinces of Spain, such as Ourense and Zamora. The Iberian Mask and Costume[1] Museum and the Iberian Mask Academy,[2] located in the city of Bragança, show this cultural heritage, common to neighboring countries. This cultural legacy carries over from one generation to the next, forming a common, cross-border identity today [18]. "There are many festive Masked celebrations that remain alive, without any temporal interruption, in both regions; the adaptations to current times are inevitable and do not interfere in their essence nor in their symbolism" [18].

50.3 Case Study and Methodology

In the Iberian Mask and Costume Museum 29 localities are represented through masks and costumes, 11 from the Province of Zamora and 18 from Trás-os-Montes and Alto Douro. Concerning the region under study, Terras de Trás-os-Montes, are represented the municipalities of Bragança, Vinhais, Macedo de Cavaleiros, Mirandela, Miranda do Douro and Mogadouro. Some municipalities have several festivities, different rituals, and consequently different masks and costumes, as can be seen in Fig. 50.1, which proves its richness at the socio-cultural level. One of the most visible rituals is the festivity of Podence", in Macedo de Cavaleiros, where the masked men embody the character of "Caretos". In 2017, the "Festa de Carnaval dos

[1] https://museudamascara.cm-braganca.pt/.

[2] https://www.academiaibericamascara.org/.

Caretos de Podence" was registered in the National Inventory of Intangible Cultural Heritage (INPCI_2017_001), and in 2019 it was integrated with the Representative List of the Cultural Heritage of Humanity (UNESCO), confirming its uniqueness at an international level.

Through all this evidence it is considered important to understand how this intangible cultural heritage, which goes beyond the festivities that take place at different times of the year, has the potential to develop creative-based tourism activities, with the capacity to develop the territory in a sustainable way and emancipate the community.

50.3.1 Main Objective

The case study was used as a research strategy, which has been applied several times in scientific research [19, 20]. The case study is considered useful to answer "how and why" questions. Most of the time, this method selects a small geographical area or a very limited number of individuals as subjects of the study [22]. For this research, the Masked Tradition of the Terras de Trás-os-Montes region was considered. The whole empirical component of the study was built with the aim of studying the potential of the cultural heritage of the Masked for the development of creative tourism in the region. The main objective was to understand the opinion of a group of people with strong connection to the theme.

50.3.2 Qualitative Approach

In the qualitative methodology, defined by the theoretical and in-depth study of a given phenomenon, it is through the perspective of a small number of participants, considered the best informants, that the researcher understands the reality that he/she intends to study [22]. To this end, "It is necessary to be open-minded, curious, empathetic, flexible and available to listen to people's stories" [22]. Among the possible data collection instruments, the interview was selected. Through interviews, it is expected to know and understand the interviewee's point of view, their understanding, and their experience within a certain context. In this case, the literature understands that the researcher as interviewer should not be seen as someone who contaminates or biases the data, but rather as a co-creator of data, in that their prior knowledge can play an important role in understanding the participant's accounts [23]. Within the interview technique, the semi-structured interview was used, which establishes an order of questions with all the themes appropriate to the research, but which admits flexibility in the interviewee's response, allowing them to extend their reflection. For this reason, the individual modality was also considered. Individual interviews are suitable for gathering detailed information about each person's perspective and

Table 50.1 Interviews

Code	Training area	Entity	Date and length
E1	Sociology, specialization in the field of intangible cultural heritage; researcher	Application to UNESCO of the carnival festival of the caretos of podence; collaborative research laboratory mountains—tourism, heritage and well-being area	29/07/2021 30 min
E2	Sociology, specialization in cultural branch; researcher	ADGTCP (Association for the development and management of portuguese cultural tourism)—PROGESTUR FIMI project (international festival of the iberian mask)	29/07/2021 60 min
E3	Social sciences researcher; Writer	Iberian mask academy	11/08/2021 45 min

Source Authors

provide an environment of privacy that helps to answer questions in a genuine way [24].

50.3.3 Participants

The research included the participation of three interviewees, who were identified for their training and knowledge relevant to the topic and willing to reflect on it. Regarding their characteristics, it was not considered relevant to draw their sociodemographic profile, since the inclusion of each interviewee was only based on their connection to the topic, in line with the research assumptions. They were previously given the Informed Consent Form to participate in the study through the interviews, which were conducted between July and August 2021. The interviews were conducted online, using the ZOOM platform (a video conferencing software), always ensuring adequate privacy conditions. They lasted approximately 30–60 min and were all recorded for later analysis and interpretation. Using audio and video recordings allows seeing and hearing the interviewees' accounts as many times as necessary, as well as transcribing their speeches in detail and having a firmer support for the analysis [24]. Table 50.1 presents more detailed information about the application of the interviews.

50.3.4 Data Collection Instrument

To implement this instrument, three interviews were planned. The respective scripts served to respond to four objectives: (i) To understand their perceptions about the

Table 50.2 —Themes and key terms from the interviews

Themes	Key terms
I. Valuing cultural identity	Mask as cultural icon
II. Development of the tourism activity	Sustainable tourism development; Organized tourism product
III. Commitment to creative tourism	Tourism competitiveness; Preservation of culture; Activities and experiences
IV. Dynamics of cross-border cooperation	Iberian socio-cultural heritage; Cross-border dynamics

Source Authors

valorization of the cultural identity of Terras-de-Trás-os-Montes, taking into account the cultural heritage of the region's masks; (ii) To understand their perceptions about the development of tourism activity, in the region of Terras-de-Trás-os-Montes, driven by the heritage of the masks; (iii) Understand their perceptions about the commitment to creative tourism, as a typology capable of providing a sustainable response to the tourism development of the Terras de Trás-os-Montes region; (iv) Understand their perceptions about the dynamics of cross-border cooperation around this culture, common to the Iberian Peninsula. The questions included in the scripts are duly grounded in the literature presented and were all relevant to the defined objectives.

50.3.5 Content Analysis

The literature on content analysis, states that interviews are often analyzed on the basis of theme. Thematic analysis is a general process of induction whereby the researcher reads and codes the content to more easily understand what participants have to say about the topic [24]. Performing a thematic analysis consists of discovering the nuclei of meaning that make up the communication and whose presence, or frequency of appearance, may mean something to the analytic objective" [25]. The theme is generally used as a unit of record to study motivations of opinions [25]. Thus, the interviews in this study were subjected to content analysis, involving the categorization and systematization of the speeches to identify the main ideas of each interviewee, as well as identify and compare response patterns. Table 50.2 presents more detailed information on this point.

50.4 Discussion of Results

For a better understanding of the contents of interviews applied, some transcripts are presented, through which it was possible to draw several conclusions.

In terms of valuing cultural identity, there is a clear consensus among the interviewees, regarding the appreciation, importance, and visibility of this intangible cultural heritage. From the interviews it was possible to understand that the many festivities that compose the Tradition of Masked are a symbol of identity for the overall region, contributing in a positive way to the affirmation of the territory in the national and international context.

"The mask is clearly recognized, both by the entities that represent the territory, the local and regional administrations, as an icon, and it has been transversally used, also by the public and private sector, in a series of moments… Even in the presentation of products and services, we have seen the use of the image of the masks of the several types of masked men that we have throughout the region, appearing for example on liquor bottles, smokehouse products, in all kinds of products and services associated with tourism… The added value that it can bring is the association with other heritages, which then translate into products and services that are related to tourism and with the commercialization of what is the cultural identity of the region…". (E1).

"Evidently, the mask is one of the icons that can have more visibility and that can bring a good promotion and publicity to the territory... they all have unique characteristics and the fact that each festivity is differentiated evidently that this is highly attractive, nowadays...What we see in the territory regarding the mask are mainly individual groups working and the most outstanding ones have people that really dedicate themselves to the cause, with a love out of the ordinary, as in the case of Podence village... The mask is something very rich history, the word mask even in terms of sound is pleasant, it stays in the ear, it has a beautiful shape, something magical, mystical, that people appreciate a lot. So, the mask is obviously one of the greatest cultural treasures of the territory and has to be considered as such. This is a work that could be more structured and from which the territory has absolutely everything to win….". (E2).

"I think it can be considered the icon of cultural identity. Practically all municipalities have this cultural element, although in many ways... Therefore, globally, the district of Bragança is identified with this culture... Of course, there are important added values, namely the visibility that this gives to the region, it gives a very high public visibility and this is already being explored, which resulted in the declaration of UNESCO, of the Carnival Festival of Podence... The communities that have these festivities feel this as their own and do not neglect this cultural element. Apart from those festivities that have already been lost, there are others that are being revitalized, because of the importance they assign to them...". (E3).

Regarding the development of tourism activity, the association of this cultural heritage with tourism shows divergent opinions, within the region and the various municipalities. However, among the interviewees there is a consensus about the tourism potential of this tradition, which requires the definition of strategies and rules that establish a sustainable and beneficial relationship for all, having as priority the interests of the communities and the respective rituals.

"The festivities can contribute to the development of tourism, and this is visible. Nowadays you can also see other types of activities such as artisans' workshops...

These types of activities are the ones that give substance to what we then define as sustainable tourism... Which is to create a cycle of visitation here throughout the year that is much healthier than having ten thousand people at once and then the rest of the year being empty. It is these healthy visitation cycles that can allow some economic dynamic so that people stay here. It is necessary that these tourism attractions are recognized by the population itself. It is necessary that the tourism product and service that is going to be offered is in accordance with the space and the population... ". (E1).

"If we want to attract tourists to the region, we cannot think only at the time when the festivities happen, at the time of the winter solstice and Carnival. To attract people all year round, the masked do not necessarily have to be on the streets all year round... When people come to the region, most of the time they do not find them..., but they can find shops, interpretive centers, museums, activities developed by the groups themselves. There is a whole panoply of actions around the masks that the territory can make available to travelers... in a way that does not interfere with the festive ritual...There would have to be a sustainable strategy, for everyone. It was not possible to do it with all the groups, but it is really possible, in terms of tourism, that some groups be more present in the territory..." (E2).

"Perhaps the agents or, in the first place, the Regional Entity of Tourism of Porto and North, should study this theme and develop it...I agree with the tourism exploitation, but not in any way. If people want to visit and get to know a certain festivity, it is good that they come and visit, however, in no way should they interfere with the development of the rituals... There are already several places with spaces dedicated to the exhibition of the masks, of the costumes, and of everything that is part of the festivity... This is also important because it allows visitors to have access to the tradition at any time and not on the specific day when the rituals take place, and also for the artisans themselves who receive an incentive to continue producing the pieces and earn some income with them...". (E3).

Regarding the focus on creative tourism, this type of tourism is identified, by the interviewees, as appropriate to the Masked Performers Tradition. In their view, there are several activities that can be developed, without interfering with the festive ritual of the community. Activities that allow visitors to get to know the tradition throughout the year, with deep respect for cultural identity and with gains for the community.

"Creative tourism is fundamental to managing this balance between preservation of culture and tourism competitiveness... which is to try to appeal to those people who come to the territory, with some connection to local experiences and already have this search for interaction as a principle, with respect for the community and local traditions... We also must do our part in this education for cultural heritage, to tell people where they are going, we cannot just have a client relationship with visitors and give in to everything that is not in line with our identity. So creative tourism is a good alternative and promotes this type of sustainability...". (E1).

"I think that in Trás-os-Montes, Podence has been an example of attracting tourism and not only that, of creating other added value. We can like it, or not like it, but who decides this is the community... The village almost every weekend is being visited by groups of tourists and the economic component is very important, and, the community has all the right to have these benefits... There are many things that can be done in deep respect with the ritual... It does not necessarily have to be the presence of the group, it can be the artisans making the masks, the costumes, it can be a workshop, it can be the musical component... It does not have to be only in a specific village or city, what should exist is a network in the region, of exhibitions, of activities...". (E2).

"This cultural element, properly divulged nationally and internationally, can boost the tourism competitiveness of the territory. Perhaps it could be better explored, the competent entities will have to do it together with the local communities, together with the associations linked to this tradition... An example of this is the case of Vinhais where the tradition of the ritual is kept only with the community and days later there is an event aimed specifically at attracting tourists... Therefore, there should not be interference between a tourism promotional event and the development of the traditional ritual... The village of Podence is the most emblematic case of tourism exploitation and here I have doubts that the preservation of the festivity as it was, will be maintained, I think they should be careful in this matter... " (E3).

Regarding the dynamics of cross-border cooperation, the interviewees, who are directly involved in cross-border cooperation around the Tradition of Masked, report various experiences of such cooperation. The collaboration between the two regions that share this Iberian socio-cultural heritage is visible. It is desirable to strengthen partnerships and common projects, for a greater projection and to multiply benefits.

"In fact, there has been a lot of interaction and partnerships, there has been a lot of collaboration at the cross-border level when we talk about the Terras de Trás-os-Montes with Castilla y Leon and with Zamora and a little bit with Galicia. In the FIMI (International Festival of the Iberian Mask) we have practically the whole of Portugal and a large part of Spain represented... many events that take place in the Iberian Peninsula start from meetings in the FIMI, they get to know each other there and then establish a relationship... by establishing this cultural relationship, they will end up bringing politicians, businessmen, academics, and all of this enhances the creation of added value for both communities. These cultural relations open doors and then there is a whole world that can take advantage of these closer relations so that there is a bridge between one side and the other. In Portugal and Spain, there are many situations in which we have created connections between groups, researchers, photographers... With the cross-border territories this should be taken advantage of, I know it is being taken advantage of, but it could be much more enhanced...." (E2).

"We are working with the European Grouping of Territorial Cooperation (Zasnet) to elevate the mask festivities to UNESCO Intangible Heritage of Humanity. It will be a cross-border application, which brings together 50 rituals with masks from Trás-os-Montes, Salamanca, and Zamora... This cooperation has also been happening from Mascararte, from the Mask Biennial in Bragança, because in all the Biennials, there has been the participation of some masked people from Zamora and lately also from other parts, from Castilla y Leon, from Galicia. On the other hand, our groups have also participated in the activities that Spain has developed, every year they participate in the parade in the city of Zamora... The Iberian Mask Academy has been working toward cross-border cooperation. I think that if we could make these initiatives even more dynamic and worthwhile it would already be good, namely meetings, congresses, audiovisual production, research production in anthropological and ethnographic terms, photography... ” (E3).

50.5 Conclusions

This study showed that it is possible, based on intangible cultural heritage, to promote tourism activity and build tourism products on a creative basis, in a sustainable way. As well as it enabled to answer the research question "How can a creative-based tourism offer be developed and implemented, taking into account the identity, the interests of the region, and its tourism competitiveness?" Identity should be the starting point for any creative-based tourism proposal, regardless of the geographical scale. The interests of the region and specifically the community should be considered the main objective of any project aimed at tourism development. Tourism competitiveness should be the result of policies and strategies oriented to the preservation, enhancement, and promotion of resources, which enable a sustainable and creative tourism activity.

The case study allowed us to conclude that cultural identity, of great expression, has several strengths over a region. The social and the economic forces stand out. Culture must serve the community, emotionally, educationally, recreationally, and historically. On the other hand, the community should also be served by culture, on an institutional, financial, and labor level. It is in the relationship of these forces that tourism activity takes on importance as an engine of territorial development, more specifically of inland regions, of low density.

The analysis of the interviews allowed us to conclude that the intangible cultural heritage should be recognized and experienced by the community, long before it is given any tourist potential. Only in this way will it make sense to promote, in a tourism perspective, this same heritage. With the certainty that it emerges in an authentic and genuine way from the community dynamics and does not submit itself to touristification processes, modeling its form and content to the tourism market interests. This relationship can become complex and even opinion-dividing within the region.

On the other hand, it is also notorious the potential of the Masked Tradition for tourism activity and especially for creative tourism. Typology that respects the characteristics and identity of the territory, through experiences, learning, and an interesting participation in varied activities, always harmonious with the local community and its rituals. Creative tourism can thus be a solution to two issues. On the one hand, it can be an incentive to the preservation and revitalization of rituals and festivities since they are attractive to contemporary tourism demand. On the other hand, it can be an incentive for the regeneration of communities, particularly artisans, who can earn income from the various activities and tourism products developed, ensuring their permanence and well-being in the territory.

This evidence shows that the responsible entities, at the local and regional level, in close collaboration with the communities, the diverse agents, and stakeholders, must guarantee that this tourism plan is adapted to the characteristics of the Tradition and to the specificities of each festivity. A plan that must be achievable and sustainable in the medium and long term, creating added value for all.

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Chapter 51
Perspectives of Social Sustainability in Urban Tourism. Comparative Study Between Porto and Barcelona

Pedro Liberato, Rita Nogueira, and Dália Liberato

Abstract Sustainability in the tourism sector has, in recent years, been raising not only a concern within the discussion of development strategies but also an area of intervention in terms of balance between residents' quality of life and the perspective of economic benefit and investment attraction for the regions involved. This research applied a qualitative methodology, based on five semi-structured interviews with academics and governmental organizations in both cities of Porto and Barcelona. A comparative analysis was carried out between the cities of Porto and Barcelona, which despite being distant in terms of their positioning and development as destinations, consolidate the research, in arguments presented by stakeholders of both regions, regarding the perspective of tourism development, based on the pillars of sustainability supported in the literature. The interviews provided information through open questions, with the opportunity to reformulate the issues during the interviews, as a crucial aspect to obtain information. The main conclusions show that the tourism growth in the city of Porto had a crucial weight in its development, namely in the remodeling of the public and private buildings, enhancement of the social and cultural heritage by the residents, and stimulation of the local economy and subsequent increase of jobs in the sector. Considering Barcelona, its positioning differs from that of Porto and aspects such as the dissatisfaction of residents with the excessive tourism demand and the lack of implementation of visible strategies to preserve permanent residence in the city, the absence of a demand segmentation

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strategy in the region, the reduced average stay that generates an increase in environmental impacts in the city, is also induced by the strong concentration of tourism attractions in some districts.

51.1 Introduction

Sustainability in the tourism sector has been, in recent years, a growing and permanent discussion and concern. The present project aims to present and analyze the positive and negative impacts inherent to the massification of tourism in the historic center of the city of Porto; to analyze the strategy envisaged for the city in terms of tourism destination management, what was implemented to solve problems and what was done to raise awareness and integrate residents in tourism. It also aims to understand if new strategies were designed and implemented during the "forced stop" period related to the pandemic. Finally, a comparative analysis was made with the city of Barcelona, for the duration of the process of tourism massification, in a previous phase to the city of Porto.

The study presented is timely and relevant, insofar as a tourism destination must develop and implement a policy with strategic dimension appropriate to the characteristics of the existing tourism system in the territory. In the case of urban tourism, the planning must coexist with the interests of the resident community, involving them in tourism practices, informing and educating them about the importance of the existing heritage, and fostering the economy in the sense of increasing investment, job offer, expansion, and diversification of local trade.

From this perspective, tourism growth in the city of Porto would be considered sustainable if the environmental, economic, and sociocultural aspects had been considered in a balanced way, ensuring a sustainable tourism activity in a long-term vision.

According to [1] sociocultural sustainability should accept the social and cultural authenticity of resident communities while maintaining the built heritage, their culture, and traditional values, also contributing to the understanding and tolerance of multicultural values.

51.2 Literature Review

51.2.1 Sustainability in Tourism

World Tourism shows an unprecedented growth: according to [1] the number of international tourist arrivals reached 1.5 billion in 2019. This number tends, according to the same source, to grow until 2030 (1.8 billion).

Nowadays, and being considered one of the world's most economically active sectors, it would be impossible not to have a global concern with sustainable development; along with the increase in numbers also increases the concern with sustainability in the tourism sector, as well as with the limits of growth [2].

For a good understanding and study of sustainable tourism, it is necessary, first, to understand the meaning of sustainable development in tourism.

The first definition dates to the Brundtland Report in 1986: "Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs". The definition identifies basic principles of sustainability: it adopts a holistic approach to planning and strategy; protects the environment and the tangible and intangible heritage; involves the participation of the resident community; ensures that economic activity can be sustained in the medium and long-term future, and provides an improvement in the level of equality and opportunity among different countries [3].

In the same line as above, [1] defines Sustainable Tourism as all "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities". It adds that "sustainable tourism development requires the informed participation of all relevant stakeholders and strong political leadership to ensure broad participation and consensus building".

Achieving sustainable tourism is an ongoing process and requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures where necessary. Sustainable tourism must also maintain a high level of tourist satisfaction and ensure a meaningful experience for tourists, raising their awareness of sustainability issues and promoting sustainable tourism practices among them.

All concepts can then be understood as structuring principles of a development process which include competitiveness and social responsibility of public and private tourism entities, inclusion of the resident and non-resident community of the destination, good employment opportunities, and fair division of revenues from the sector. It is also necessary the preservation and conservation of cultural and environmental heritage [4].

According to the proposed theme for this research, special relevance will be given to the aspects of sociocultural sustainability and economic sustainability.

51.2.2 Economic Sustainability

The development of a tourism destination is seen as an economic opportunity. The economic aspect, in tourism sustainability, aims at ensuring the viability and competitiveness of destinations, to achieve long-term economic viability; maximizing the economic benefits of tourism for the local community; increasing the quantity and quality of tourism-related jobs in the local community, including wages, working environment and employment opportunities without discrimination; ensuring fair and equitable distribution of the social and economic benefits from tourism.

According to [5], for the destination to be sustainable, there should be a fundamental balance between the three pillars of sustainability. To this end, it is necessary that none of them overlaps with the others. However, and in most cases, the economic aspect is the one that more easily and quickly overrides the others.

The economic impacts on the destination are mostly positive and easily quantifiable, such as a better local economy, income levels, employment, and public infrastructure [6]. However, there are economic impacts that can be perceived as negative and with direct interference in the daily life of the resident community: general increase in prices (inflation), increase in real estate prices (purchase and rental), and decrease in the purchasing power of consumers.

51.2.3 Sociocultural Sustainability

In terms of social and cultural sustainability it is intended to ensure the well-being of the community, including access to social infrastructure, resources, and a quality environment; maintenance and development of cultural heritage, local culture, customs, and authenticity of the resident community; provide a safe and enjoyable tourism experience that meets the needs of the demand; integration of all stakeholders in decision-making and strategic planning for the destination.

The arrival of tourists and the increase of tourism activities can have very unpleasant consequences for the daily life of the local population. These negative impacts include, for example, increased traffic in the destination, increased demand for public services, crowding, deterioration of public facilities, erosion of sites, pressure on fragile environments, increased water, and air pollution, among others. On the other hand, they can also be negative, when tourism development does not correspond to local development projects, when the presence of tourists disturbs the social climate or has negative impacts on the cultural integrity of the population [7]. The last-mentioned impacts are usually generated by specific types of tourists who display disrespectful behavior toward the local culture, habits, and environment. These inconveniences of tourism activities can affect the attitudes of residents, and the local population may take aggressive actions to limit or deter tourism. These actions can range from petitions, peaceful events, and demonstrations, with the aim of alerting local authorities to take action. The city of Barcelona has been the target of this type of action.

For [8], it is not possible the existence of a sustainable solution that simultaneously maximizes benefits for residents and the tourism industry. Thus, it is necessary to combine research on environmentally sustainable results and socially acceptable compromises, which are located somewhere between the optimal solution for each group. In this perspective, it is important to affirm the importance of good planning and management for sustainable development, something that could be a pillar of Sustainable Tourism [9].

51.2.4 The Role of the Resident Community in the Sustainable Development of the Destination

Until recently the focus of sustainable development and tourism development concerns centered on the environmental aspect, but over time, the cultural and social part also began to demonstrate the tensions of tourism development. Anthropologists, sociologists, geographers, and economists have long studied the social impacts of tourism. Understanding the implications of tourism development in all aspects is the key point for the destination development to be sustainable [10].

The resident community of a destination plays a role with great influence regarding the success or failure of the destination as a tourism product [11–13]. If residents' interests and preferences are not in line with tourism development policies and programs it is likely that the implementation of strategies in the destination will not be successful, thus not achieving destination sustainability.

For [14] if residents perceive that they benefit from the presence of tourism within their community and that the level of tourism is appropriate, then residents support tourism development. Under such circumstances, the likelihood of sustainable destination development is higher.

The process of tourism development influences how residents and tourists attach distinct meanings to tourism destinations and communities. The call for broader active community participation in tourism planning has many advocates, and such calls are based on a possible restructuring of political power to achieve more sustainable goals [10].

51.2.5 Tourism Sustainability and Planning

To implement the objectives and targets for sustainable tourism, each country or region should define specific targets, and develop appropriate implementation processes. As a result, public management becomes inseparable from the implementation of the objectives proposed by the UNWTO [15].

Destination management and planning is a central issue in ensuring that the implementation of the tourism strategy is indeed sustainable and that it meets the needs of stakeholders and resident communities [16]. For [17], meeting stakeholders' needs is the key to the successful implementation of sustainable tourism strategies, adding that their participation in the development of appropriate indicators also helps to ensure that monitoring and evaluation processes are successfully implemented, and the results, accepted by stakeholders. For [18] sustainable tourism also requires effective management and monitoring, including the creation of appropriate institutions, the establishment of rules for decision-making, and policy evaluation and monitoring practices, to satisfy the economic, social, cultural, and environmental dimensions of sustainable development.

In addition to government and industry involvement, residents and community members also need to be an integral part of tourism planning and decision-making processes, with the aim of motivating the community itself to be part of the sustainable development of the destination [19].

51.2.6 Porto

The historic center of the city of Porto is considered, since 1996, a World Heritage Site by UNESCO. The distinction comes after an application submitted by the destination and assumed by the country itself, which justifies the existence of a legacy of architecture and landscape of interest to humanity. It represents urban life, with centuries of history, whose cultural legacy has been adapting to economic, social, and historical realities. In terms of buildings, the city of Porto underwent a major transformation from the year 2011. In that year most of the buildings in the city presented serious problems and were in urgent need of revitalization. In 2015, a municipal study pointed out the existence of two distinct phenomena: the market was not acquiring the new housing built and the continuous abandonment of old housing. The first aspect can be explained by the fact that the market was not financially able to afford the high prices per square meter, subsequently, the existing building was demolished internally to cater to a residual market. As for the abandonment of the existing building, it can be explained by the following sequence, presented by [20] "low rental values → low investment in maintenance/preservation → loss of habitability conditions → need for high investment/difficulty in property transmission in inheritances → abandonment". Since the completion of the European Capital of Culture in 2001, the City of Porto has undergone transformations at various levels, of great importance from the cultural, social, economic, and environmental point of view.

51.2.7 Barcelona

The city of Barcelona is an urban and cultural destination of first order on an international scale, the result of a long process of evolution of tourism activities in the destination [21], is the fifth European city with more visitors—12 million in 2019 [22], being that the first four are country capitals. The process of development of the city of Barcelona dates to 1992, the year in which the city hosted the Olympic Games; for the reception of this event Barcelona, underwent a huge restructuring, with the creation of infrastructures, renovation of neighborhoods and housing areas, and transformation of degraded and deserted areas that gave way to renovated areas with large-scale accommodation capacity. There are several reasons that can explain the expansion of urban tourism, both from the point of view of demand and supply. Barcelona is a city with a unique historical and monumental heritage; with an outstanding cultural activity; economic capital of business tourism that increasingly stands out as a city of events and congresses; university city; sports capital; center of attraction of specialized services; offering a waterfront completely recovered since 1992, which has a wide range of recreational and leisure services and 4 km of beaches.

In the last five years the debates, studies, and reflections about tourism in the city have multiplied, and the 2015 strategic plan comes to try to combat the excess of tourists, trying to attract a type of tourist that seeks to stay longer (extend the average stay—1.2 nights in 2019) and that seeks a more cultural tourism. This plan comes exactly to control the tourism flow in the city, promoting the quality of life of residents.

With demonstrations of protest, increasingly recurrent by the communities, Barcelona called to the debate the residents, their proposals were heard and some of them implemented, being justified by the literature the impossibility of the success of a tourism destination without the support of the resident community.

51.3 Methodology

This research was initiated with a literature review and application of semi-structured interviews to researchers and governmental organizations in both the city of Porto and Barcelona.

A comparative analysis was carried out between the cities of Porto and Barcelona, which despite being distant in terms of their positioning and development as destinations, consolidate the investigation, due to the arguments presented by the stakeholders of the two destinations, ensuring a more diversified analytical basis and a more in-depth analysis. In qualitative methodology, data collected should be understood and interpreted with the proper emotional detachment, to ensure the transcription with maximum transparency. This type of methodology was considered the most appropriate for this study because it was adapted to the research objective.

The interviews allowed obtaining information through open-ended questions, with the opportunity to reformulate questions during their presentation, as a key aspect to obtain information. Table 51.1 shows some interviewees' data.

The questions in the interview scripts were based on the literature review.

- After the increase of demand in the city of Porto, we can see that the city has improved in several aspects: safety, refurbishment of empty buildings, development of economic activities, among others. Can we consider that the development was sustainable? Did the same happen in Barcelona? We can consider that the development was sustainable? [1, 5, 6].
- The Tourism Strategy 2027 is the strategic reference framework for tourism in Portugal, which seeks, among other things, to 'ensure that tourism has a positive impact on resident populations'. But we have seen some discomfort and displeasure on the part of residents, who have seen their landlords increase rents, end rental contracts from one hour to the next, lose their local and traditional shops, among other aspects. Has the government together with Regional Entity for

Table 51.1 Interviewees

No. interviewee	Entity	Representative	Interview date
E1	Historic Center of Porto	President of the Council	09.10.2020
E2	Historic Center of Porto	Member of the Executive Committee—Department of Tourism	09.10.2020
E3	CETT—University Tourism Barcelona	Professor and Researcher	15.10.2020
E4	FAUP—Faculty of Architecture of the University of Porto	Professor and Researcher	09.11.2020
E5	Municipality of Barcelona	Director of Tourism	30.11.2020

Tourism (Porto and North) managed to implement measures to solve these problems? / In the Strategic Tourism Plan 2015 (PET 2015) it was mentioned that “The health of tourism activity in the city depends on the well-being of its population, which must be both cause and effect of Barcelona’s good tourism development”. However, it was precisely in these years that we witnessed several demonstrations by neighbors in many Barcelona neighborhoods, mainly due to “badly behaved tourists”, excessive illegal low-cost accommodation, the disappearance of traditional trade, among others. The government, together with Turismo de Barcelona, managed to implement measures to solve these problems? [7, 10, 23, 24].

- What future do you expect for the city of Porto as a tourism destination? What future do you expect for Barcelona as a tourism destination? [25, 26].
- Has Porto had an effective and efficient management in its destination management plan? What measures is the city government proposing to avoid the long-term decline of the city as a tourism destination and the decline in the quality of life of the population? [15, 18, 19].
- Which strategies are the most urgent? [17].
- What is the tourists’ opinion about their tourism experience in Porto? And in Barcelona? [27–29].
- What measures are being taken to prevent the decline, in the long-term, as a tourism destination, and the decline in the quality of life of the population? What measures is the city government proposing to avoid the long-term decline of the city as a tourism destination and the decline in the quality of life of the population? [17, 30, 31].
- How has the tourist / resident community relationship evolved?[10].
- Are we taking advantage of this decrease in demand due to the pandemic for the implementation of measures to regulate the excess of tourism demand? [11, 32–34].

51.4 Results

The interviews were conducted in October and November 2020, in-person (E1 and E2) and by videoconference (Zoom Platform) to the remaining interviewees.

In this section we will transcribe the interviews previously carried out, separated by the context of each city. We will first transcribe those related to Porto, then we will present the common aspects to both destinations, and finally, we will transcribe the interviews conducted in the context of Barcelona.

Increased demand in the city of Porto and sustainable development.

Regarding whether the growth of tourism in Porto was sustainable or not the interviewees refer that “The growth would have been sustainable if the entities with public power had measured all the aspects, (E1) Residents lost their homes and saw leases end after decades, I think the private economic power had an increased relevance” (E2). “Development and growth were not sustainable, simply because economic power always speaks louder, and the responsible authorities did not take timely action” (E4).

The Tourism Strategy 2027 is the strategic reference for tourism in Portugal which aims, among other things, to “ensure that tourism generates a positive impact on resident populations”. “The measures did not get out of the paper, nothing was done… When the ban on construction and licensing for new local accommodation was already late (E1 and E2). Has the government together with Turismo do Porto e Norte, or the council, been able to implement measures to solve these problems? “We have been able to help as much as possible, the buildings that still belong to the Porto City Council or the Parish Council are being refurbished and rented. We have competitions for young people who want to live in the center of Porto (E1 and E2). “For the government, the most important thing is to generate revenues” (E4).

Has Porto had effective and efficient management in its destination management plan? “Yes, without a doubt, the city of Porto has improved exponentially in recent years, at all levels (E1, E2, and E4), it is more beautiful (E1 and E2), brighter, attracts more people (E1 and E2), stirs the economy, and creates jobs every day (E1, E2, and E4), and all this is due to the development of the city of Porto as a tourism destination (E1, E2, and E4)”.

What measures are being taken to prevent the long-term decline as a tourism destination, and the decline of the quality of life of the population? “None, they called the residents in 2017 and 2018, they were heard, but nothing that was proposed, was implemented, in fact (E1).“ “There is the expansion and remodeling of the Campanhã area, the new bridge over the Douro River that will increase the metro network and reduce traffic and pollution levels (E4).“

The tourist/resident community relationship “remained more or less constant, and we can distinguish two relationships: the resident relationship that works in the tourism sector and the relationship of the resident who does not have in his profession anything related to tourism (E1) … who depends on tourism likes to have the city full…. those who do not work in the area have become unhappy mainly because they cannot enjoy the city as before the increase in demand (E1 and E2)” “The Portuguese citizen receives like nobody else knows how to receive, we are a very welcoming population (E1, E2, and E4)".

The future of the two destinations involves "increasing mobility and creating the necessary infrastructures for it (E1, E2, E3, E4, and E5), expanding the destination in physical terms… dispersing tourists in the existing space, and creating dynamism in other points of the destination (E3, E4, and E5)". "Increased concern with the pillars of sustainability and devising urgent strategies to meet the necessary goals (E3 and E4)… Call the resident community to intervene and get involved in the management of the destination (E1 and E2)". The most urgent strategies "involve trying to control the mass flows of tourism, managing to sort out the type of tourist that the destination wants to have (E1, E2, E3, and E5)".

When visiting both Porto and Barcelona "tourists feel at home (E1, E2, E3, E4, and E5), the food is wonderful, the city is beautiful and with attractions for all tourism experiences (E1, E3, E5)… The destination has been adapting and recreating itself to provide a wide range of experiences for the tourist to enjoy, (E2, E3, E4 3 E5), and repeat (E1, E4, and E5)".

Regarding the advantage of this post-pandemic time and the consequent decrease in tourism demand to implement urgent measures in destinations, the interviewees consider that nothing is being implemented, but believe that when the sector resumes activity mass tourism will decrease considerably and that this alone will be enough to control the destinations and make them more sustainable.

Regarding the sustainable growth of Barcelona, the interviewees consider that "growth was sustainable until the carrying capacity of the destination was exceeded… other attitudes could have been taken, and we would not have reached this point (E3)… in the first years of the destination, Barcelona had no strategic plan, which hindered and delayed the whole process (E3 and E4)".

In the 2015 Strategic Plan, the main concern was the residents of Barcelona, but it was precisely in this year and the following ones that there were demonstrations by residents. "The plan underwent a major change, mainly with the joining of administrative and governmental bodies that occurred with the beginning of the Plan… It was the beginning of the concern to control the exaggerated flows of tourism … tourism that Barcelona does not want to have (E5)". "The residents and neighborhood associations were heard, the main problems were presented and several solutions were proposed… solutions that are part of the Strategic Plan for Tourism (E3 and E5)".

Regarding the effective and efficient management of the destination, E3 admits that "the planning was late… we have been years and years promoting the destination around the world, for all markets, with air routes to all the world and with all kinds of companies… with cruises dropping thousands of excursionists daily in the port of Barcelona, and without a land management plan".

To avoid the decline of the destination and quality of life of residents "Barcelona is changing, we want to have a tourist who stays longer, who likes the city and who takes advantage of the maximum it must give (E5) … we want a more cultural tourist, with higher economic power (E3 and E5)"; "We will restrict the number of cruises in the Port of Barcelona (E5)".

The future of the destination will involve "increasing mobility within the city, by increasing prices and consequent segmentation of the market, by a more cultural tourism…(E3 and E5); Barcelona even greater in what concerns business tourism…(E3 and E5)". "And the most urgent strategies are" "greater supervision and fines for illegal accommodation (E3 and E5)… inclusion of residents in the management of the destination… reduction in the number of cruises in the Port of Barcelona (E3 and E5)".

51.5 Conclusions

The balance between the three fundamental pillars of tourism sustainability is central to the healthy growth and development of any destination, regardless of the type of tourism developed in the region, the positioning of the destination, or the degree of development the destination has.

To ensure a sustainable growth and development it is necessary to have a management plan outlined by the competent entities, with objectives and goals outlined to ensure the success of the destination. During the development of this research, we concluded that the city of Porto and Barcelona saw their strategy implemented in a delayed way.

According to the literature review, the process of destination management and decision-making goes through the involvement of the resident community, and this plays a role with great influence regarding the success or failure of the destination. It is possible to captivate the attention of the resident community while it is given importance, and that its opinion is valued; it is also necessary that the community is entitled to the distribution of tourism revenues in an equitable way, and that it does not feel overwhelmed by larger companies often even external to the destination. In the cities analyzed in this research, the residents of both cities like to receive visitors, it is natural for them to want to know about those who visit them and share their experiences, habits, traditions, gastronomy, and ways of living with other people.

To integrate the sustainability perspective, semi-structured interviews were designed, applied to five personalities of the sector, among researchers and experts who are members of the main management entities of the tourism destinations Porto (Portugal) and Barcelona (Spain), between October and November 2020.

It is noteworthy that the destinations Porto and Barcelona, despite some negative impacts today, have similarly a significant improvement since the beginning of its development as a destination, since the creation of renewed infrastructure, greater support, and existence of improved services, higher security level, greater wealth in the destination, employability, attractions, events, among others.

The city of Barcelona before the pandemic was in a position of stagnation with several negative impacts on the destination, and although no measures were implemented during the decrease in demand in 2020 due to the pandemic, the destination will emerge renewed, and the measures can be implemented in a natural way. Tourism will change naturally; mass groups and cruise ship excursionists will decrease dramatically, and this will give the destination time to transform and adapt its offer.

The importance of the tourism industry in Porto is unquestionable, and this fact is much more perceptible now, in a post-pandemic period that took the life of the city and destroyed thousands of jobs (direct and indirect) from the sector. Here, similarly to what happened in Barcelona, the pandemic period was not used to implement measures, but it is possible to believe in a recovery of the sector in a more segmented, more technological, and more sustainable way. The destination must communicate in a different way, and make its communication directed to the markets and niches it wants to bring to the city, positioning itself in a medium-high segment to avoid mass tourism and thus be able to offer a unique and exclusive experience, while maintaining harmony and balance between the people who visit and the people who live there [32–35]. Regarding the latter, opinions diverge between the urgency of not losing residents and repopulating Porto's historical center—keeping its authenticity—and letting the city become a tourism product without residents in its center.

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Chapter 52
Northern Portugal Tourism Experiences Management for the Post-Covid Period: Facing Demand Changes in Tourism Products and Services

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Abstract Several authors consider that the current outbreak of COVID-19 presented serious economic consequences worldwide, leading to dramatic changes in companies and consumers behavior, improving changes in communication, entertainment, and online shopping. Also, the World Tourism Organization (UNWTO) has produced global research on the impact of COVID-19 on tourism and the expected recovery time. The aim of this research is to identify the main changes arising from COVID-19, considering the Northern Region in Portugal. As for the identification of the main changes introduced by COVID-19 in the Northern Region, the analysis of the demand typology was carried out, considering the demand modification towards tourism products and services, leading to the creation and design of new proposals of tourism experiences. According to the interviewees, the products and services that started to be more sought after due to the pandemic were nature and rural tourism, as well as tourism destinations with lower population density. In this context, the main motivations for this demand were the security issues and the rediscovery of regional tourism resources.

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52.1 Introduction

The tourism sector is the largest exporting economic activity in Portugal, being possible to verify that, in 2019, it was responsible for 52.3% of exports of services and 19.7% of total exports [1]. In the same year, tourism revenue contributed 8.7% to the national GDP [1]. In fact, in 2019, the number of arrivals to Portugal from non-resident tourists reached 24.6 million (an increase of 7.9% compared to the previous year), with Spain being the main international market, by contributing 26.1% of the total number of arrivals (an increase of 8.2% compared to 2018) [2]. According to Quintero et al. [3], to consider the inflow of tourists in a destination is of vital importance since it allows the implementation of an assessment at the level of visits and the definition of certain behaviors of tourists, which allows to define appropriate marketing strategies. The Institute for Tourism Planning and Development (IPDT), in partnership with the Regional Tourism Authority of Porto and North of Portugal (ERTPNP) and Sá Carneiro Airport, conducted a study on the profile of tourists visiting Porto and/or the North of Portugal, and leaving this destination via Porto Airport [4]. The referred study characterizes the socio-demographic and professional profile of tourists, the motivations, the organization of the trip, the characteristics of the visit, the total consumption, the satisfaction, and the intentions of revisit and recommendation.

Firstly, regarding the socio-demographic profile of the international tourists who visited Porto and North, IPDT [4] found a near equality in terms of gender; a majority of married or cohabiting tourists, followed by the single ones; that most of the surveyed tourists were employed and the rest were distributed among other professional situations, especially the self-employed, students and retired people; and, the main segment of international tourists visiting Porto and North of Portugal was between 19 and 40 years old, followed by the group between 41 and 60 years old. In addition, notes, regarding the segment and main reason for the visit, mostly leisure or holiday trips and to visit family and friends, followed by professional or business motivations; the main source markets of international tourists were France, Switzerland, and Spain, with about 54% of the total market share; the city of Porto stood out largely as the place of accommodation chosen by respondents; as for the type of accommodation, hotels, family or friends house, own house and, with some importance, there are also local accommodation units.

In fact, in 2019, Porto and North presented 5.9 million guests, of which 2.8 million (47.2%) correspond to the national market and, 3.1 million (52.8%) to the international market, remaining the same issuing markets [5]. Additionally, according to IPDT [4], each tourist spent 568 € during the visit; and the most practiced activities in the region were experiencing the gastronomy and shopping, followed by appreciating the landscape, going to the beach, enjoying the nightlife, and car rides. The overall satisfaction index with the visit, on a scale of 1–7 points, was 6.4 points, the intention to recommend is similar to this value (6.4 points), however, the intention to return is lower (5.7 points); regarding the intention to share on the internet contents about the visit, the online interaction is higher for tourists whose motivations were leisure or holidays, on the contrary, in the other segments most tourists do not intend to post contents about their visit to the destination, mainly the business segment; and, the main attractions identified by tourists were the historical area of Porto, the beaches, the Douro River, the food and wines, Port Wine and the riverside.

Effectively, of the eight NUT III belonging to the Northern Region of Portugal, between 2015 and 2019, the Metropolitan Area of Porto concentrates the highest number of guests and overnight stays, followed by Alto Minho, Alto Tâmega, Ave, Cávado, Douro, Tâmega and Sousa, and Terras de Trás-os-Montes [5]. In fact, of the 5.9 million guests and 10.8 million overnight stays observed in this region in 2019, the Metropolitan Area of Porto collected about 3.6 million guests and 7 million overnight stays [5].

According to Chinazzi et al. [6], COVID-19 differs from previous pandemics by having a longer incubation period and fewer detectable symptoms, which facilitates its spread. Thus, Prideaux et al. [7] add that COVID-19 spread through air, land, and sea travel used by the tourism industry, resulting in a large-scale disruption of domestic and international tourism flows and consequently causing an unparalleled crisis for the global tourism industry. In fact, COVID-19 disrupted the global tourism industry in 2020 [8], and it is possible to add, that this pandemic interrupted global mobility on an unprecedented scale, causing the mechanisms of tourism to be severely disrupted [9]. When the world stopped, so did tourism, a sector that not only accounts for more than 10% of global GDP, but for one in ten jobs on the planet and one in four new jobs created globally in the last 5 years [10]. COVID-19 has already been shown to have crippling effects on the economy, including on travel and tourism [11]. Thus, Ma et al. [8] state that this pandemic resulted in negative impacts not only on the economy but also on the physical and mental health of the population since the anguish caused by the virus and the lack of social interaction caused a great emotional pressure on society.

The aim of this research is to identify the main changes arising by COVID-19, considering the Northern Region in Portugal. Regarding the identification of the main changes in the Northern Region, the analysis of the typology of demand was carried out, considering the modification of demand for tourism products and services, leading to the creation and design of new tourism experiences proposals.

52.2 Literature Review

According to Donthu and Gustafsson [12], the current outbreak of COVID-19 had serious economic consequences worldwide, leading to dramatic changes in the way companies act and consumers behave. Due to the observed changes, communication, entertainment, and online shopping have experienced unprecedented growth [12].

In this sense, Jiménez-Barreto et al. [13] states that as the world adjusts to COVID-19, progressively recover tourists' mobility, and reopen hotel and tourism facilities, in this new reality, managers need to (re)understand tourists' beliefs and the main factors that drive consumption in hospitality. In fact, people who face constant restrictions in their daily activities, also change their behaviors regarding tourism and travel [14]. Regarding consumers' monthly travel searches in 2020, greater than any other global region, Europe exhibited contradictory behavior [15]. The increase in consistent searches in the second quarter was followed by a decrease of similar magnitude in the third quarter, becoming evident in the decrease of these searches, with the increase of positive Covid-19 cases [15]. However, the consumer response in terms of reduced travel is not only due to increased infection rates but also government responses, especially in Europe because of strict restrictions on travel [14]. Consumers mostly avoid international travel due to health-related issues and travel restrictions, thus giving rise to growth in domestic travel in the year 2020 [14].

Regarding the market segments, adventure tourism was the one that registered the highest increase in searches in early 2020 and the one that felt a smaller decrease in searches, compared to the same periods in 2019 [15]. On the other hand, cultural tourism started the year in line with what happened in 2019 and, throughout the year, it was always accentuating the level of decrease in searches [15]. Between September and November, when there was insistent talk of progress in the availability of a vaccine, some optimism was unleashed, together with the approach of the Christmas season, even though Europe was already facing the second wave of the pandemic [15].

Hotels, according to Jiménez-Barreto et al. [13], in many countries were forced to close due to restrictions imposed during the pandemic, thus there is an inherent need to communicate how they deal with the new coronavirus to motivate guests to visit them in the future. However, Jiménez-Barreto et al. [13] state that, the lack of knowledge on how to persuasively communicate about the hotel units' cleanliness programs for COVID-19, may challenge the survival of this industry. In addition, over 2020, air travel and accommodation bookings were found to have recovered slightly from the initial shock and stabilized around a slight upward trend [15]. Hotel occupancy was not as affected as air travel bookings, suggesting that air travel was replaced by other means of transportation [15]. It is also important to note that the average price per night in hotels was always much lower than in 2019, with a slight recovery in Europe during the summer months [15]. Thus, concerns about the mutation of the new coronavirus significantly influence the, already weakened, tourism demand in many important markets, including those in Europe, and therefore the beginning of 2021 is certainly a challenge for the European airline industry [14]. Data presented by the National Institute of Statistics (INE), indicate that in July 2020, the tourist accommodation sector in Portugal, recorded 1.0 million guests and 2.6 million overnight stays (−63.8 and −67.8%, respectively, compared to the previous year) [2], with the domestic market contributing with 1.8 million overnight stays and non-resident tourists with 877.1 thousand overnight stays (−29.4 and −84.7%, respectively, compared to 2019) [5].

According to Wen et al. [11], the tourism and hospitality industry is working to recover from COVID-19, and stakeholders' decisions should be based on reliable scientific evidence. However, as [16] points out, the crisis caused by COVID-19 is so broad and has developed so suddenly and unexpectedly that it has become very difficult to make even slightly realistic predictions. Re-opening the tourism economy and rebuilding destinations will require a more coordinated approach, due to the interdependent nature of tourism services [17]. Indeed, Wen et al. [11] recall that COVID-19 is not the first disaster of its kind to hit the tourism industry, since SARS brought similar consequences in 2003 and, the similarities between these viruses suggest that the tourism community will gradually recover. In the same context, Ioannides and Gyimóthy [9] report that the tourism sector has traditionally shown considerable resilience in recovering after crises and disasters, including previous regionally-based epidemics such as SARS. Based on the review of recent crisis recovery processes, the tourism sector is likely to recover from the sudden market shock mainly, due to the various government interventions [9]. On the other hand, Ioannides and Gyimóthy [12] argues that although society has been hit by several pandemics in the past, it is difficult to estimate the long-term economic, behavioral, or social consequences. Indeed, based on previous crises, leisure tourism is expected to recover more quickly than business tourism, especially for trips to visit family and friends [18]. However, according to Prideaux et al. [7], as there is potential for a new outbreak of infections originating from international arrivals, these trips are likely to resume only when the COVID-19 vaccine is widely administered. In this regard, a study conducted by Booking.com [19] proves that more than half of global travelers do not feel comfortable traveling until a vaccine or treatment against the novel coronavirus is adequately secured.

In addition, Hall et al. [20] also note that international travel is more complicated in terms of resetting and, for most countries, will depend on the timing of mass vaccine deployment, as well as, the uncertain anxieties of travelers and the existence of at-risk market segments, such as senior tourists. According to Ioannides and Gyimóthy [9], it may be a long time before leisure travel and especially long-haul flights reach pre-COVID'19 levels. Thus, according to Bookin.com [19], it may be a long time before experiencing the world again as freely as before, however, innovation within the travel industry will accelerate faster than ever before to respond to marked changes in travel expectations and behaviors.

In this context, Hall et al. [20] mention that changes in tourism because of COVID-19 will be uneven in space and time, since while some destinations will reconsider the nature of the tourism industry and focus on its local and more sustainable forms without institutional and governmental interventions, on the other hand, many destinations, and governments, especially those with authoritarian tendencies, will focus on tourism for business only. Hall et al. [20] reiterate that, how the destination and tourism industry respond to COVID-19, is affected in the long-term by competing destinations and businesses, which may have implications for recovery trajectories due to some destinations deliberately positioning themselves in terms of low cost, with little concern for the consequences to increase visitor numbers and employment possibilities as quickly as possible. Furthermore, Wen et al. [11] indicates that the scale of COVID-19 is much larger and that more drastic recovery measures will be required to promote the success of the tourism industry. According to Prideaux et al. [7], COVID-19 has already transformed the global tourism industry from one concerned with managing rapid growth, to one that is being affected by major disruptions and possible bankruptcies of major companies in the airline, hotel, and tourism attractions.

From an industry-oriented perspective, the World Tourism Organization [18] has produced global research on the impact of COVID-19 on tourism and the expected recovery time. Based on that study, international tourism will only recover in the third quarter of 2021 or only in 2022; it considers travel restrictions as the main barrier to tourism recovery, along with factors relating to attenuated virus containment and low consumer confidence; it does not expect the return of pre-pandemic 2019 levels until 2023, and it notes that domestic tourism drives recovery in several destinations, but in most cases only partially. Higgins-Desbiolles [21] believes that this pandemic crisis may offer a rare and invaluable opportunity to rethink and redefine tourism toward a better way forward. For the tourism industry to thrive, it must look beyond the temptation to adopt strategies based on returning to the past and instead seek to understand how it should respond to the future transformation of the global economy [7]. The same authors list four factors that determine the outcome of strategies undertaken to deal with crisis events, such as COVID-19: (1) identify the main objectives of the strategies adopted to deal with the crisis, in this case, destinations that prioritized health showed fewer deaths and fewer infections than those that identified the needs of business and politics; (2) combine leadership, which is characterized as an important element in determining the success or failure of the crisis response, with the need for clear, honest, accurate and regular communications with both the public and organizations; (3) receive expert advice on developing strategies to respond to crisis events; and (4) respond quickly to the threat, avoiding de-laying responses into the future. In this sense, the main priorities of governments, in fighting the pandemic currently existing, are indicated by Guerreiro [17], in relation to the Organization for Economic Cooperation and Development (OECD): restore tourist confidence; support tourism businesses to adapt and survive; support domestic tourism; provide clear information and limit uncertainty (within possible); support the safe return of international tourism; start building the path of a more resilient and sustainable tourism; and evolve in proposing response measures and resolution of gaps. According to Jiménez-Barreto et al. [13], marketing communications on how hospitality and tourism service providers deal with COVID-19 are an important aspect of achieving the new normal. Furthermore, Araujo et al. [22] argue that organizations need to invest in staff capabilities or hire experienced people to have competent, adaptable, and innovative human capital, since having the right employees allows them to reinvent, create and work on trends, market indicators, and consumer behavior, which has been evolving at a rapid pace. It is also important to maintain employees' contracts during this period to create the basis for a smooth post-crisis transition [10].

52.3 Methodology

The data collection in this research was based on a semi-structured interview with seven open-ended questions. Semi-structured interviews can employ a better use of the information collected, allowing more room to follow up on any perspectives considered important by the interviewee, and the interviewer has a greater opportunity to become visible as a participant, rather than hiding behind a predefined interview script [23]. In semi-structured interviews, the interviewer has more relevance in focusing the conversation on questions that he or she considers important regarding the research topic [23].

The target of this research are the entities of the tourism and hospitality sector in the Northern Region of Portugal. To cover the destination and given that this region is divided into eight NUT III (Alto Minho, Cávado, Ave, Porto Metropolitan Area, Alto Tâmega, Tâmega and Sousa, Douro and Terras de Trás-os-Montes), this study opted to conduct interviews in all NUT III. Since March 2020, there has been a major reduction across the board in the tourism sector and all associated services. This was mainly due to the restrictions imposed in the country in the fight against the pandemic, which led to the closure of establishments and the reduction of tourism activities. Although no contradictory opinions were observed from the participants of the study, the answers obtained presented a diversity of tourism services and quite different tourism typologies (Table 52.1).

The interviews were applied to destination *stakeholders* and entrepreneurs of the sector, which constitute the sample of the study, because it is considered that these are the actors with the greatest knowledge regarding the difficulties facing the COVID-19, as well as the practices adopted, and future strategies implemented.

Table 52.1 Theoretical background of the interview guide

Question	Authors
How has the summer changed the typology of demand?	[5, 20, 24, 25]
Which tourism products or services are no longer in demand?	[3, 9, 12, 26, 27]
Which is the reason to justify that they are no longer wanted?	[12, 20, 27, 28]
In what way were new tourism products or services designed?	[9, 29]
What justifies the alternatives created?	[29, 30]
Which tourism products or services began to be in demand?	[3, 17, 31, 32]
What led to these being the new tourism products or services?	[16, 20, 33]

52.4 Results

In this context, the service indicated by a higher number of participants was the hospitality, where *the activity dropped significantly in 2020, in some cases by about 90%* (P.5). In fact, the new tourist profile, afraid of getting infected with COVID-19, opted for accommodation where it was not necessary to *share common spaces* (P.2) with third parties. *All services of direct contact with the customer had to be rethought in terms of logistics, from accompanying the guest to the room and carrying his suitcase* (P.10) to all the associated services, such as *wine tasting or sightseeing* (P.3). In addition, *the ban on commercial aviation implied a reduction of tourism services in destinations, such as accommodation (P.*8).

The classical hotel business, especially, suffered the most. People were afraid of anything that was sharing spaces and therefore they did not want to go to hotels or to accommodations that had common spaces, an aspect that hotels cannot escape (P.1).

Tourist entertainment, group activities, and organized tourism were services that were no longer in demand because they were prevented from operating normally. Since the outbreak of the pandemic, gatherings, and activities with a significant number of people were banned, which was reflected in a reduction at the operational level of these services. In fact, *tourism entertainment companies and tour guides, who used to make visits to the city, no longer had clients to perform this type of activities* (P.5) and verified a *loss in demand* (P.1). In the same context, *excursions for groups were no longer in demand* (P.2), *vans to transport tourists between regions they did not exist* (P.3).

The same happened in the organization of events, an activity *that had a significant demand* (P.13, P.5). Including *major concerts* (P.5), *traditional festivals (P.*8), *summer festivals, markets and craft shows* (P.9), as well as *the diversity of actors that moves around this type of events and that did not work* (P.5).

There is a clear reduction in tourist entertainment services, tour guide services, and organized tours between regions. Companies had to readapt, create new services, and work with smaller groups. Everything that involved organized groups, were reduced to groups of 5–6 people, causing a reduction of what is operation at these levels (P.9).

Summer festivals, traditional festivals and markets, and handicraft exhibitions were banned by the government and either ceased to exist or were held with restrictions.

In addition, two types of tourism that were also mentioned by the participants were urban tourism and health and wellness tourism. Urban tourism, is due to the tendency in people to avoid places with large agglomerations or with higher population density. On the other hand, health, and wellness tourism, because many of these establishments have been prevented from operating, but also by the fear of the pandemic and the tourists' need to avoid physical contact and enclosed spaces. In addition, other types of tourism mentioned, due to the reduction of activity, although less commonly, were nautical, sun and beach, cultural and gastronomic tourism.

Tourism in large cities. In fact, *city breaks* were clearly very affected in cities like Porto and Braga. While Porto had maximum occupancy rates of 15%, the low-density territories, i.e., the inland locations, had occupancy rates in the summer of 90–95% (P.4). For contingencies, what are services related to wellness, such as massages, gyms had to close.

However, in addition to fear for the pandemic and the unknown, during the interviews, participants also identified two of the main reasons why there was a reduction in demand, and certain tourism products and services were no longer in demand.

Firstly, there were the health and safety reasons, as well as the *perception* (P.4) and *the mistrust that exists in relation to them* (P.2) since *people do not want to risk getting infected with COVID-19* (P.1) and *choose more reserved places* (P.5). Secondly, the limitations of movement were mentioned, which, besides preventing international tourism, also prevented *many people from leaving their own municipality and, consequently, stopped going to other territories for weekends or a few days* (P.1).

Because of the health issues. While this insecurity is not over, there will always be this fall in demand, whether for services or for goods associated with tourism (P.12). Evident to the international tourism, the fact that airplanes could no longer circulate, people could no longer circulate from one country to another. Borders were closed, there were limitations to movement (P.5).

The financial issues were also not justified in the absence of demand in the summer of 2020, but possibly, they will be a future problem. In fact, from the consumer's point of view, those who opted for domestic tourism were people who *normally made international trips* (P.1) and were prevented from doing so, on the other hand, from the perspective of *businesses, they had already received payment from tourists and were able to assume the costs* (P.2) since in the summer they were not yet going through an economic crisis (Table 52.2).

No new tourism products or services have emerged. What occurred was the adaptation of what already existed before or the adoption of new business strategies. This

Table 52.2 Summary of evidence of tourism products and services no longer in demand

Subcategories		Evidence from interviews
Tourism products and services	Hotel units	"The classical hotel business, especially, was the one that suffered the most. People were afraid of everything that was sharing spaces and, therefore, they did not want to go to hotels or to accommodation that had common spaces, an aspect that hotels cannot escape" (P.1). "The services of a certain type of accommodation, such as dormitories, are being reduced. In addition to the reduction of what is hospitality and of the spaces with greater capacity" (P.9)

(continued)

Table 52.2 (continued)

Subcategories		Evidence from interviews
	Tourism recreation and organized tourism	"Guided tours for groups are no longer in demand, as the activities themselves are no longer available" (P.2). "There is a clear reduction in the services of tourist animation, tour guide and organized tours between regions. Companies had to readapt, create new services and work with smaller groups. Everything that was organized groups, were reduced to groups of 5–6 people, causing a reduction of what is operation at these levels" (P.9)
	Events	"The segment of major events had a significant demand, and now has no demand" (P.13). "The summer festivals, traditional festivals and markets, and handicraft shows were targeted by the government prohibitions and ceased to exist, or else, were held with restrictions" (P.9)
	Urban tourism	"The big cities were the most affected because people fled those destinations" (P.5). "In fact, *city breaks* were clearly very affected in cities like Porto and Braga. While Porto had maximum occupancy rates of 15%, low-density territories, i.e., inland locations, had occupancy rates in summer of 90% and 95%" (P.4)
	Health and wellness tourism	"There was a sharp fall in products associated with health and spas" (P.6). "Services related to well-being, such as massages, the gyms had to close, and even if the customer wanted to use them, the regulations did not allow it" (P.10)

(continued)

Table 52.2 (continued)

Subcategories		Evidence from interviews
Reasons for no longer being wanted	Sanitary and safety reasons	"The main reasons were undoubtedly the health issues and the search for the safety that the pandemic caused" (P.6). "There are people who, in fact, are very worried about these pandemic issues and who are very retracted, whether to go out for lunch or dinner or to travel. If this insecurity does not pass, there will always be this drop in demand, whether for services or for goods associated with tourism" (P.12)
	Circulation limitations	"The circulation limitations made many people unable to leave their municipalities and, consequently, stopped going to spend weekends or a few days in other territories" (P.1). "Evident to the international tourist, the fact that airplanes stopped being able to circulate in the airspace, people stopped being able to circulate from one country to another" (P.5)

need for adaptation and reinvention was a factor that all participants in the study highlighted throughout the interviews, even if in different questions. The main justification for this need was due to the adaptation to the change in demand, i.e., to the new tourist profile that was mentioned above. But also, in bringing added value to the experience of the visit, to meet new markets.

The offer must adapt to the demand. With the pandemic, there was a need to work on other products that could better fit the new tourist profile. Thus, what we had programmed was no longer a priority in terms of tourism products, and so it was necessary to structure, organize and make available the offers for those who were looking for them (P.4). The strategy was to add value to the experience, making it educational, aiming to give tourists a real perception of what they visited (P.8). Give everything that can be an additional value to the experience: the authenticity of the producers; explain exactly all the *storytelling* […]; where we buy our vegetables; show our vegetable garden; show where we are producing our food. We make here a whole experience more genuine (P.10).

Regarding the adaptation of services, it is possible to highlight, firstly, the catering units and the implementation of *takeaway,* which was a measure adopted for these establishments to be able to continue to operate, especially in periods of confinement.

The tourist activities have adapted to carry out activities and guided tours with smaller groups, as well as in outdoor spaces and in contact with nature. While the changes in service typology, i.e., the implementation of *takeaway* and the reduction of the number of people per group, were adopted by organizations due to the restrictions imposed in the fight against the pandemic. On the other hand, the enhancement of nature tourism and outdoor spaces, meet the change in demand and motivations of the tourist. Restaurants adapted to the type of offer and quickly began to use takeaway, even small establishments managed to reinvent a service that they never imagined doing before (P.1). Offer of services, such as walks, walks in the mountains, routes, guided tours. The entertainment companies, in addition to what was their traditional product, also had a concern, to have a very appealing offer in this area. Guided tours, hiking on certain nature trails, but with a pedagogical and informative component, combined with outdoor meals (P.13).

Furthermore, there was also a great investment in the digital environment, and in the adaptation of services *that could take place at a distance* (P.2). For example, the organization of *wine tastings online* (P.3), the realization of *virtual tours (*P.6) *to any part of the world* (P.2), or even, the simple *possibility of purchasing products or tourist services online* (P.6). In this way, *the digital medium has been greatly enhanced* (P.5) and will continue to be a growing trend.

In terms of new products, the digital media, and in everything that was possible to happen at a distance. Nowadays, through the new technologies, being in Portugal, it is possible to visit museums all over the world, and almost for free (P.2). The only service possible to perform at the closure, due to the COVID-19 situation we were in, was the online wine tastings (P.3). The very significant increase of digital, both in sharing content and in the organization of virtual visits (P.6) (Table 52.3).

Similarly, to what was previously mentioned, with the pandemic, there was no *tourism product or service that had started to be demanded and previously was not* (P.1). What was observed was *an increase in the demand for products and services that already existed* (P.4). This increase in demand was justified, mainly, by the security issues of the pandemic context, i.e., to be able to *ensure social detachment* (P.11), *without interference of third parties (P.*1), *avoid large crowds, and have control by the hygiene of the spaces* (P.10). The pandemic made people look for places where they could feel safer, could ensure social distancing (P.11).

In this sense, it was observed the preference for nature tourism and rural tourism (mentioned by seven participants), as well as the *experiences in these territories* (P.4). Effectively, *these territories had accommodation units with the occupancy rate almost at 100%* (P.6). The choice for accommodation typologies in rural areas was verified, with the *possibility of experiences such as horseback riding, walking trails, and promotion of the swimming pool* (P.9), *spaces where they could socialize as a family, without the interference of third parties, outside their family nucleus* (P.1).

Table 52.3 Synthesis of evidence to the creation of new tourism products and services

Subcategories		Evidence from interviews
Tourism products and services	General	"Not many new services emerged, they were adaptations of what already existed" (P.1). "Above all, there was a re-adaptation of what already existed, trying to understand what made more sense, and what would be feasible or unfeasible to implement" (P.2)
	Restoration units	"Restaurants adapted to the typology of supply and quickly began to resort to *take away*, even small establishments managed to reinvent a service that they never before imagined doing" (P.1)
	Tourist activities	"Offering services, like the tours, walks in the mountains, routes, guided tours. And the entertainment companies, in addition to what was their traditional product, also had a concern: to have a very appealing offer in this area. Guided tours, walks on certain nature trails, but with an educational and informative component, combined with meals in the open air" (P.13)
	Digital media	"At the level of new products, there was a big bet on the digital medium, and on everything that was possible to happen at a distance. At this moment, through the new technologies, being in Portugal, it is possible to visit museums all over the world, and almost for free" (P.2). "The only service possible to perform at the closure, due to the COVID-19 situation we were in, was the online wine tastings" (P.3)

(continued)

Table 52.3 (continued)

Subcategories		Evidence from interviews
Justification to tourism products and services	Adaptation to changing demand	"What justifies it is the change in the point of view of demand and the fears associated with the pandemic. Demand was constrained, rules were imposed, and, with this, there was a need to create new options" (P.2). "Supply has to adapt to demand. With the pandemic, there was a need to work on other products that fit better with the new tourist profile. Thus, what we had programmed was no longer a priority in terms of tourism products, and so it was necessary to structure, organize and make available the offers for those who were looking for them" (P.4)
	Value-added experience	"The strategy was to add value to the experience, making it educational, aiming to give the tourist a real perception of what he visited" (P.8). "To give everything that could be an additional value to their experience: the authenticity of the producers; explain exactly all the *storytelling* […]; where we buy our vegetables; show our vegetable garden; show where we are producing our food. Making a whole experience here more genuine" (P.10)

Another aspect to consider is the preference for destinations with lower population density, which focuses on *inland destinations and more remote places, such as villages* (P.8) *and river beaches, i.e., much more secluded places* (P.10). Interestingly, in this theme, respondents mentioned *destinations such as the Peneda-Gerês National Park, which had a huge turnout* (P.10), even though it does not belong to that territory. In addition, respondents from destinations of lower population density ended up benefiting from this feature in this pandemic period. People are increasingly looking for rural tourism, the enjoyment of rural or nature tourism environments, outdoor locations, and activities targeted for smaller groups or families (P.2). People started to opt for nature tourism and tourism in rural areas, and in 2021, this growth will be even more accentuated (P.6).

Tourists turned to completely different things, namely smaller, isolated places that allow for an almost private holiday. Tourists sought destinations that were guaranteed not to have large crowds, i.e., much more secluded places, more inland, villages, and river beaches (P.10).

Finally, another justification why these tourism products and services started to be in demand, was the rediscovery by the countryside. In general, *people started to give more value to the little things, and this issue of nature and the demand for the interior itself led to new products and new services adapted and created in this sense* (P.6). In this way, *the permanence in the territory allows to deepen the knowledge, to deepen the activities to be done, which is beneficial for the territories and for tourism, both from the supply and demand point of view* (P.12) (Table 52.4).

Regarding the definition of the most affected areas of the sector, despite the impact has been in different dimensions, among all the interviewees eight distinct areas were considered: hotels, restaurants, tourist entertainment, tour guide activity, events, cultural spaces, transport, and travel agencies. Firstly, the areas of hospitality, restaurants, and events, are in accordance with what was stated by Gössling et al. [28]. The impact on events is also justified by Rowen [29]. Continuously, it is verified that the cultural spaces are in accordance with [12, 33]. Other areas highlighted in the interviews, were the tourism entertainment, the tour guide activity, and travel agencies. Finally, tourism transportation was hardly mentioned by the participants, but several authors, such as [7, 20, 30] mentioned air and cruise transportation as being among the most affected.

52.5 Conclusions

Regarding the identification of the main changes brought about by COVID-19 in the Northern Region, the analysis of the typology of demand was carried out, analyzing the modification of demand and new proposals for tourism products and services.

In the typology of demand, the main changes identified were the increase of the domestic market, the decrease of the external market, and the modification of the profile and behavior of the tourist. In this sense, through the data provided by TravelBI and INE, it is possible to verify that in fact, there was an increase in the domestic

Table 52.4 Synthesis of evidence to tourism products and services that started to be sought

Subcategories		Evidence from interviews
Tourism products and services	Nature tourism and rural tourism	"The most popular tourism products and services were nature tourism and rural tourism, as well as the experiences in these territories" (P.4). "People increasingly sought rural tourism, the enjoyment of rural environments or nature tourism, outdoor locations, and activities aimed at smaller groups or families" (P.2)
	Destinations with lowest population density	"The main demand was for more remote places, […] for the possibility of outdoor activities and open spaces" (P.8). "Tourists turned to completely different things, namely, smaller places, isolated, that allow an almost private holiday. […] they looked for destinations that were guaranteed not to have large crowds, i.e., much more secluded places, more inland, villages, and river beaches" (P.10)
Reasons to start being sought	Security issues	"The pandemic made people look for places where they could feel safer and could ensure social distancing" (P.11)
	Rediscovery by portugal	"The search for nature and for self-discovery by the inland. And this issue of nature and the very search for the hinterland, made that there were new products and new services adapted and created in this sense" (P.6). "People, by staying longer at the destination, start to wish to do other activities, have other experiences, visit other places and get to know other realities" (P.12)

market and a sharp decrease in the foreign market, in 2020 in this region. Considering the change of the profile and behavior of the consumer, the conclusions drawn by the interviews in relation to the market segmentation, mostly family, were supported by WTTC, McKinsey and Company [15]. The tourism products and services that were no longer in demand were hotels, tourism entertainment, organized tourism, events, urban tourism, and health and wellness tourism. Regarding hotels, through the statistical data provided by INE, it is possible to verify the sharp decrease of overnight stays in hotel units in 2020. Furthermore, there is no specific data on the absence of demand for events in the Northern Region, however, it was one of the areas considered to be most affected by Gössling et al. [28], Rowen [29] at a global level. Continuously, the sharp decrease in urban tourism in this region is in line with the study prepared by WTTC, McKinsey and Company [15]. Within the same theme, the main reasons for this change were the health and safety reasons, and the limitations of circulation, motivations that are also mentioned by [24, 34–36] and present in the data presented by INE and ETC. In addition, the study participants did not identify any new tourism product or service but referred to adaptations to already existing business models, namely in the restaurants with takeaway, in outdoor tourism activities, and in the use of digital means for the provision of services. In this sense, the prevalence of takeaway is in line with [22, 28] highlighting the digital transformation of the tourism sector [37–39]. Thus, the main reasons were the adaptation to the change in demand and the need to bring added value to the experience. Finally, according to the interviewees, the products and services that started to be more sought after due to the pandemic were nature and rural tourism, as well as destinations with lower population density. In this context, the main motivations for this demand were the security issues and the rediscovery of the country.

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Chapter 53
Fashion Weeks as a Driver of Sustainable Development in Tourism Destinations: The Case of *Portugal Fashion*

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Abstract Over the last years, fashion events tourism has been increasing, namely through promotional events, in which designers and fashion companies present their new collections, attracting visitors that meet their needs of shopping experiences and attending fashion events. The objective of this research work is to identify the effects of the realization of a fashion week in the sustainable development of a city, as a tourism destination. On the empirical side, using a qualitative methodology, the research presents a case study that relates the *Portugal Fashion* event with the sustainable development of the city of Porto as a tourism destination. The main conclusions show that the *Portugal Fashion* adds value to Porto and contributes to the sustainable development of both the economic and socio-cultural perspectives. However, it is crucial that the several stakeholders of the city cooperate so that the benefits from this event are maximized.

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53.1 Introduction

A sector of tourism events that have seen a positive development over the last years is fashion event tourism, which, in turn, consists of promotional events (fashion shows, fashion weeks, window dressing, fairs, and exhibitions) [1] in which designers and fashion companies present their new collections [2]. Fashion tourism is characterized by the fact that visitors choose to visit destinations that meet their needs of shopping and attending fashion events [3].

Over time, local governments and institutions have begun to realize the role of fashion as an identity creator and strategic advantage. In fact, shopping tourism is one of the main tools used by DMOs to enhance a destination's offer and increase demand flows [4], since tourists increasingly buy fashion and handicraft products during their trips [5, 6]. Also, fashion events attract many visitors, promoting the aesthetic and creative characteristics of the city in which they take place [4], being fashion weeks one of the main tools for the attribution of the title of fashion city to a tourism destination [7, 8].

There are several reasons that lead to the growing number of participants in fashion events, and many are motivated to participate due to professional issues. In fact, in fashion events, in addition to the public with interest in the sector, it stands out the presence of representatives of the clothing industry, footwear and accessories, fashion designers, mannequins, retailers, fashion producers, students, and fashion teachers, members of the specialized media and other professionals whose activities are associated with the fashion sector—as well as hairdressers, makeup artists, photographers, among others [9].

Fashion events are mostly held in cities internationally recognized as fashion cities, which are characterized by a wide range of business, entertainment, and cultural activities, as well as by the fact that they are associated with strong and unique identities [10], which distinguish them from competitors. Thus, fashion events tourists are attracted by the image of fashion cities, very characterized by their high status, elegance, and dynamism. The fashion events emerge as differentiating elements, capable of adding value to a tourism destination, in an increasingly competitive market [11–13]. Indeed, fashion events, in general, and fashion weeks are crucial in the process of promoting a tourism destination worldwide and attracting a high number of visitors [11], offering the host city the opportunity to achieve several direct and indirect economic and social benefits [4, 14].

With the motivation to identify the impacts of fashion weeks in the sustainable development of the city of Porto, this paper aims to demonstrate, based on data collected through interviews, the importance of fashion events, in general, and the Portugal Fashion week viewing the promotion and sustainable enhancement of the city of Porto as a tourism destination.

53.2 Literature Review

Fashion events have as main objective to celebrate fashion and design and are held in the most emblematic cities, in a global circuit which is repeated annually [15, 16]. They allow the contact between different actors of the sector [17], distinct cultures, attract economic investment and promote the image of the destinations where they are held [2, 18, 19]. They can be promotional, such as fashion shows, fairs and exhibitions, fashion weeks and showcases—where new trends and collections are presented for the first time [2]—or informative, such as lectures and conferences—where several topics relevant to the sector are addressed.

Fashion weeks incorporate in their agenda several events of diversified nature, thus going far beyond the parades, showcases, and exhibitions. After the promotional events, participants have not only the opportunity to visit the most emblematic places of the destination and its shops, museums, park, cafes, and restaurants, among other relevant spaces of the city [20], as well as participate in parties, cocktails, and dinners [4]. The combination of several events in a week allows attracting different audiences, reducing costs, and adding value to the participants' experience [21]. As the name suggests, they last for approximately one week in each city. One of their main objectives is to promote designers and brands and, respectively, their latest collections [14]. All fashion weeks are held twice a year, with editions referring to the autumn/winter seasons, which are presented in February or March, and spring/summer, presented in September or October, according to the timing and order of the diverse fashion weeks.

During a fashion week, the whole host city eradicates an atmosphere of creativity and authenticity related to fashion. Such phenomenon is due to the presence of the participants of the various events who, by wearing bold and original outfits, transform the city streets into an open-air parade, both day and night [4]. In fact, host cities of fashion weeks enjoy several benefits, since the realization of these events promotes and associates to the city the idea of an elegant, dynamic, and cosmopolitan lifestyle, and it can ensure its high status compared to competing destinations [14].

Thus, fashion events not only can create value for their organizers and participants but also for other stakeholders that may not be directly related to the fashion industry, such as the tourism sector [19]. Fashion events also allow to increase the economic value and, in this way, contribute to the positive development of several local and national companies and businesses, belonging to the fashion industry or to other commercial sectors. It becomes, therefore, determinant of the constant adaptation of the concept of fashion events, to recognize the market needs and take advantage of emerging opportunities [20].

Regarding the clothing and footwear sectors, fashion is defined as the institutionally accepted way for individuals of a given society to dress, in each period [21]. Conversely to the concept of clothing, which corresponds to the need to be used, fashion is institutionally constructed and culturally disseminated [19] and refers to the items that adorn the body [22]. Thus, fashion can vary from society to society [23], according to the respective socio-cultural context.

One of the particularities of fashion is that it is constantly changing [24], a process that is due to a primary reason: the fact that fashion reflects the change in the lives of individuals, because they need to change and because they quickly get bored of what they have. Effectively, fashion is a means by which people express their desire to renew their way of being, as well as the attitude they have toward life and to affirm their change by embracing a new beginning [23]. The constant fashion development is due to several factors, including globalization, technological advances, the need for cost reduction, and the fact that customers are increasingly informed, thus becoming more demanding [24]. Also, the media have an important role in accelerating the fashion seasonal cycles [25]. Such factors have led to several changes in the fashion industry, highlighting the emergence of the fast-fashion concept [26].

The fast-fashion is characterized by the fast production and distribution of fashion products, which are accessible to all markets due to their low prices [27, 28]. The characteristic products of fast-fashion consist of clothing and footwear pieces that follow the current trends and, also, go out of fashion in a short time [28], thus consisting of a type of unsustainable fashion. The fast-fashion resulted from changes in modern western societies, which did not take into consideration the sustainability regarding the choice of materials and production methods of fashion goods [29].

In contrast, slow-fashion is based on fairness, authenticity, regionalism, exclusivity, functionality [30], and sustainability. Slow-fashion garments are made using local/national products by employees benefiting from fair working conditions [31], are high-quality products with simple and timeless designs, and their high costs are associated with their value, which in turn reflects the identity of each garment [26]. However, nowadays, the design component comprises a higher percentage than the work process in terms of its contribution to the added value [29, 32].

The traditional shopping streets of big cities, once full of luxury brand stores, are now replaced by several fast-fashion establishments, including stores, outlets, and shopping malls [33]. This change leads to the loss of the prestige environment that emerges associated with slow-fashion stores in cities. The increasing concentration of luxury stores and national brands in big cities allows the positive development of the local economy, encouraging creativity and entrepreneurship by young designers and local artisans [26]. The destinations where fashion events take place are known as fashion cities, and enjoy privileges compared to the competitors, since their images are associated with high symbolic values, which, in turn, allow attracting a high number of resources, visitors, and capital [34]. In fashion cities, heritage and traditions are combined with creativity and innovation, including elements from the past, the present [35], and the future.

Fashion cities are the places where new trends are developed and presented to society and, therefore, the most emblematic companies of the fashion industry consider that these cities are the ideal places for the realization of fashion events, as well as for the implementation of their physical stores since they are considered as authentic business centers, recognized by their unique identity [2].

There is a global network made up of several fashion cities standing out Paris, London, Milan, and New York, among many others, less influential [36], being increasing the number of emerging cities. These cities are known on an international scale and strongly related to the fashion industry, occupying the several places in the urban hierarchy of fashion, in which Paris occupies the first place. The cities that occupy the top places in this hierarchy are entitled “fashion capitals” since they are the cradle and place of development of many trends, as well as representatives of a strong fashion industrial system [13].

World-famous cities promote fashion events as an advantage to increase their image and reputation [13]. Thus, it is possible to state that there is a strong connection between the fashion industry and cities, relationship that is often based on the fact that fashion needs to be associated with places with personality and several values [37], and where it is possible to experience an ideal environment for the consumption of products and high-quality fashion experiences. There is, therefore, a bidirectional relationship between the image of a destination and fashion [35].

Effectively, fashion cities are often interconnected with the companies of the sector, which use the name of the city or associations to it in their brands’ construction and promotion [13], to better make themselves known and strengthen their presence in the market [20].

Fashion cities benefit from the advantage of presenting higher prices to the public, in the context of tourism, to reach only the desired market segments [13, 38, 39]. Thus, the fashion industry emerges as a competitive advantage of a destination against others, since, combined with proactive development strategies, it allows to introduce of creativity and design in a wide range of economic activities [40]. Fashion cities, in general, and fashion capitals are, by themselves, able to attract a vast number of visitors and investments, due not only to their reputation and position in the world hierarchy but also by their creative factor, providing a greater ability to ensure and root the talent of several designers and other professionals in the fashion industry [13]. The historical, artistic, and architectural heritage of a city offers designers a base of values and symbology that inspire them in the design of their collections [20].

Additionally, fashionable cities must have constant concerns at the economic, environmental, and social levels, highlighting the attention to the positive development of infrastructure and transport, as well as the improvement of the resident’s quality of life, since the urban development of a city is an integration process of several areas, including culture and economy [40].

In this perspective, it is highlighted the relevance of local policies in the fashion sector, both in terms of marketing, cultural planning, and urban design, since they are as relevant as the traditional policies of the industrial sector in the process of local fashion groups’ influence. Effectively, attracting talent and defending the reputation and competitiveness of local fashion stores is no longer only a task of fashion companies, but also of local political entities [13]. One of the concerns of DMOs should be to seek to extend the life cycle of a destination, promoting it through destination branding as a “fashion destination”, reaching several market segments [39, 41, 42].

53.2.1 Case Study

Portugal Fashion, a project created in 1995, the result of a partnership between ANJE (National Association of Young Entrepreneurs) and ATP (Textile Association of Portugal) is currently one of the largest and main fashion events on the Iberian Peninsula.

The main objectives of this fashion week are to promote Portuguese fashion and its brands where design is a competitive factor—giving them prominence both on the national and international catwalks,—as well as fostering the development of partnerships between production and fashion creation. Another *Portugal Fashion*'s main objective is to invest in young designers, both in Portugal and abroad. In fact, the project seeks to encourage emerging talent, renew the national fashion scene, to facilitate the integration of new designers in the labor market, and to fill any gaps that companies in the textile, clothing, and footwear sectors may have in terms of design.

Another pillar of *Portugal Fashion* is the internationalization of Portuguese fashion. In 1999, *Portugal Fashion* made its debut on the international catwalks with the participation of Portuguese designers at the *São Paulo Fashion Week*. The project then went on to promote Portuguese fashion in several fashion cities, including New York, Madrid, Barcelona, Istanbul, London, Vienna, Milan, and Paris—where it has produced shows since 2000.

For several editions, *Portugal Fashion* has been hosted in the city of Porto, which, in turn, is the second-largest city in Portugal and the most representative of the Northern region. Over the past few years, Porto has seen a very positive development regarding the tourism sector, has become internationally recognized.

In fact, the city of Porto has been working in a remarkable way regarding its positioning on the map of the main European tourism destinations. It has achieved the distinction of *Best European Destination* for three years, respectively in 2012, 2014, and 2017—a distinction awarded annually by *European Consumers Choice,* ensuring notoriety to the city of Porto as a tourism destination [43, 44] (Table 53.1).

The city of Porto hosts several fashion events, including *Portugal Fashion* which, in turn, is one of the main fashion events in Portugal, as well as in the Iberian Peninsula. Porto offers to fashion events several favorable conditions, among which stand out the climate, infrastructure, and equipment, the diversity of leisure activities complementary to these events, and a good communications network [41–44].

Table 53.1 Guests (No.) and Overnight stays (No.) in tourist accommodation establishments in the city of Porto

	2014	2015	2016	2017	2018	2019	2020[a]
Guests	1,144,376	1,287,725	1,426,863	1,536,798	1,958,645	2,223,458	278,150
Overnight Stays	2,246,244	2,515,659	2,833,406	3,040,424	4,001,160	4,535,329	410,071

Source Tourism Association of Porto and North (2020[a], July)

53.3 Methodology

Based on the general objective, which is to identify the effects of the Fashion Week *Portugal Fashion* in the sustainable development of the city of Porto, as a tourism destination, the specific objectives of this research are to understand the effects of the Fashion Week *Portugal Fashion in the* sustainable economic development of the city of Porto, as a tourism destination, and to understand the effects of the Fashion Week *Portugal Fashion* in the sustainable socio-cultural development of the city of Porto, as a tourism destination.

To meet the main objectives of this study, the qualitative methodology was chosen, and the semi-structured interview was used as a data collection instrument. Interviews prove to be an advantageous data collection technique due to their efficiency and the fact that they allow for the collection of diversified data. Semi-structured interviews are characterized by the existence of a previously prepared script but offer the interviewer the freedom to include, during the interview, several questions on aspects that may be considered relevant to the research. Four interviews were conducted individually, with three representatives of fashion associations and the director of a fashion school (Table 53.2).

All interviews were audio-recorded and transcribed *verbatim.* The interview script includes several open-ended questions:

- *Portugal Fashion* week adds value to the city of Porto?
- The title "city of fashion" gives Porto a competitive advantage over competing for national and international destinations?
- Holding *Portugal Fashion* attracts economic benefits to the city of Porto?
- Holding *Portugal Fashion* attracts socio-cultural capital to the city of Porto?
- The *Portugal Fashion* week contributes to the preservation of designer stores and Portuguese fashion brands in the city of Porto?
- The *Portugal Fashion* week contributes to the increase in the opening of Portuguese designers' shops and fashion brands in the city of Porto?
- In the opposite direction, the opening of new shops of Portuguese designers and fashion brands in the city of Porto encourages an increase in the dimension of the *Portugal Fashion* week?

Table 53.2 Interviews

Interview No.	Interview date	Interview duration
1	27/10/2020	13:19
2	03/11/2020	35:41
3	05/11/2020	Written Reply
4	05/11/2020	59:49

Source Authors

- Which factors, within the organization (preparation phase) of *Portugal Fashion,* can be decisive for the sustainable growth of the city of Porto, both as a fashion city and as a tourism destination?
- Which factors, in the context of the realization (implementation phase) of *Portugal Fashion,* can be crucial for the sustainable growth of the city of Porto, both as a fashion city and as a tourism destination?
- How has the organization of *Portugal Fashion* week evolved, from the perspective of the sustainability of the event itself? Are there spaces, equipment, and infrastructures that are maintained? Are relationships and partnerships maintained?

Data collected from the interviews were analyzed using the content-coding method of analysis—understanding of phenomena should arise from the data rather than preconceived notions formulated by the researcher.

53.4 Results

With the motivation to identify the impacts of fashion weeks on the sustainable development of the city of Porto, semi-structured interviews were conducted. The analysis of the interviews met the codifiers and respective subcategories presented in Table 53.3: *Portugal Fashion* and *City of Porto*. In this section, a more detailed description is presented, being used transcriptions of the participants to illustrate and facilitate understanding.

Regarding *Portugal Fashion*, this fashion week allows the valorization not only of the city of Porto, but also of the entire northern region, since a *"platform for artistic, cultural and economic expression has the ability to bring together national and international press, Portuguese and foreign buyers, stylists, professionals linked to fashion, and many people who gravitate around the sector and, thus, there is a value associated with the city of Porto by Portugal Fashion*" (3).

The *Portugal Fashion* week allows the attraction of economic and socio-cultural capital to the city of Porto, since this project brings together *"social and economic*

Table 53.3 Categories and subcategories of the coders

Categories	Subcategories
Portugal fashion	Valorization of the city of Porto Attraction of economic capital Attraction of socio-cultural capital Event organization Event realization Sustainable development of the event
City of Porto	Fashion city Opening and preservation of fashion stores

Source Authors

entities that help create an interesting dynamic for the city. Hundreds or thousands (in editions without pandemic restrictions) of people go through Portugal Fashion, with direct economic return in the fashion segment, but also, desirably, and increasingly, are associated with the event, several experiences in restaurants, hotels, shops, among others. In addition to creating synergies that provide more economic conversion at this level, Portugal Fashion is committed to designing a strategy that enables the creation of real opportunities to attract more international brands, which may begin to see Portugal, and the North, as a starting point for production" (3).

Effectively, regarding the economic sustainability coming from Portugal Fashion, some interviewees believe that the impact is not direct, but they believe that "*making Portuguese design and Portuguese fashion production known, allows the attraction of foreign investment*" (1).

Regarding socio-cultural sustainability, "*fashion today is very comprehensive—it is not a closed community, it is an open community*" (1) and the "*creation of facilities by Portugal Fashion results in attracting new talents to the city, which in turn, bring with them new values, thoughts, habits, and ways of being*" (2).

Regarding the organization and the realization of the fashion week *Portugal Fashion*, the interviewees recognize that *"Portugal Fashion is an event that spreads throughout the city, that exists in several important and relevant points in Porto*" (1). For that, "*the issue of funding* is *determinant, i.e., there must be financial capacity to develop a structured and sustainable project, ambitious and that corresponds to several objectives"* (2)—as well as "*the consistent integration and collaboration of the main institutional, economic and tourism players. With these dynamics, it is easier to bring relevant people, including those who live and breathe fashion, as well as others who bring with them business, investment and, therefore, an active contribution to the sustainable growth of the city*" (3).

Analyzing the implementation phase of *Portugal Fashion*, it *"is more active in this sustainable contribution, but the dynamic of Portugal Fashion is permanent, both in terms of the national and international action plan and in terms of the communication plan*" (3).

Regarding the sustainable development of the event itself, "*a network of partners has been developed over the 25 years of existence of Portugal Fashion, and Alfândega do Porto is a good example of this, as well as institutional and sector partners. However, it is essential that events and structures evolve over time, that they become more creative and sustainable over the years, based on strategies that can leverage investment and scale-up business. The scale-up of national fashion and the sustainability of its business are crucial to the mission of Portugal Fashion, and this is also a pillar of sustainability of the project itself*" (3).

Unsustainable development is referred to regarding dependence on public funds and the impossibility of recognizing until when and under what conditions they exist, "*which makes it impossible to think about the future with clarity*", as well as about the regional stakeholders' involvement, since "*there should be greater involvement and commitment to ensure greater sustainability*" (2).

A particularity of Portugal Fashion, which distinguishes it from other fashion weeks, is the fact that it has promoted, since the beginning of the project, an "*interaction between the creative capacity of designers and the productive and commercial capacity of the industry*" (1), which should be considered as a competitive advantage for the city of Porto. Also, it is held "*in the heart of the city of Porto, which in line with the positive tourism development in this location, allows the creation of an interaction that benefits multiple stakeholders*" (1). Porto has the advantageous characteristic of "*being a city that offers many points of interest in a reduced area*" (4).

As for the competitive advantage that the title "fashion city" gives Porto, compared to competing destinations, it is important to highlight "*the whole universe of glamour that surrounds fashion, which is a major tourist attraction factor*" (1). However, it must be recognized that *"there is still a way to go when comparing Porto to other international fashion cities*" (3), since "*Porto still does not properly recognize fashion as an asset to enhance the city*" (4). "*For now, Porto as a fashionable city is just a title and not a brand*" (2), but when Porto achieves its recognition and value as a fashionable, there will be noticed more benefits to the city.

Effectively, for Porto to be internationally "*recognized as a fashion city, the whole city must achieve a fashion environment, and it should be a continuous concern* (…) *and, thus, it is important to show that fashion is not closed in the days of Portugal Fashion but, instead, is present in the city throughout the year*"(4).

The city of Porto is associated with "*a historical past directly related to the textile industrial production"* (4) and there are several differentiators of this city that enhance its development as a fashion city, such as *"the proximity to the industry, the quality of life, the climate, the friendliness of people, as well as an inherent creative capacity, which breaths in various parts of the city*" (3).

The fashion week *Portugal Fashion* has contributed not only to the opening of movable shops and ateliers of Portuguese designers and fashion brands in the city of Porto, as well as for the preservation of the same, *"because many of these designers would not have had the capacity or visibility to be able to assert themselves in such a business without the recognition coming from the participation in several editions of Portugal Fashion*" (1). However, Porto is "*a difficult city for the physical location of young creators and, therefore, it is important that the city supports the incubation of fashion creation projects*" (4).

Also, the presence of physical stores of national fashion in the city of Porto "*gives another dimension to Portugal Fashion*" (1), since they consist in an addition of value to the city of Porto as a fashion city, mainly regarding the international promotion.

However, for the opening and preservation of fashion shops in the city of Porto to be strengthened, it is crucial that "*society itself changes its consumption habits, giving more importance to what is produced in Portugal—that has design and good quality. This is a thought that should be transversal to the country, as a manufacturer and creative one*" (3).

53.5 Conclusion

Considering the 25 years of history, the *Portugal Fashion* week, held in recent years in Porto, allows the enhancement not only of the city, as well as the northern region since it is a project of artistic, socio-cultural, and economic expression that allows the interaction between several national and international agents, which are directly or indirectly related to the fashion industry. The event allows the attraction of economic and socio-cultural capital to the city of Porto, by attracting foreign investment and new talent, thus enabling the sustainable socio-cultural and economic development of Porto as a tourism destination [45].

Portugal Fashion has also contributed to the opening and preservation of Portuguese fashion shops and ateliers in the city of Porto, since it allows Portuguese designers to feel supported and valued, encouraging them to develop and enhance their businesses. In other analysis perspectives, also the presence of physical stores of national fashion in the city of Porto gives a greater dimension to *Portugal Fashion*, since they consist in an addition of value to the city of Porto as a fashion city, mainly regarding international promotion.

As for the sustainability of the event itself, *Portugal Fashion* week has developed a partner network over its 25 years of existence, has sought to evolve as an event based on creativity and sustainability. However, for the Portugal Fashion to be a more sustainable event, it is necessary to value financial independence, as well as the involvement of multiple-scale stakeholders of the city of Porto and the Northern region. For Portugal Fashion to achieve a similar dimension as other fashion weeks worldwide, it is important that the main components of the event take place throughout the city of Porto and not isolated in a particular space.

Two positive factors of the fashion week *Portugal Fashion* lies in the fact that it takes place in the heart of the city of Porto and, unlike the other fashion weeks, not only presents the creative component of the design but also combines it with the production component. However, although the city of Porto is recognized as the home of fashion events in Portugal, there is still a way to go so that Porto can be internationally recognized as a fashion city and, for this, it is crucial that the stakeholders of the multiple sectors of the city, create partnership opportunities to enhance Porto as a fashion destination [41, 45–48].

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Chapter 54
Enhancing Historical Heritage and Religious Tourism in the North of Portugal: The Monasteries Route

Pedro Liberato, Mónica Gomes, and Dália Liberato

Abstract The creation of cultural and tourism routes and itineraries are important resources, which allow the enhancement and dynamization of destinations, particularly from an economic perspective, by increasing tourism demand. As such, it is a differentiating and unique product, offered to visitors and tourists, and that has observed a considerable demand. Although the dimension of religious and cultural tourism is widely studied by several authors, the tourist and cultural routes and itineraries to boost and enhance the historical and cultural heritage are not sufficiently studied, so the aim of this paper is to extend the scientific knowledge on this topic. The general objective of this research is to evaluate the role of Portugal's historical and cultural heritage in the context of the creation of the monasteries route, focusing on Northern Portugal. The method applied in this research was the qualitative methodology, with data being collected through semi-structured interviews. Ten interviews were applied to the representatives of several entities. According to the exhaustive and detailed analysis of the information and data provided, it can be proven that UNESCO's attribution of the World Heritage designation to destinations and sites gives them greater recognition and an exponential increase in tourists; the historical and cultural heritage is one of the main factors for the choice of a destination; the historical and cultural heritage is positively leveraged by public and governmental entities; the role of pilgrimages positively influences the increase of the tourism sector in Portugal bringing several advantages mainly in the hotel and restaurant sector; the creation of a tourism and cultural itinerary fosters knowledge,

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the preservation of the historical and cultural legacy and, finally, repercussions in the economy of Portugal; convents and monasteries are one of the dimensions that are targeted by national policies of preservation of the historical and cultural heritage.

54.1 Introduction

One of the rising tourism trends in Europe is based on culture, and cultural routes, considered as one of the products that need to be developed. Although, some researchers attribute to the concept of route, the denomination of route or itinerary, it is important to make a clear and conscious distinction, in relation to these concepts since they present dissonant meanings between them. Considering [1] although tourist routes can be designated in multiple ways, specifically trails, thematic routes, among other designations, are generally defined as an effective method of tourist distribution. They can be done through several forms of locomotion, usually on foot, although in some cases, if not most, the distance that takes the tourist to cover the route is long, which leads to do it in stages, as happens with individuals who go on pilgrimage to Santiago de Compostela, in Spain (Galicia). In addition to the different designations that can be adopted to define tourist routes, they can also be divided into different spheres such as, for example, pilgrimage routes and trails, this being one of the oldest forms of cultural routes, according to the studies of [2]. In turn, [3] regarding the concept of route admits that the word derives from Italian culture, meaning "course", "path". As such, the route is "a specific type of route consisting of a trunk functioning as the main axis and complementary branches of that trunk; covered in a certain space of time; thematically autonomous or linked to another Route; organized with a very objective geography and developed in a particular direction; consumed in the form of a route, directed to the dominant theme and aggregating multiple attractions and activities that enrich it as a unique tourism product; oriented to originate local circuits, well identified that are linked, in turn, through itineraries with local and/or regional scale" [3]. According to the Council of Europe (2015) the concept of route is described as a network that groups different destinations and geographical locations based on a theme, in which differ from each other according to the particularities inherent to each destination or geographical space. Alongside this, [3, 4] suggest that tourism routes aim to group a set of activities and attractions that have something in common to encourage and provide entrepreneurial business opportunities through the development of ancillary products and services. Considering the definition of the Council of Europe (2015) the cultural route can also be considered as "a complex cultural asset and as a territorial project, which includes to identity aspects of cultural expressions, fitting into the current framework of heritage interpretation". In turn, considering the project carried out by *Turismo, Sostenabilidad, Proyectos,* from Chile, [3] points out that the Tourist Route can be defined as an "itinerary or thematic natural route of a community or geographical area, which allows the knowledge of its values and particular attractions, capable of attracting visitors (…), visiting the attractions, performing activities and using services that have been built for this purpose". According to the Resolutions of the Council of Europe (2013) the cultural route is considered as "a cultural and tourism cooperation project aimed at developing and promoting an itinerary or series of itineraries based on a historical route, a cultural concept, figure or phenomenon". In this sense, it is a route that is not confined to a particular region, but instead covers several countries attending to a common theme, being the core of the route based on the historical, European cultural dimension, since the route presents a meaning that goes beyond the strictly local (Resolutions of the Council of Europe 2013). Hafele [5] in turn states that routes can be understood in multiple ways such as, for example, a real route or road that already existed; "a network of historical or natural places or facilities"; as a particular space that has a common theme or even a route that encompasses different territories and countries guided and defined according to historical, artistic, or social reasons. Unlike the ideas presented previously, according to [3], in a more commercial perspective the route aims to be practiced individually or in groups, more specifically in the form of excursions or visits with the tourist, cultural, professional, or other assumption, with start and end of the activity. In addition, "it includes all the services contracted and included in the price such as transportation of people and their luggage, meals, accommodation, visits, or guided tours in the places indicated in the excursion program, payment of guides, if applicable, and access expenses to contracted points of interest (museums, theme parks, monuments, among others)" [3]. On the other hand, for [6] thematic routes "establish natural or man-made attractions from a given theme, with facilities at the level of available means of transport". Maia and Batista [7] argues that the routes or cultural itineraries can be defined as something modern and current, which is complex and multidisciplinary, and that aims to enhance and highlight the heritage with the purpose of promoting it, but at the same time to requalify it. The Council of Europe (2015) in this context emphasizes the idea that the routes have been focusing over the years on different aspects such as cultural heritage (landscapes), intangible heritage, and industrial archaeology. Indeed, considering each route, it must have its target audience, to objectively respond to their needs and desires [3], being necessary to reconcile the interests of different agents of tourism activity, "operators, service providers and the interests of local communities", having as its main focus of action the tourists [3].

As for the tourist itineraries it can be said that these assume a double connotation to the extent that, according to [8] are a route or route that determines the places and suggests numerous activities and services along the tour. Lourens and Greffe [1, 4] corroborate with the idea defended above pointing out that the diversity of activities and attractions combined with each other can generate opportunities for companies through the growth of alternative products and areas. According to [7] the tourist itinerary can be understood "as the production of a set of activities and attractions" that originate the association of other areas that interconnected with each other enhance the economic promotion through the tourism area. Moreover, it is an active, interactive, and constantly evolving process that has an enormous impact on tourism and leisure, hence the need to draw up a rigorous program. According to [3] the circuit refers to a trip planned to be traveled given a certain route and that can, perhaps, group other circuits in order to create an itinerary; "a trip in which operators provide various services (*package tour*)"; a planned route, in which the different thematic segments relate to each other; an area that may have several means of locomotion; "a trip designed so that the point of departure is coincident with the point of arrival"; an organized trip of medium-short duration, in which is defined its price and has the necessary information to its customers in relation to the "point of departure, schedules and activities, and point of departure from the Tour".

In fact, according to Juan [9], the Council of Europe's European Cultural Routes Program was certified in 1987 through the following resolutions: the Camino de Santiago de Compostela and the Rural Habitat Route, and it was only in 1997 that the European Institute of Cultural Routes was established thanks to an agreement between the Council of Europe and the Grand Duchy of Luxembourg. The aim of the convention was to promote "a greater knowledge of the European cultural area" [9]. Furthermore, considering the Directorate General for Cultural Heritage and Hafele [5], the European Cultural Routes Program advocated by the Council of Europe aims to put into action the main guidelines by which the Council of Europe is governed: "human rights, cultural democracy, cultural diversity and identity, dialogue, exchange and mutual enrichment between countries". As such, the Extended Partial Agreement on Cultural Itineraries of the Council of Europe signed through the Resolution of 8 December 2010 identifies the cultural itinerary as a "project of cultural cooperation, education, property and tourism, whose objective passes through the development and promotion of a route or a series of itineraries based on a historical *tour*, a concept, a person or a cultural phenomenon of transnational dimension, which proves important for the understanding and respect of European values that have in common", according to the studies conducted by Juan [9]. The main purpose of this agreement, according to [9] is to encourage networking through the establishment of cultural links and dialogue with a view to European citizens' understanding of their European identity.

The general objective of this research is to evaluate the role of Portugal's historical and cultural heritage in the context of the creation of the route of the monasteries, focusing on Northern Portugal. The methodology applied in this research was a qualitative methodology, with data being collected through semi-structured interviews.

54.2 Literature Review

Based on the study of the Council of Europe (2015), and [5], for a route to obtain the certificate of the Council of Europe it is necessary that it meets the main requirements: definition of a theme present throughout Europe, in which throughout the route this same theme is present, and therefore the theme is the target of cooperation projects, communing European values common to all of Europe; the theme of the route must also portray "European memory, history and heritage and contribute to an interpretation of Europe's diversity" and facilitate cultural and educational dialogue, as well as the implementation of innovative projects about cultural tourism and sustainable

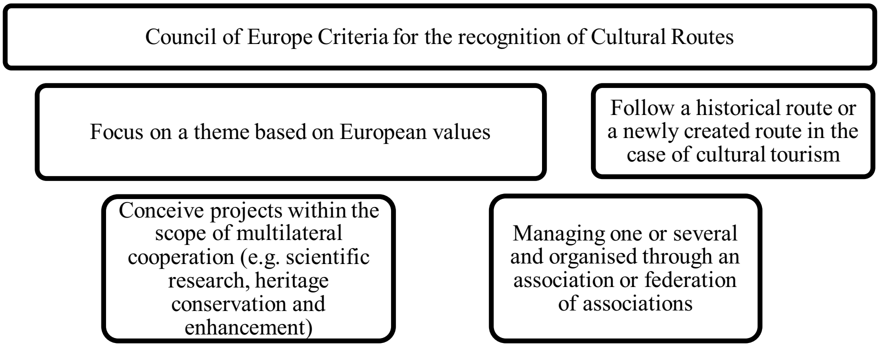

Fig. 54.1 Criteria for the recognition of cultural routes by the council of Europe. *Source* Council of Europe (2015)

cultural development and, finally, it must be developed in partnership with tour operators in order to target different audiences; identification of the elements associated with heritage through the "geographical, cultural, historical and natural characteristics of the different regions". In addition to the aspects listed above, it is also essential that the different cross-border territories that are part of the European routes projects establish an effective link between them so that the Council of Europe's cultural routes can become truly efficient. In addition, the role of the local community is also decisive, because its collaboration and interaction in the route areas of the routes enable the process of "identification" according to the Council of Europe (2015) (Figs. 54.1 and 54.2).

Considering [9], until the year of his research there were about 29 Cultural Itineraries scattered around the national territory, among which the following stand out: Camino de Santiago de Compostela (Way of Saint James) (1987), The Andalusian Legacy (1997), Vikings and Normans (1998), The Iron Route in the Pyrenees (2005), Saint Martin de Tous (2005), The Network of Cluniac Destinations (2005), The Routes of the Olive Grove (2005), The Via Regia (2005), Transromanica: Itineraries of Romanesque Art in Europe (2007), *Iter Vitis*: The Ways of the Vine in Europe (2007), The European Itinerary of the Cistercians (2010), The European Route of Cemeteries (2010), Prehistoric Rock Art Paths (2010), The European Route of Thermal Heritage and the Thermal Cities (2010), European Itineraries of Jewish Heritage (2010), Itinerary of the Casa Dei (2012), The European Route of Ceramics (2012) and the most recent European Modernism Network which was inaugurated in the year 2014.

Regarding the Cultural Routes program, these were disseminated in 1987 thanks to the interest expressed by the Committee of Ministers of the Council of Europe, whose concerns came to be revealed in the development of the Cultural Routes, according to [11]. Thus, the agreement established aimed to enshrine a close cooperation between entities with common interests in the field of cultural routes [11]. In this sense, the resolution defined by the Council of Europe in December 2010 had as main purposes: "tangible illustrations through European cross-border itineraries,

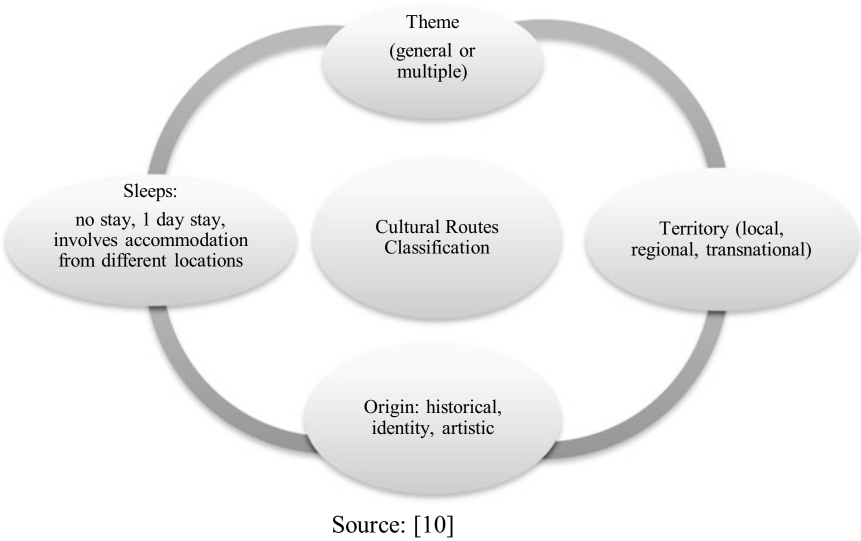

Fig. 54.2 Classification of the cultural routes. *Source* [10]

pluralism and diversity of European culture based on shared values"; "means for intercultural dialogue and respective intercultural understanding" [11]. In Portugal the main Cultural Itineraries are pointed out: "Transromanic- Romanesque Itineraries of European Heritage, Pilgrimage routes to Santiago de Compostela, *Iter Vitis*- Vineyards, European Route of Jewish Heritage, Prehistoric Cistercian Rock Art, European Route of Cistercian Abbeys, European Route of Cemeteries, Andalusian Legacy Route, Emperor Charles V Route, European Route of Historic Thermal Cities, Art Nouveau Network and *Destination Napoleon.* Such cultural routes promote the realization of numerous events, activities and even educational exchanges that involve the participation of thousands of individuals and the support and presence of various organizations and local communities [11]. Along with the routes, there will be a total of 38 Cultural Routes of the Council of Europe by 2019, and their purpose is related to the preservation and dissemination of the "memory, history and heritage of Europe" in order to better understand the European destinations and their inherent immensity. Therefore, in addition to the routes noted above, the following are also noted: Via Habsburg (2014), Roman Emperors and Danube Wine Route (2015), Emperor Charles V's European Routes (2015), Napoleon Destination (2015), following in the footsteps of Robert Louis Stevenson (2015), Fortified Cities of the Greater Region (2016), Impressionist Route (2018), Charlemagne Route (2018), European Industrial Heritage Route (2019), Iron Curtain Trail (2019), *Le Corbusier* Destinations: Architectural tours (2019), Route of Liberation Europe (2019) and, finally, Routes of the Reformation (2019).

With the elaboration of the Route of the Monasteries in the North of Portugal that focuses specifically on the Order of the Regular Canons of Saint Augustine, it is sought that the monasteries that are without any use or even vacant have a new use. In this sequence, the Route of Monasteries of the Order of Regular Canons of Saint Augustine has three main vocations. The first vocation is closely related to the enhancement and dissemination of heritage through the development of a tourist package complementary to the existing offer, namely the Romanesque Route, Route of Monasteries and Benedictine Landscapes and the Cathedrals Route. The goal is, therefore, the development of a tourist package properly structured, organized, and customizable given the different market niches. As such, it is intended to capture different audiences from international tourists, local community and visitors coming from other locations to experience, but mainly to discover and learn about the heritage linked to the monasteries belonging to this religious order not only by conducting guided tours to these places, but also through the creation of a set of activities. Another of the vocations to be noted under the Proposal of the Route of Monasteries in Northern Portugal—Order of the Regular Canons of St. Augustine is related on the one hand with an educational aspect and on the other in terms of training and learning. With regard to the educational aspect, it is intended to conduct study visits, develop recreational activities and present theatrical performances in order to instill an appreciation of the heritage and a sense of belonging to that heritage, as well as its passing on to future generations. The training and learning aspect are based on the development of various skills and the professional, personal, and intellectual growth of individuals through painting, conservation, and restoration classes in the cultural sphere. Finally, another of the vocations concerns the attraction of businesses that are fundamental to the operation and development of the respective route, namely linked to the hotel, restaurant and tourist entertainment sectors, this last sector being particularly important, in that it can be a factor in attracting different audiences and, alongside this, be a factor in fixing tourist demand. To this end, it seeks to develop partnerships in collaboration with private companies within the area surrounding the route and supported by municipalities to promote and boost the region and its economy.

54.2.1 Case Study

The Monasteries Route Proposal has as main purposes the establishment of a cooperation network between different territories spread along the North of Portugal to unify and aggregate the goods and services between them to facilitate their accessibility. It is intended, therefore, that these territories cooperate with each other, despite each of them having different characteristics. In this context, the set of activities design proposed in this research must consider not only the profile of the individual who seeks to get to know the route, but also the needs, particularities, and specificities of this same territory, in terms of morphology and resources available. As such, it is imperative to draw up a program with the local authorities to ascertain the conditions for its implementation to preserve the heritage and make it more dynamic.

Also, the Route of Monasteries in Northern Portugal—Order of the Regular Canons of St. Augustine intends to implement a marketing strategy and policy to publicize and make accessible this heritage, evident through the vast monastic complex existing in Portugal. Thus, the goal is to create a digital platform for its dissemination and supply presentation toward the demand. As a result, promotion involves creating a *website* alluding to the Route of Monasteries in Northern Portugal, as well as social networks (*Facebook, Instagram, Twitter*) through promotional videos with a brief presentation of the monastic buildings with some of the suggestions of what can be done and visited in the main destinations covered by the Route of the Monasteries in Northern Portugal belonging to the Order of Canons Regular of St. Augustine and that extends from the area of Vila do Conde, Maia, Porto, Baião, Amarante, Vila Nova de Gaia, Braga, Guimarães, Ponte da Barca, Viana do Castelo, Caramos, Santo Tirso to Marco de Canaveses.

It should be noted that this promotional plan is supposed to focus on a younger audience that seeks to discover the charms of Northern Portugal and, at the same time, have a different and unique experience. Therefore, to capture this audience, it is intended to propose activities linked to nature and sports. This is due to the increased presence and importance considering environmental issues, sustainability and sport in everyday life that attracts a younger demand. As such, some of the suggestions proposed in these spheres are related to the creation of hiking trails, as well as camping.

Finally, through the creation of this route it is intended to tell a story, the identity of the everyday life of the monks to involve the visitor and make them understand the narrative. In addition, it seeks to promote religious and cultural tourism and, therefore, to increase the conservation of monastic buildings returned through the conversion of some of these buildings in libraries for example, or even works toward the requalification of some of these spaces not only considering the strictly economic aspect, but also heritage to constitute an added value to the revitalization of a particular tourism destination. The research method applied in this study is based on semi-structured interviews, although at an early stage of the study, the use of a quantitative methodology was considered. However, given the current adverse context, the application of a qualitative methodology became more convenient. Thus, interviews are a method that aims at understanding the particularities of a given phenomenon, allowing for a rigorous and in-depth analysis of the topic in question. The choice of the qualitative method based on semi-structured interviews was to the fact that the interviewee could go further in his/her discourse, i.e., not only answer the previously prepared script, but also have the possibility of highlighting other elements and other information relevant to the research. After drafting the script, the potential interviewees were requested to participate in this research. The interviewees belong to a very heterogeneous group, since they belong to academic and professional areas which differ from each other. The purpose of selecting these interviewees is related to the search for more diversified and, at the same time, specific and detailed answers, because, given the impossibility of conducting surveys, the richness of the data provided by the interviewees and the obtaining of answers with the greatest accuracy, clarity and

Table 54.1 Interviewees

Interview No	Entity	Date	Duration
E1	Regional directorate for culture of the North	22/April/2020	01:41:55
E2	Tibães monastery	23/April/2020	1:53:53
E3	Researcher at the center for religious history studies	18/May/2020	44:26
E4	Researcher	1/June/2020	1:35
E5	Hotéis Bom Jesus and member of the Obra Nacional da Pastoral do Turismo	28/May/2020	Written
E6	Clerigos tower	29/June/2020	53:25
E7	Dukes Palace	14/July/2020	26:35
E8	Romanesque route	11/August/2020	Written
E9	SPIRA	01/September/2020	39:28
E10	Researcher in the field of wine-growing cultural heritage and wine tourism	22/September/2020	01:12:05

assertiveness are essential for this study to have the necessary foundation and credibility. These interviews were individually conducted through the zoom platform, except for one interview, which was conducted in person. The interviewees belong to different research areas, namely the tourism sector, cultural tourism, religious tourism, heritage, history, and art history. Next, the interviewees will be presented and the details inherent to the conduct of the same, as well as the respective script of the interviews (Table 54.1).

This interview script was developed in accordance with the literature review. Thus, all these questions were written according to the authors cited in relation to these themes. A table with the questions of the interview script and the main authors who support them is presented below (see Table 54.2).

The general objective of this research is based on the understanding of the impact of the route of the monasteries in the North of Portugal in the promotion of the historical and cultural heritage of the northern regions. Taking this general objective as a principle, several specific objectives were created, which are divided into different categories. These specific objectives were outlined considering the literature review on this topic, as well as the questions in the interview script. The first category concerns the objectives that are linked to the motivations of tourists and the role of cultural-historical heritage for tourism and as a decisive factor for the election of the tourism destination present both in the literature and in the interviews.

- Understand the role of tourists' motivations in the election of tourist destinations.

  Olsen [22] refers in his research that cultural factors, along with religious aspects are one of the main reasons for visitors to seek a tourist destination. On the other hand, [21, 28] admit that the motivations related to leisure and business are the main reasons that lead individuals to travel, thus positively influencing Tourism

Table 54.2 Framework for the development of the interview script

Questions from the interview guide	Theoretical foundation
The awarding of world heritage status mean that destinations attract more tourists?	[12–15]
Public and government entities are taking advantage of the potential of the historical and cultural heritage of the cities to boost the tourism sector in Portugal?	[16, 17]
Tourism has been increasing because of the rise in religious tourism or because of other segments of tourism?	[18–22]
The growth of the religious tourism sector is linked exclusively to religious motivations or to other factors?	[17, 21]
Which are the main motivations that lead individuals to travel (religious, cultural, leisure, business, social pressure, cultural attractions, personal, educational, and cultural development, knowledge of other nations' culture and religion)?	[16, 17, 21]
There is an increase in religious tourism during the celebration of religious events or pilgrimages?	[23, 24]
The most visited destinations in Portugal are linked to its historical-cultural heritage or to the religious sphere?	[13, 14, 18–20]
Are the cultural attractions of a destination the main reason for choosing it?	[18, 19]
How could the planning of activities lead to the boosting of tourism in Portugal, namely around the heritage associated to convents and monasteries?	[3]
With the creation of a tourist itinerary, tourists become better acquainted with Portugal's historical and cultural heritage?	[3, 5, 25]
How could the development of the route of convents or monasteries foster religious tourism in Portugal?	[5]
Does the occurrence of pilgrimages lead to transformations in the political, hotel, economic, social, and cultural sector in Portugal?	[17]
What advantages could the tourism industry have from the creation of the route of convents or monasteries?	[1]
The creation of a tourist and religious itinerary could increase other sectors, such as hotels and restaurants?	European Council (2007–2013)
Which convents and monasteries exist in the North of Portugal and are still active? Is there documentation associated with the built heritage of these convents and monasteries?	[26]
Is there a national policy for the preservation of buildings associated with convents and monasteries?	Tourism of Portugal—Revive (2020)

(continued)

Table 54.2 (continued)

Questions from the interview guide	Theoretical foundation
The preservation of convents and monasteries contributes to the authenticity of the destination? How do you view the conversion of convents and monasteries or other historical remnants into tourist resources?	[21, 27]

Source Authors

in Portugal. The issues associated with leisure and business are one of the factors most pointed out and that are reflected in the increase of tourism.

- Understand the influence of historical and cultural heritage in the tourism sector.

  Jimura and Graham et al. [13, 29] refer that the Historical and Cultural Heritage is one of the main responsible for the promotion of Tourism, since its identification and respective preservation allows the disclosure of the existing heritage to subsequent generations, working, in this way, as a real engine for the economy.
- Understand the influence of World Heritage designation on destinations.

  Canale et al. and Breakey [14, 30] admit that the distinction given by UNESCO to destinations, as World Heritage confers them a growth in the number of tourists. Jimura [13] also expresses the idea that destinations by holding this distinction generate an increase in the number of revenues at the economic and socio-cultural level of the places. All this is a result of the interest and growing attraction shown by tourists to know the monuments and all the elements linked to the historical and cultural heritage of destinations, which leads, therefore, to the revival of tourism products and their preservation.
- Understand the influence of pilgrimages on tourism in general. [17, 21] point out the representative weight of pilgrimages in the tourism sector, given that they ensure the entry of thousands of individuals annually in tourism destinations. In turn, [21] describes the effects caused by events of a religious nature and their consequent influx of a greater number of tourists during this period.
- Understand the role of pilgrimages in the growth of the hotel and economic sector of the regions. According to [31] pilgrimages have very positive effects on regions' economy, with particular emphasis on the places that are at the heart of these religious events, such as Santiago de Compostela in Spain, Lourdes in France and Fatima in Portugal.
- The second large group is linked, in turn, to the importance of cultural routes in different aspects and that are addressed throughout the interviews, whose purpose is related to:
- Understand the role of cultural routes (route of the monasteries) in the tourism sector in Portugal. According to [32, 33] the routes are an important agent for the economic development of the regions, as they attract different segments of tourists which leads, consequently, to the creation of a greater number of products, services and goods that meet the needs and desires of this demand, clearly through the creation of restaurants, hotels, or other accommodation units.

- To evaluate the influence of the monasteries route on the knowledge of historical and cultural heritage. According to the Council of Europe, cultural routes play a key role in boosting the tourism sector, as they are responsible for the development of new products and businesses, tourism, and cultural services, thus influencing new tourists.
- To determine the influence of the monasteries route in the preservation and requalification of the historical legacy in Portugal. One of the guidelines pointed out in the Annual Consultative Forum of the Cultural Routes of the Council of Europe concerns the conservation of memory and history, and the main objective and consequent integration as a Cultural Route of the Council of Europe aims to demonstrate its importance in this context and the perpetuation of these remnants for future generations.
- Understand the role of authenticity in the tourists' experience. Hargrove [34] emphasizes that authenticity is related to experience. This fact derives from the tourists' incessant demand to experience something authentic that provides them with a different, unique, and true experience, achieving the desired degree of satisfaction [35, 36].

54.3 Results

The monasteries in different parts of Northern Portugal share common characteristics, although their influence and representativeness were greater or lesser depending on the impact they had on the local communities, the reforms carried out, the location of the monastery itself and the prerogatives they enjoyed. All these aspects dictated the continuity of their activity over the centuries. Most monasteries were established in places outside cities, far from debauchery since the monks were intended to live in isolation. Multiple functions were assigned to them, and the monks divided their time between praying, working in the fields, cooking, cleaning the monastic space, taking care of the animals, singing, and transcribing classical works and biblical texts.

Many monasteries, over the centuries, and due to the lack of support and investment in the requalification of these spaces, are currently in ruins, since it is economically impossible to ensure the maintenance of all these buildings since they are numerous. However, there are still several monasteries scattered throughout Northern Portugal, whose infrastructure has no use and could be enhanced. In this sense, the creation of the Route of the Monasteries of Northern Portugal, with particular emphasis on the Religious Order of the Canons Regular of St. Augustine, aims in addition to deepen the question of the history of its foundation, to identify its building and its current state, and promote a set of activities common to the different monasteries belonging to this religious order. Thus, the proposal is based on the organization of a set of activities with the purpose of boosting the existing cultural heritage to preserve the identity, history, and roots of the historical and cultural legacy of Northern Portugal. As such, we highlight some of the main activities that could be promoted inside and outside the monastic building or even ideas of possible transformations of these buildings: Musical events (Gospel, Opera, Choirs); Photographic exhibitions; Literary and musical presentations (Books, Bands, Musical Instruments); Theatrical shows; Gastronomic fairs and conventual sweets show (presentation of typical dishes of the region and desserts, competition for the best menu/dish/dessert; gastronomic classes and wine tasting); Restoration and conservation classes, painting; Cinema outdoors or inside the monastic space; Corporate events; Guided tours; Playful activities; Glamping; Champing; Walking trails; Fashion shows; Spiritual sessions (meditation, prayer) in the open air; Scientific exhibitions; Creation of PUB's; Creating libraries.

The Route of the Monasteries belonging to the Benedictine Order intends to trace an itinerary of the monasteries according to this religious order and which still endure in the different locations in the North of Portugal.

Table 54.3 presents the summary of the interviews applied in this research.

54.4 Conclusion

The objective of this study focuses on the creation of the monasteries route in the enhancement of historical and cultural heritage and religious tourism in Northern Portugal. Considering this theme, objectives were outlined, which were intended to be answered from the application of the interviews.

Regarding the role of tourists' motivations in the choice of tourism destinations it can be seen from the analysis of the interviews that tourists go to a particular tourism destination according to their profile and motivations. The motivations are multiple; however it can be ascertained given the majority of respondents that leisure, beach, city-breaks, business are one of the main factors that lead individuals to travel. In addition to these reasons, but with less relevance in the number of trips made by tourists are the motivations linked to the cultural and religious, and the historical and cultural heritage is one of the main points of reference to be visited in our country. Monuments and museums are one of the most sought-after attractions by tourists when they go on holiday. Note, however, according to the perspective of most of the interviewees, that even in destinations considered as religious, such as Santiago de Compostela in Spain, Fatima in Portugal, Lourdes in France the religious belief is not always the predominant vector for the choice of destination, emphasizing the dimension of heritage and culture, the experience itself that are alongside the religious issue elements of great relevance. Such reason is because tourists decide to go to a given place because of the religious issue, however they end up not only confining themselves to that purpose and take the opportunity to visit monuments and the surrounding heritage, as well as to get to know the community, culture, and local traditions of the region. Indeed, the historical and cultural heritage has a decisive influence on the tourism sector since it has contributed to its continuous growth.

Regarding the impact of the World Heritage designation by UNESCO, it can be concluded from the analysis of the interviews that the attribution of this distinction has led to a greater recognition and visibility of the destination, improving demand.

Table 54.3 Summary of the interviews

Topic	Conclusions	Interviewees
World heritage	Obtaining the UNESCO heritage label gives destinations greater notoriety, visibility, distinguishing it from the rest of the offer and in relation to others. In addition, this classification entails the entry of a greater number of tourists Local and government entities have made efforts to enhance the revaluation of heritage actively, increasingly, and continuously	E1/E2/E3/E4/E5/E6/E7/E8/E9/E10 E2/E3/E4/E5/E6/E7/E8/E10
Tourists Motivation	The factors that lead a tourist to choose a tourist destination are several. However, the most frequent reasons that are pointed out are related to the beach, *city-breaks,* visits to museums and historical heritage and nature walks The cultural and tourist attractions are one of the aspects pointed out as a factor of dynamization of the places, however everything revolves around the destination	E1/E6/E8/E9/E10 E2/E5/E7/E9/E10
Religious and cultural tourism	The religious and cultural dimension is one of the reasons pointed out by the interviewees as one of the preponderant elements that motivate the individual to travel. Religious and cultural tourism following the outbreak of religious festivities or celebrations has a higher growth, as it triggers the entry of a greater number of tourists and visitors	E1/E2/E3/E4/E5/E6/E7/
Pilgrimages	The pilgrimages generate economic transformations, structural changes at the level of the territory given the entry of thousands of pilgrims annually in the national space	E1/E2/E3/E4/E5/E7/E8/E9/E10

(continued)

Table 54.3 (continued)

Topic	Conclusions	Interviewees
Tourist and cultural route and itinerary	The creation of several itineraries is a factor of attraction and fixation of tourism demand, as it captures the attention of specific niches, promoting cultural heritage The existence of programming and adequate planning in relation to itineraries and routes, which meet the wishes of tourists, proves to be decisive for its success The convents and monasteries are under the preservation policy aimed at heritage requalification, such as REVIVE, among others	E1/E2/E3/E6/E9 E1/E7/E8/E9 E1/E2/E8/E10
Authenticity	The interviewees are supporters of the preservation of convents and monasteries from the perspective of maintaining the identity and integrity of the space	E1/E2/E3/E4/E5/E6/E7/E10
Conversion of convents and monasteries	The interviewees agree about transforming monasteries and convents in tourist resources provided that their heritage is respected	E1/E2/E3/E4/E5/E6/E7/E8/E10

Source Authors

This fact is due to the value and cultural interest that heritage represents and leads to an improvement in the quality of life of the community and the increase of the regions' economy and general development. Indeed, the importance of heritage and its distinction as World Heritage lies in the fact that it is an important agent in the transmission of memory and identity to future generations. However, it is important to note that although there is a continuous effort undertaken by public and governmental entities to invest and take advantage of the potential of the historical and cultural heritage of the cities, this is still not enough, nor is it expected given the role it plays in promoting and boosting the tourism sector in Portugal. In addition, there are regional asymmetries between the coast and the inland regions.

Besides the positive effects associated with the UNESCO distinction, to monuments and sites as World Heritage, there are also other less positive implications related to the environmental issue, pollution and overcrowding of some spaces. As a paradigmatic example of this, see the case of Porto, clearly shown through the area of the historic center of the city of Porto and the Clérigos tower, which is the target of an excessive concentration of tourists, to which the entities are aware of the problem and are acting accordingly in order to decentralize and relocate this demand to less known areas of the city, but equally attractive and appealing from the historical, cultural, and heritage point of view.

In turn, Religious Tourism over time has been gaining representativeness, however it all depends on the destination we may consider. In the case of pilgrimages in Portugal we have the paradigmatic example of Fátima which is the main religious center in Portugal, and which originates the entrance of thousands of tourists. The pilgrimages are, therefore, one of the main responsible for the increase of Religious Tourism. As such, the outbreak of certain festive and religious celebrations that have been held over the years in honor of the saints as the Feast of Our Lady of Agony, the Holy Week in Braga, St. Benedict of the Open Door and Fatima give the destinations at certain times of the year a higher concentration of individuals. Indeed, the pilgrimages play a major role in the regions' growth, as can be seen in the illustrative example of Fátima, which due to the pilgrimages, observed a strong growth of all the surrounding area. The hotel and restaurant sector developed in function of the growth of Fátima, with an enormous impact in the economy of the region.

According to the conclusions obtained after the analysis of the interviews regarding the role of cultural routes (monasteries route) in the tourism sector in Portugal, it is considered that the routes and itineraries are one of the tourist products most sought by tourists, since they seek different and unique experiences. Therefore, the routes and itineraries prove to be a key element for the increase of intercultural dialogue and human values such as respect, mutual understanding, and solidarity between different peoples, by facilitating access to heritage, based on the resolutions of the Council of Europe. In addition, multiple routes should be created, duly typified and structured, since they are considered a factor in attracting and fixing tourism demand, as it is able to attract different target audiences and follow a story that connects all the territories in common. A proposal for a route properly segmented and with a dissemination plan can therefore contribute to the knowledge of the historical and cultural heritage. It should be noted that in Portugal, the preservation of buildings about monasteries and convents is developed under the Revive program, whose purpose is precisely to enhance and upgrade the space providing a new use.

Furthermore, in general and consensual through the results obtained in the interviews it can be concluded that the creation of the monasteries route in Northern Portugal is an asset to the tourism sector in the sense that it aims to enhance the cultural heritage, increase, and diversify the existing tourism offer, to be a factor of attraction and fixing of demand and, ultimately, to promote better performance of the economy. It is intended, therefore, to contribute to the creation of new businesses, encourage the promotion of several areas and activities that are directly linked to the area of tourism, such as catering and hospitality. Thus, the purpose of creating the route of the monasteries is based on the exploitation of the potential of many of these tourist resources that in some cases are unused or even abandoned, in ruins. By taking advantage of the space through the implementation of numerous activities allied to the endogenous heritage that the North of Portugal has, it is intended to give a new life, a new recognition and visibility, so that, in fact, the heritage has a new potential and, as such, is preserved for future generations. Through the conservation of the historical and cultural legacy it is thus intended to maintain the authenticity of the space. The authenticity of these places is supported by maintaining the identity, history, and memory of the space.

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