

## Gamification as a Strategic Marketing Innovation: A Systematic Literature Review

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**JEL CODES**  
M10, M31, O30

**RECEIVED**  
13/08/2023

**APPROVED**  
17/01/2025

**PUBLISHED**  
01/04/2026

**SECTION**  
Accounting

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**Disclosures:** Author declare no institutional or personal conflicts of interest.

**Abstract:** Gamification has emerged as a prominent technique for enhancing user engagement by incorporating gaming elements into non-gaming settings. Consequently, it is rapidly gaining popularity as a marketing strategy to attract and retain customers. This study examines research trends in this domain through a systematic bibliometric review of studies addressing gamification as an innovative marketing approach. Employing the prisma framework, the review analyses 62 articles indexed in the Scopus™ and WoS™ databases, thereby providing updated insights into the field. The R-based tool “Biblioshiny for Bibliometrix” was used to conduct the bibliometric analysis. The results indicate that gamification contributes to branding, sales growth, and organizational performance. In addition, it supports value co-creation—a central element of contemporary marketing—and promotes social interaction through online forums where users share experiences, knowledge, and feedback. The main theoretical contributions suggest that gamification enhances consumer engagement in immersive experiences, increases brand awareness, strengthens customer loyalty, provides valuable insights into consumer behavior, and stimulates sales by encouraging repeat purchases. From a managerial perspective, the findings highlight the importance of marketing professionals understanding specific game elements and their influence on players’ emotional responses and engagement in order to implement gamification strategies that foster more engaging, interactive, and personalized customer experiences, ultimately contributing to increased brand loyalty, sales, and customer satisfaction.

**Keywords:** Bibliometrix, gamification, innovation, marketing, marketing innovation.

Suggested citation: Rosário, A. & Casaca, J. A. (2026). Gamification as a Strategic Marketing Innovation: A Systematic Literature Review. *Innovar*, 36(100). e110410. <https://doi.org/10.15446/innovar.v36n100.110410>

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## La gamificación como innovación estratégica de marketing: una revisión sistemática de la literatura

**Resumen:** La gamificación ha emergido como una técnica destacada para mejorar la participación de los usuarios mediante la incorporación de elementos de juego en contextos no lúdicos. En consecuencia, está ganando rápidamente popularidad como estrategia de marketing para atraer y retener clientes. Este estudio examina las tendencias de investigación en este campo a través de una revisión bibliométrica sistemática de estudios que abordan la gamificación como un enfoque innovador de marketing. Empleando el marco PRISMA, la revisión analiza 62 artículos indexados en las bases de datos Scopus™ y WoS™, proporcionando así una visión actualizada del campo. La herramienta basada en R "Biblioshiny for Bibliometrix" se utilizó para realizar el análisis bibliométrico. Los resultados indican que la gamificación contribuye al posicionamiento de marca, al crecimiento de las ventas y al desempeño organizacional. Además, apoya la cocreación de valor, un elemento central del marketing contemporáneo, y promueve la interacción social a través de foros en línea en los que los usuarios comparten experiencias, conocimientos y retroalimentación. Las principales contribuciones teóricas sugieren que la gamificación mejora el compromiso del consumidor en experiencias inmersivas, incrementa el reconocimiento de marca, fortalece la lealtad del cliente, proporciona información valiosa sobre el comportamiento del consumidor y estimula las ventas al fomentar compras repetidas. Desde una perspectiva gerencial, los hallazgos destacan la importancia de que los profesionales del marketing comprendan los elementos específicos del juego y su influencia sobre las respuestas emocionales y el involucramiento de los jugadores, con el fin de implementar estrategias de gamificación que promuevan experiencias del cliente más atractivas, interactivas y personalizadas, contribuyendo en última instancia al aumento de la lealtad de marca, las ventas y la satisfacción del cliente.

**Palabras clave:** Bibliometrix, gamificación, innovación, marketing, innovación en marketing.

## Gamificação como inovação estratégica de marketing: uma revisão sistemática da literatura

**Resumo:** A gamificação tem emergido como uma técnica proeminente para aumentar o engajamento dos usuários por meio da incorporação de elementos de jogos em contextos não lúdicos. Consequentemente, vem ganhando rápida popularidade como estratégia de marketing para atrair e reter clientes. Este estudo examina as tendências de pesquisa nesse campo por meio de uma revisão bibliométrica sistemática de estudos que abordam a gamificação como uma abordagem inovadora de marketing. Empregando o framework PRISMA, a revisão analisa 62 artigos indexados nas bases de dados Scopus™ e WoS™, oferecendo, assim, uma visão atualizada do campo. A ferramenta baseada em R "Biblioshiny for Bibliometrix" foi utilizada para realizar a análise bibliométrica. Os resultados indicam que a gamificação contribui para o branding, o crescimento das vendas e o desempenho organizacional. Além disso, apoia a cocriação de valor, um elemento central do marketing contemporâneo, e promove a interação social por meio de fóruns on-line nos quais os usuários compartilham experiências, conhecimentos e feedback. As principais contribuições teóricas sugerem que a gamificação aumenta o engajamento do consumidor em experiências imersivas, amplia o reconhecimento da marca, fortalece a lealdade do cliente, fornece percepções valiosas sobre o comportamento do consumidor e estimula as vendas ao incentivar compras repetidas. Sob uma perspectiva gerencial, os achados destacam a importância de que os profissionais de marketing compreendam os elementos específicos dos jogos e sua influência sobre as respostas emocionais e o engajamento dos jogadores, a fim de implementar estratégias de gamificação que promovam experiências do cliente mais envolventes, interativas e personalizadas, contribuindo, em última instância, para o aumento da lealdade à marca, das vendas e da satisfação do cliente.

**Palavras-chave:** Bibliometrix, gamificação, inovação, marketing, inovação em marketing.

## Introduction

Technological advancements have increased human–computer interactions, thereby transforming modern marketing approaches. As a result, many companies are evolving their methods of engaging and attracting customers by integrating interactive human–computer mechanisms. Gamification is an emerging approach that has gained attention in the contemporary digital business environment. It refers to the use of game design elements in non-gaming contexts, such as marketing (Spais *et al.*, 2022). For example, companies are increasingly adopting gaming aspects, including challenge, design, fun, play, and transparency, and applying them to real-world contexts rather than purely for entertainment. In addition, gamification, as grounded in psychological principles, is associated with influencing behavior through motivation and engagement, which are critical dimensions in marketing (Thorpe & Roper, 2019). As a marketing tool, gamification makes brands more interactive by encouraging customers to participate in various promotional activities. Therefore, gamification in marketing can help brands build customer loyalty and strengthen customers' emotional attachment to the brand, thereby enhancing their competitive advantage.

In an era of digital transformation, gamification in marketing can effectively engage customers, build loyalty, and increase sales. In marketing, gamification applies game design elements in non-game contexts to engage and motivate consumers. Prior to the adoption of gamification, companies relied on other strategies to increase customer loyalty, including video games, loyalty programs, social media, and mobile technology. The rise of video games in the 1980s and 1990s popularized game mechanics such as points, badges, and leaderboards to motivate and engage players. Marketers have adapted these mechanics to their campaigns to incentivize customer behavior and engagement (Garcia *et al.*, 2018). Loyalty programs have long been part of marketing strategies, offering rewards for repeat purchases. Gamification builds on this by incorporating game mechanics into loyalty programs to make them more engaging and motivating for customers (Kinnett & Steinbach, 2021; La-Quadra *et al.*, 2020). Social media platforms such as Facebook and Twitter have popularized likes, shares, and other forms of social interaction to motivate and engage users. Gamification incorporates these social elements into marketing campaigns to increase engagement and virality (Nobre & Ferreira, 2017). Finally, the rise of mobile technology has enabled the delivery of gamified experiences to consumers anytime and anywhere. This development has allowed marketers to create mobile applications and other digital experiences that incorporate game mechanics to engage and motivate customers (Parapanos & Michopoulou, 2022; Rakhmanita *et al.*, 2022). Overall, gamification has emerged as a strategic marketing innovation due to the convergence of these and other factors, making it a powerful tool for engaging and motivating customers.

While other gamified contexts primarily focus on influencing people's behaviors in predetermined ways, gamification in marketing encourages customers to purchase products or services. In this context, companies use game elements to design engaging experiences that enable users and audiences to purchase the promoted services or products. For instance, in gamification, designers create systems characterized by the controlled pace of the game experience and the degree of compatibility between the game and the product (Thorpe & Roper, 2019). For example, some companies implement gamified loyalty programs in which customers collect points each time they make a purchase. These points can then be redeemed for

discounts or free products or services. Customers within such systems may consistently purchase products from a specific brand or outlet to accumulate enough points for the promised reward. In this regard, user engagement in gamified marketing techniques is perceived as a system output that leads to desired behavioral outcomes, including brand recall and purchasing behavior (Huotari & Hamari, 2017). However, Spais *et al.* (2022) note that although gamification offers numerous applications, greater coherence is required in its conceptualization, theorization, and implementation across sectors and brands. In addition, Huotari and Hamari (2017) and Thorpe and Roper (2019) indicate that the literature lacks systematic and bibliometric analyses of gamification as a marketing innovation. This study addresses this gap by conducting a systematic literature review to identify trends, emerging themes, and future research directions. Thus, this systematic bibliometric literature review (LRSB) aims to provide critical insights to support the implementation and integration of gamification into marketing practices and core business strategies.



The remainder of this paper is organized as follows. The next section presents the research methodology, including data collection, analysis, and visualization procedures. The following section presents the bibliometric findings based on the documents used in the bibliometric analysis. The subsequent section provides an in-depth analysis of the concept of gamification and its application in marketing. Finally, the paper concludes by highlighting the importance of gamification in marketing activities.

## Methodology

A literature review is a foundational research method that contributes to the systematic advancement of knowledge within a field (Trunfio & Rossi, 2022). This study employs a systematic review approach, a rigorous methodology that utilizes explicit and reproducible protocols to identify, select, and critically appraise relevant research, thereby ensuring a robust collection and analysis of data (Moher *et al.*, 2009). Furthermore, this process adheres to the principles of transparency, inclusivity, and heuristic depth as recommended by Denyer and Tranfield (2009). To complement the systematic review and provide a broader perspective on the field, a bibliometric analysis was integrated. This method allows for a structured examination of large datasets, enabling the identification of longitudinal trends, shifts in disciplinary boundaries, and the most prolific scholars and institutions (Aria & Cuccurullo, 2017). Rooted in science mapping and a quantitative research framework, this bibliometric analysis aims to chart the structural development and evolution of the discipline. To achieve this, the study follows the standard workflow proposed by Zupic and Čater (2015), focusing on the final four stages: data collection, data analysis, data visualization, and interpretation.

### *Data collection*

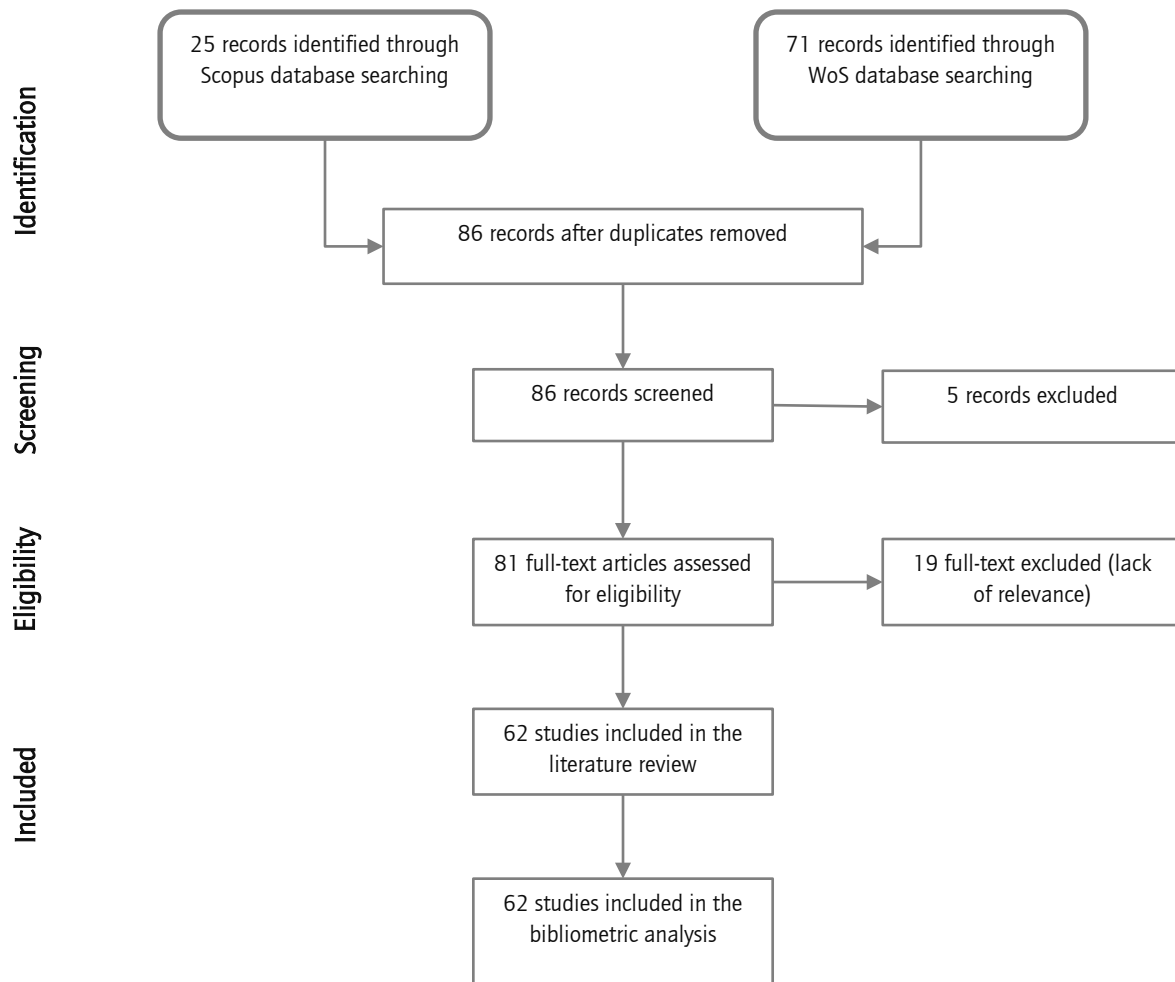
The initial sub-stage in data collection involves selecting the databases used to identify relevant publications for the literature review. Accordingly, the databases Scopus™, operated by Elsevier, and Web of Science™ (WoS), operated by Clarivate, were selected for the search. Scopus™ and WoS™ are among the largest and most comprehensive abstract and citation databases, covering a wide range of disciplines, including business, marketing, and technology. Their extensive collections of peer-reviewed journals ensure that the study draws on credible and up-to-date research. Furthermore, both databases curate content from reputable academic publishers, ensuring that the sources used in this study meet high academic and scientific standards. This contributes to the credibility and reliability of the study's findings.

The second sub-stage involves data loading and conversion. To achieve the objectives of this study, a combination of terms was selected to identify scientific literature on gamification within the marketing field. Using these keywords allows the search query to retrieve a comprehensive set of studies addressing the intersection of gamification, marketing strategies, and innovation. This approach facilitates a thorough understanding of the field, enabling the identification of gaps in the literature and the establishment of a solid foundation for the study.

For data loading, the keywords "gamification," "marketing," and "innovation" were used within the search string "(gamification AND marketing AND innovation)" and applied to titles, abstracts, and keywords. The workflow for the systematic literature review (figure 1) was conducted on December 9, 2022.

No exclusion criteria were applied during the initial search process, which returned 96 documents from the two databases. Ten duplicate documents were removed. At the end of the identification stage, 86 papers remained. Following the workflow, five documents classified as "books" were excluded, resulting in

a sample of 81 papers after the screening stage. In the next step, the full texts of these documents were reviewed to assess their eligibility. As a result, 19 full texts were excluded because their subject matter was not closely related to “gamification, marketing, and innovation.” Ultimately, 62 documents were included in the review and bibliometric analysis.



**Figure 1.** Systematic literature review workflow. Source: authors based on Moher *et al.* (2009).

For the conversion phase, we exported 19 records from Scopus™ and 43 records from WoS™ in “BibTeX” format. Using the R software (R Core Team, 2022), the two files were converted into a bibliographic data frame and merged into a single file in “.xlsx” format.

The final sub-stage is data cleaning, as the quality of the results depends on the quality of the data. To clean the dataset, we used the software OpenRefine™ (<https://openrefine.org>) to merge similar keywords (e.g., singular and plural forms, abbreviations), as well as variations in author names and journal title abbreviations.

### Data analysis

The R tool “Biblioshiny for Bibliometrix” (Aria & Cuccurullo, 2017) was used to conduct a comprehensive bibliometric analysis. The *bibliometrix* R package (<http://www.bibliometrix.org>) provides tools for quantitative research in bibliometrics and scientometrics. The data analysis comprised descriptive analysis and network extraction using different units of analysis (author, document, journal, reference, keyword, and country) (Aria & Cuccurullo, 2017).

The bibliometric analyses used in this study include co-word analysis (to examine the conceptual structure of a research field), co-author analysis (to examine the social structure and collaboration networks), and co-citation analysis (to detect shifts in paradigms and schools of thought).

### Data visualization

Visualization techniques are used to depict science maps and the outcomes of various analyses (Aria & Cuccurullo, 2017). One method employed is thematic analysis, which helps identify and explore themes in the literature. Thematic analysis is a process for identifying, analyzing, and describing patterns (themes) within data (Braun & Clarke, 2006).

## Bibliometric findings

The bibliometrics analysis was conducted on the 62 documents listed in table 1, highlighting the importance of the topic.

**Table 1.** List of the 62 documents analyzed.

Authors	Title	Year	Source Title
Adhiatma <i>et al.</i>	The role of personal dexterity and incentive gamification to enhance employee learning experience and performance	2022	Cognition Technology & Work
Andrade and Vaz	Using gamification to animate a virtual community	2013	7th European Conference on Games Based Learning, ECGBL 2013
Artamonov and Artamonova	Using gamification elements at every lifecycle stage of cloud system client service	2018	RPTSS 2018 - International Conference on Research Paradigms Transformation in Social Sciences
Ashley	Improving information literacy through gamification: Fantasy brand leagues	2019	Marketing Education Review
Barile and Bovalino	Empathic media, emotions and gamification: From the Fourth Industrial Revolution to the post-pandemic society	2020	H-Ermes-Journal of Communication
Bitrián <i>et al.</i>	Enhancing user engagement: The role of gamification in mobile apps	2021	Journal of Business Research

Authors	Title	Year	Source Title
Boboc <i>et al.</i>	Gamification and game-based learning - A solution for Romanian education system?	2018	Elearning Challenges and New Horizons, Vol 1
Ciuchita <i>et al.</i>	It is really not a game: An integrative review of gamification for service research	2022	Journal of Service Research
Conaway and Garay	Gamification and service marketing	2014	SpringerPlus
Dzandu <i>et al.</i>	Gamification of mobile money payment for generating customer value in emerging economies: The social impact theory perspective	2022	Technological Forecasting and Social Change
Garcia <i>et al.</i>	Developing and testing a new tool to foster wind energy sector industrial skills	2021	Journal of Cleaner Production
Garcia <i>et al.</i>	Dealing with transformation in a VUCA world: A competence-based development project applying transmedia storytelling and gamification for an international corporation	2017	Proceedings of the 11th European Conference on Games Based Learning (ECGBL 2017)
Garcia-Magro and Soriano-Pinar	Design of services in servitized firms: Gamification as an adequate tool	2019	Journal of Business & Industrial Marketing
Garcia <i>et al.</i>	Welcome aboard: Applying motivational design to a corporate onboarding project	2018	Proceedings of the European Conference on Games-Based Learning
Harman <i>et al.</i>	Scholarly interest in gamification: A citation network analysis	2014	Industrial Management & Data Systems
Huotari and Hamari	A definition for gamification: Anchoring gamification in the service marketing literature	2017	Electronic Markets
Ikhide <i>et al.</i>	A balanced perspective on the affordance of a gamified HRM system for employees' creative performance	2022	Personnel Review
Jipa and Marin	Enterprise gamification in business to consumer (b2c) engagement model	2014	Proceedings of the 8th International Management Conference: Management Challenges for Sustainable Development
Jreissat and Makatsoris	Towards consumer driven food new product development: A closed-loop platform	2022	International Journal of Computer Integrated Manufacturing
Kinnett and Steinbach	A case study in the use of salesforce trailhead to teach a course in CRM implementation	2021	Proceedings of the Information Systems Education Conference, ISECON 2021
Korcsmaros <i>et al.</i>	Streamlining managerial skills of generation Z and Y by gamification	2019	12th International Conference of Education, Research and Innovation (ICERI 2019)
Kornevs <i>et al.</i>	Gamification of a procurement process for professional training of public servants	2019	International Journal of Serious Games
Leclercq <i>et al.</i>	The boundaries of gamification for engaging customers: Effects of losing a contest in online co-creation communities	2018	Journal of Interactive Marketing

Authors	Title	Year	Source Title
Leite <i>et al.</i>	Visual management and gamification: An innovation for disseminating information about production to construction professionals	2022	Applied Sciences-Basel
Lent and Marciniak	Enhancing tourism potential by using gamification techniques and augmented reality in mobile games	2019	Vision 2025: Education Excellence and Management of Innovations Through Sustainable Economic Competitive Advantage
Li <i>et al.</i>	Poverty alleviation oriented digital agricultural gamification development: Cases from Yunnan province	2021	Journal of Library and Information Science in Agriculture
Lynch and Ghergulescu	Review of virtual labs as the emerging technologies for teaching stem subjects	2017	INTED2017: 11th International Technology, Education and Development Conference
Makris <i>et al.</i>	Digitization era for electric utilities: A novel business model through an inter-disciplinary S/W platform and open research challenges	2018	IEEE Access
Makris <i>et al.</i>	SOCIAENERGY: A gaming and social network platform for evolving energy markets' operation and educating virtual energy communities	2018	2018 IEEE International Energy Conference (Energycon)
Marcoa <i>et al.</i>	Gamifying the product quality reviews in the pharmaceutical industry	2019	Proceedings of the 20th European Conference on Knowledge Management (ECKM 2019), Vols 1 and 2
Markova and Gechkova	Let's play--The gamification method in education	2019	9th International Conference on the Future of Education
Mehrbod <i>et al.</i>	Gamification in supported geocaching tours	2018	2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings
Merhabi <i>et al.</i>	Gamification for brand value cocreation: A systematic literature review	2021	Information
Miciula and Miluniec	Gamification 3.0 for employees' involvement in the company	2019	12th International Conference of Education, Research and Innovation (ICERI 2019)
Milanesi <i>et al.</i>	Let's play! Gamification as a marketing tool to deliver a digital luxury experience	2022	Electronic Commerce Research
Mindeguia <i>et al.</i>	Gamification: An approach in the Master of Business innovation and project management	2019	13th International Technology, Education and Development Conference (INTED2019)
Nobre and Ferreira	Gamification as a platform for brand co-creation experiences	2017	Journal of Brand Management
Oliver	Gamification as transformative assessment in higher education	2017	HTS: Theological Studies

Authors	Title	Year	Source Title
Otero <i>et al.</i>	How to increase revenue generation by maximizing the (customer) experience of the digital learner?	2017	9th International Conference on Education and New Learning Technologies (EDULEARN17)
Pamfile <i>et al.</i>	A case study of business model innovation: Building value through gamification	2020	2020 BASIQ International Conference: New Trends in Sustainable Business and Consumption
Panasenko <i>et al.</i>	Innovative approach to fitness industry development	2018	Espacios
Parapanos and Michopoulou	Innovative mobile technology in hotels and the use of gamification	2022	Tourism Planning & Development
Parra and Torres	Gamification as a learning resource for design teaching	2018	Eari-Educacion Artistica-Revista de Investigacion
Patricio <i>et al.</i>	Gamification approaches to the early stage of innovation	2018	Creativity and Innovation Management
Pisano <i>et al.</i>	Identify innovative business models: Can innovative business models enable players to react to on-going or unpredictable trends?	2015	Entrepreneurship Research Journal
Raftopoulos	Playful card-based tools for gamification design	2015	OZCHI 2015: Being Human – Conference Proceedings
Rakhmanita <i>et al.</i>	Confirmatory factor analysis: User behavior M-commerce gamification service in Indonesia	2022	International Journal on Informatics Visualization
Reginato <i>et al.</i>	Counting challenges: A teaching case about serious game development	2017	9th International Conference on Education and New Learning Technologies (EDULEARN17)
Robson <i>et al.</i>	Is it all a game? Understanding the principles of gamification	2015	Business horizons
Rocha <i>et al.</i>	The role of the predictive gamification to increase the sales performance: A novel business approach	2019	Journal of Business & Industrial Marketing
Sanchez <i>et al.</i>	Gamification as a comprehensive training tool: 'Serious game UFV' entrepreneurial experience	2017	EDULEARN17 Proceedings
Shpakova <i>et al.</i>	Gamifying the process of innovating	2020	Innovation-Organization & Management
Spais <i>et al.</i>	Promotion and Branding from the Lens of Gamification in Challenging Times	2022	Journal of Promotion Management
Suciu <i>et al.</i>	Gamification for accelerating the go-to-market of electric vehicle batteries	2016	Elearning Vision 2020, Vol I
Tayal <i>et al.</i>	Gamification with datathon: An industry case study on COVID-19	2022	Proceedings – 2022 6th International Conference on Intelligent Computing and Control Systems, ICCC 2022
Thorpe and Roper	The ethics of gamification in a marketing context	2019	Journal of business ethics
Torres <i>et al.</i>	The creation of a marketing plan through serious gaming: a jeans brand experience in the UFV	2018	11th International Conference of Education, Research and Innovation (ICERI2018)

Authors	Title	Year	Source Title
Trigo-De la Cuadra <i>et al.</i>	Could gamification improve visitors' engagement?	2020	International Journal of Tourism Cities
Vallet-Bellmunt <i>et al.</i>	The mobile in the classroom helps to raise the note	2018	Actas del Congreso Virtual: Avances en Tecnologías, Innovación y Desafío de la Educación Superior (ATIDES 2018)
Varelas	Virtual immersive platforms as a strategic innovative destination marketing tool in the COVID-19 era	2022	Sustainability
Yang <i>et al.</i>	Research on the effect and mechanism of leaderboard and red packet on purchasing behavior in gamification elements	2018	Proceedings of 2018 China Marketing International Conference: Smart Marketing: Human, Technology and Innovation
Yang <i>et al.</i>	Gamification of mobile wallet as an unconventional innovation for promoting fintech: An fsQCA approach	2023	Journal of Business Research

Source: authors.

These 62 articles were analyzed narratively, describing and comparing the insights of each study. This narrative approach presents the evolution of knowledge on gamification applied to marketing, highlighting the development of ideas, theories, and findings over time. This method describes the studies and connects them, illustrating how one concept led to another and how gaps in the literature have been addressed.

### *Publication trend*

Research on the topic under study can be divided into three phases (figure 2). The first phase (2013–2016) is characterized by low output, with a maximum of three publications in 2014 and 2015. The second phase (2017–2019) is the most productive, with 13 publications in 2018. The final one (2020–2022) shows lower output than the previous phase but higher output than the first. These publication trends indicate that gamification as a strategic marketing innovation is an emerging area of research.

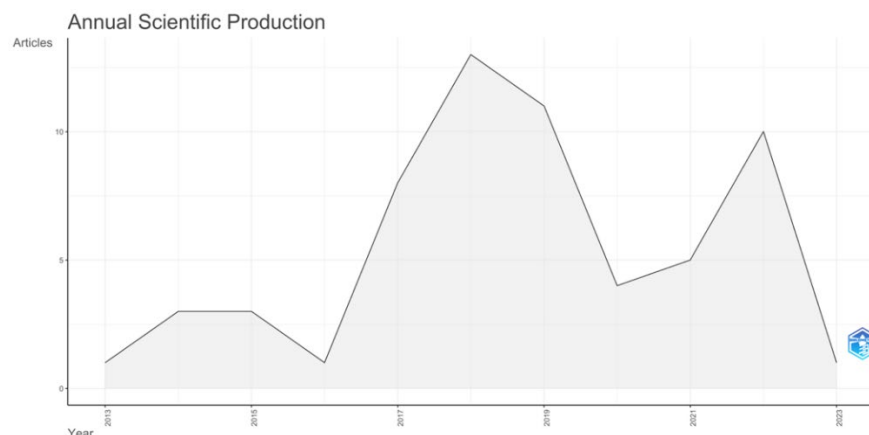


Figure 2. Annual scientific production. Source: authors.

### Most relevant sources

Table 2 illustrates the sources that have published the highest number of documents on this topic. The *9th International Conference on Education and New Learning Technologies (EDULEARN17)* stands out as the leading source, with three published papers. The conference proceedings of the *12th International Conference of Education, Research and Innovation (ICERI 2019)*, the *Journal of Business & Industrial Marketing*, and the *Journal of Business Research* rank second, each with two publications.

Table 2. Most relevant sources.

Sources	Number of documents
9th International Conference on Education and New Learning Technologies (EDULEARN17)	3
12th International Conference of Education, Research and Innovation (ICERI 2019)	2
Journal of Business & Industrial Marketing	2
Journal of Business Research	2
11th International Conference of Education, Research and Innovation (ICERI2018)	1
13th International Technology, Education and Development Conference (INTED2019)	1
2017 International Conference on Engineering, Technology and Innovation	1
2018 IEEE International Energy Conference (Energycon)	1
2020 BASIQ International Conference	1
7th European Conference on Games Based Learning, ECGBL 2013	1

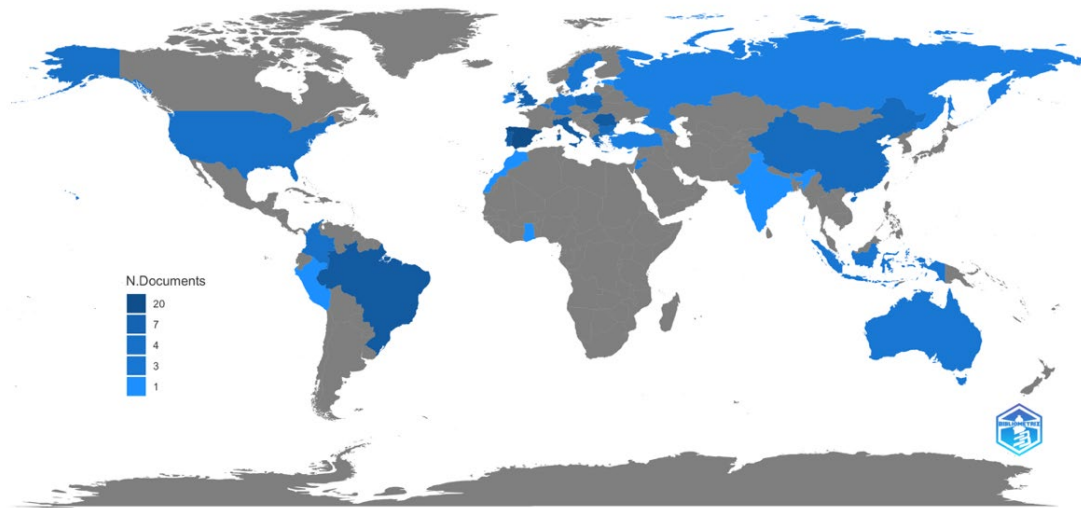
### *Seminal papers*

Analyzing the most cited documents helps identify seminal articles recognized within the scientific community. Global citations indicate the total number of times a document has been cited across the entire database, reflecting its overall impact within the bibliographic record. Table 3 shows the number of citations received by each article, identifying the seminal works. With 386 citations, the article *“Is It All a Game? Understanding the Principles of Gamification”* (Robson *et al.*, 2015) is the most cited, followed by *“A Definition for Gamification: Anchoring Gamification in the Service Marketing Literature”* (Huotari & Hamari, 2017), with 296 citations, and *“Gamification and Service Marketing”* (Conaway & Garay, 2014), with 58 citations.

**Table 3.** Most global cited documents.

Documents	Global Citations
Robson <i>et al.</i> , 2015, Business horizons	386
Huotari and Hamari, 2017, Electronic Markets	296
Conaway and Garay, 2014, SpringerPlus	58
Leclercq <i>et al.</i> , 2018, Journal of Interactive Marketing	55
Nobre and Ferreira, 2017, Journal of Brand Management	49
Pisano <i>et al.</i> , 2015, Entrepreneurship Research Journal	45
Bitrián <i>et al.</i> , 2021, Journal of Business Research	44
Harman <i>et al.</i> , 2014, Industrial Management & Data Systems	32
Thorpe and Roper, 2019, Journal of Business Ethics	32
Patricio <i>et al.</i> , 2018, Creativity and Innovation Management	20

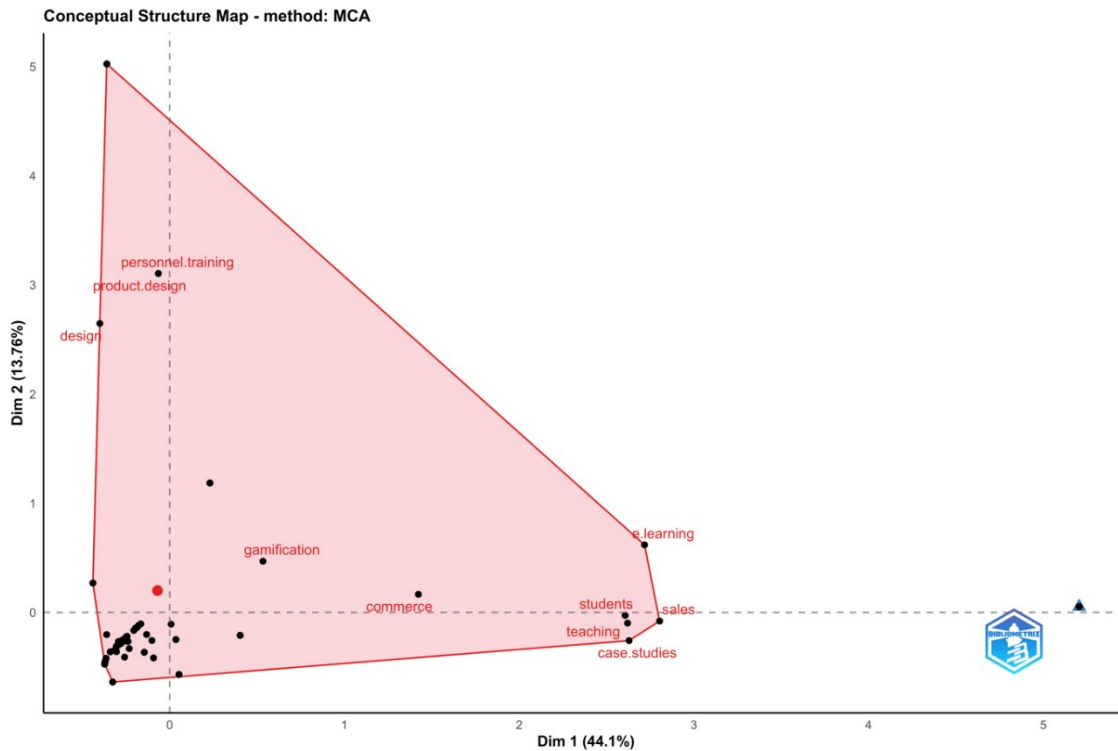
Regarding countries' scientific production, figure 3 shows that Spain accounts for 21 publications. Italy ranks second, with 12 publications, followed by Brazil, Romania, and the United Kingdom, each with 11 publications. The countries highlighted in blue on the map have published research on the topic; the more intense the color, the greater the production. However, the two most cited countries are Canada and Finland, with 386 and 297 citations, respectively. Portugal, with 69 citations, is close to the top three.



**Figure 3.** Scientific production by country. Source: authors.

### *Keywords and themes papers*

We obtained a conceptual structure map in figure 4 by applying a multiple correspondence analysis (MCA) method to the keywords. The basic idea behind this factorial approach is to reduce the dimensionality of the data and represent it in a low-dimensional space. The proximity between words reflects shared content: keywords appear close to each other because many articles address them together, whereas they are distant when only a small number of articles use these words jointly. Thus, dimension 1 includes 44.1% of the keywords related to gamification, commerce, students, e-learning, sales, and similar topics. Dimension 2 includes only 13.76% of the keywords and refers to topics such as personnel training, product design, and design.



**Figure 4.** Conceptual structure map of research on gamification as a strategic marketing innovation. Source: authors.

By applying a clustering algorithm to the keyword network, it is possible to highlight the different themes within a given domain. Each cluster or theme can be represented in a plot known as a strategic or thematic map, where centrality indicates the importance of the theme within the overall research field, and density reflects the degree of development of the theme. Figure 5 summarizes the results in several research themes mapped in a two-dimensional space defined by importance (centrality) and development (density). The map classifies research on gamification as a strategic marketing innovation into four groups: motor themes (high centrality and high density), niche themes (high centrality and low density), emerging or declining themes (low centrality and low density), and basic themes (low centrality and high density). Motor themes represent the most populated area, with two clusters. The niche and emerging or declining themes each contain one cluster, while the basic themes quadrant does not include any specific clusters. The clusters "loyalty and tourism" and "COVID-19" do not belong to any specific theme

Emerging themes (lower-left quadrant) include "motivation, self-determination theory, virtual reality" and "self-determination theory." Motor themes (upper-right quadrant) identify well-developed and relevant subjects of academic investigation that can drive future research. The results show that gamification as a strategic marketing innovation has been examined through themes such as "gamification," "commerce," and "case studies." This stream of research provides a basis for developing related aspects such as "experience," "framework," and "dominant logic." Basic themes (lower-right quadrant) include topics such as "innovation," "engagement," and "model."

Niche themes (upper-left quadrant) present a cluster with “design,” “personnel training,” and “product design” as the most prominent subjects. Finally, “loyalty” and “tourism” are themes with low development and a moderate degree of relevance that cannot be classified as niche, emerging, or declining themes. Similarly, “COVID-19” is a theme with low relevance and a moderate degree of development, positioned between emerging or declining themes and basic themes. Table 4 summarizes the research themes and the corresponding number of documents.

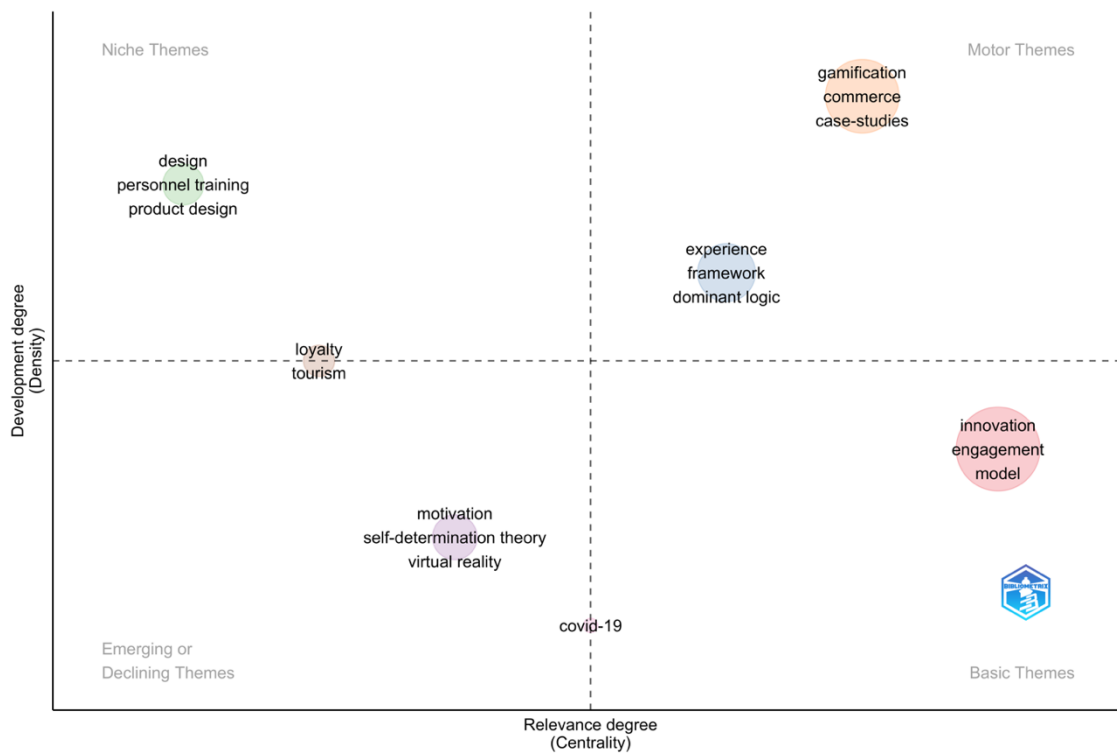


Figure 5. Thematic map of research on gamification as a strategic marketing innovation. Source: authors.

Table 4. Research themes and number of documents.

Research themes	Number of documents
Gamification, commerce, and case studies	5
Experience, framework, dominant logic	5
Design, personnel training, product design	3
Innovation, engagement, model	8
Motivation, self-determination theory, virtual reality	2
Loyalty, tourism	2

## Theoretical perspectives

In recent years, the use of game artifacts has increased across marketing initiatives, including branding, customer engagement, and promotions. Companies are increasingly integrating their advertising units with interactive games, creating immersive, engaging, and enjoyable experiences for customers (Garcia *et al.*, 2017). This approach helps customers remember a brand and may drive purchases, resulting in a successful gamified campaign. Common gamified elements in marketing include leaderboards, rewards, and countdowns. Incorporating these elements delivers multiple benefits, including strengthening brand loyalty, increasing brand awareness, enhancing user engagement, and boosting conversion rates (Lent & Marciniak, 2019). Therefore, game elements can improve organizational performance when appropriately integrated into marketing strategies. This section provides an in-depth analysis of gamification and its application in marketing, offering insights that can be implemented to leverage existing opportunities. It is divided into two subsections. The first defines gamification, including its elements, principles, and processes, while the second examines marketing perspectives on gamification and its applications.

### *Definition of gamification*

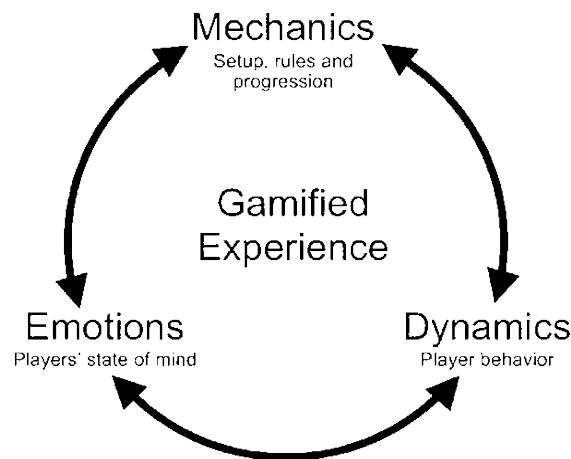
The term "gamification" is defined in various ways in the literature. While its most widely cited definition refers to the use of game elements in non-gaming contexts, some researchers have proposed more specific definitions to help practitioners better understand how to incorporate them into practice. For instance, Huotari and Hamari (2017, p. 25) define it as "a process of enhancing a service with affordances for gameful experiences to support users' overall value creation." Unlike the common definition that focuses on the methods, this definition emphasizes the goal of gamification, namely creating gameful experiences for target audiences. Similarly, Milanese *et al.* (2022) define gamification as the art and science of converting customers' daily interactions into games that serve an organization's objectives. In addition, gamification can be defined as the integration of game mechanisms into a pre-existing system, service, or product to motivate consumers to complete a specific task. The concept can therefore be understood from multiple perspectives, including desired outcomes, design principles, processes, and systems. Despite differences in definitions, common elements include influencing, engaging, and motivating users.

Gamification is more effective when it applies principles of motivational science to transform routine tasks into enjoyable experiences. For example, gamifying high-value interactions with customers, employees, and partners can increase revenue, foster greater cooperation, improve return on investment (ROI), deepen loyalty, and enhance customer satisfaction (Pisano *et al.*, 2015; Yang *et al.*, 2023). In addition, gamification frequently employs game design elements to increase user engagement, creating positive and memorable experiences that help users recall the brand. In marketing, gamification occurs when a brand uses a well-known game template to promote a new

product or service while offering easily attainable rewards (Varelas, 2022). This approach has proven more effective, valued, and widely shared than the generic incentives often attached to the end of traditional advertising campaigns.

*Principles of gamification*

Gamification borrows concepts from game design and applies them to enhance user experiences. As a result, gamification principles are based on game design elements and their impact on improving aspects such as ease of use and overall enjoyment among target users. This section explores the gamification elements proposed by Robson *et al.* (2015) through the MDE framework, which includes mechanics, dynamics, and emotions (figure 6). This framework highlights the importance of understanding game elements and their influence on players' emotional responses and engagement.



**Figure 6.** MDE framework of gamification principles. Source: Robson *et al.* (2015).

**Mechanics**

Mechanics are the decisions made by designers tasked with gamifying a non-game setting to establish the goals, rules, setting, and context, and to determine the interactions (i.e., opponents) and restrictions of the scenario to be gamified (Uribe *et al.*, 2020). In this regard, designers must clearly communicate these gamification elements to ensure that players understand them before the experience begins, and they must remain constant throughout the experience. In other words, they do not vary from one player to another and remain consistent each time players participate in the experience (Garcia *et al.*, 2018). For example, in organizational control theory, mechanics can

be understood as the structures and technologies that managers may use to produce desired behaviors and outputs.

Setup, rule, and progression mechanics are three types of mechanics that are crucial in games and gamified experiences. Setup mechanics refer to factors that characterize the environment of the experience. These include variables such as the setting, the objects required, and how they are shared among players (Robson *et al.*, 2015). In this case, designers use setup mechanics to decide who a player competes against, whether well-known or unknown, an individual or a group, internal or external. These aspects significantly influence the overall context of the gamified experience (Garcia-Fernandez *et al.*, 2017). On the other hand, rule mechanics determine the objective of the gamified experience to be pursued (Garcia *et al.*, 2021). They specify acceptable player behaviors and explain limitations (for example, time limits) that restrict players' actions and impose pressure on participants. Rule mechanics can be deterministic, producing the same result every time if the player input is the same, or nondeterministic, particularly when probability elements are included or when players can communicate with one another (Panasenko *et al.*, 2018). Other rule mechanics can be topological, explaining what occurs when a player lands on a specific physical or virtual location.

Finally, progression mechanics refer to game design elements in which designers establish a sequence of actions that players must follow to progress in the game. Thus, gameplay progression relies mainly on checkpoints that a character must achieve to move to the next level. These checkpoints vary depending on the game genre (Robson *et al.*, 2015). For instance, in action, adventure, and role-playing games (RPGs), key checkpoints may include defeating a level boss, ranking among the top three on a specific track, or solving problems in a puzzle game.

## Dynamics

Gamification dynamics refer to the different player behaviors that arise as the experience progresses. For example, in a competition-based game, players are more likely to become competitive, cooperate, or cheat to achieve specific desired outcomes (Vallet-Bellmunt *et al.*, 2018). In this context, gamification dynamics reflect players' behaviors as they attempt to achieve desired goals or outcomes. Unlike designer-defined mechanics, gamification dynamics depend on players' responses to the mechanics established by designers (Robson *et al.*, 2015). As a result, these dynamics define in-game behaviors and the strategic actions and exchanges that occur throughout gameplay.

For instance, in the context of multiplayer card games, poker mechanics such as shuffling, trick-taking, and betting can generate numerous dynamics, including bluffing, cheating, plotting, and boasting (Harman *et al.*, 2014; Tayal *et al.*, 2022). However, because players vary in personality and behavior, gamification dynamics are difficult to predict. For example, team-based game

structures may lead to cooperative dynamics but may also generate conflicts among team members due to differences in skills and playing strategies (Patricio *et al.*, 2018). Therefore, designers cannot fully predict player behavior, which may lead to unintended outcomes, both positive and negative.

### Emotions

When individual players participate in gamified experiences, they experience affective reactions and psychological states referred to as emotions. These emotions result from how players interact with mechanics and generate dynamics. In addition, emotions in gamified experiences are expected to be enjoyable and compelling at both practical and emotional levels (Robson *et al.*, 2015). Therefore, designers must recognize that players may discontinue participation if the experience is not enjoyable, making player enjoyment a critical factor in achieving and maintaining engagement in gamification. These positive reactions and states may take various forms, including exhilaration, amusement, awe, surprise, and a sense of personal triumph over challenges (Barile & Bovalino, 2020). However, gaming experiences may also produce negative emotions, such as disappointment or frustration when players fail to obtain a desired reward or outcome.

### *Elements of gamification*

Gamification elements characterize the gamified experience, including rules, setup, and progression. These elements include leaderboards, badges, feedback, points, achievement tiers, challenges, goals, and social networks. Conaway and Garay (2014) define them as the elements and tools of gamification processes and classify them into four fundamental components (figure 7).

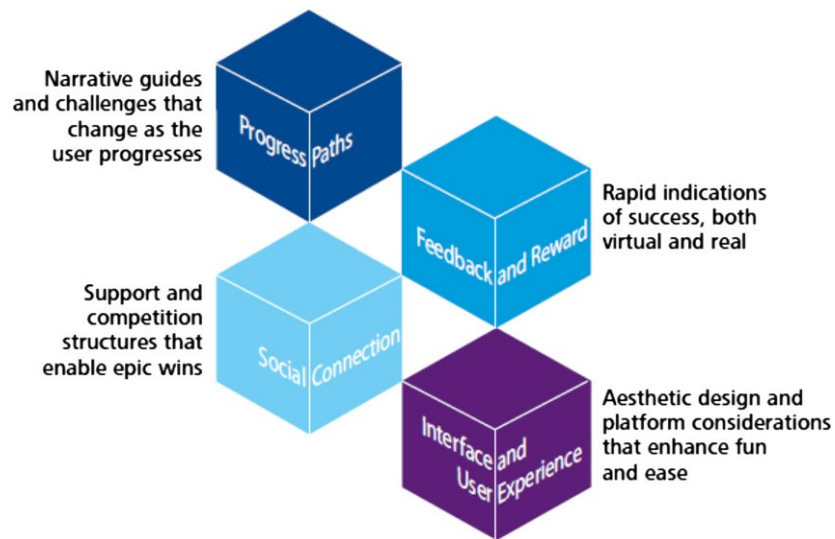


Figure 7. Elements of gamification. Source: Conaway and Garay (2014).

**Progress paths**

This element uses challenges and evolving narratives to encourage players to complete specific tasks. A narrative that leads to a challenge attracts participants and provides a sense of direction and purpose, thereby engaging them in the gamified experience. Conaway and Garay (2014) explain that gamification often begins with simple tasks that progressively evolve into more complex challenges, thereby increasing engagement.

**Feedback and rewards**

Gamified environments utilize virtual and monetary rewards to signify success. Participants often receive updates on their goals and progress through on-screen notifications, messages, word of mouth, or emails (Artamonov & Artamonova, 2018). This feedback fosters a sense of progress, motivating participants to maintain momentum and strive for greater achievements.

**Social connection**

Social connection leverages customers’ social networks to foster competition and support. The goals, badges, contests, and other mechanics of a gamified initiative gain greater significance when integrated with a community (Yang et al., 2018). Players are inherently social, and their interactions significantly influence their emotions and actions. Consequently, many gamification programs allow quick connectivity with friends and social networks, which is a crucial component of gamification’s

## Interface and user experience

Users are more likely to adopt a gamified experience when it includes an attractive user interface (UI) and user experience (UX). This can be achieved through various features, including video game graphics and web page design (Jreissat & Makatsoris, 2022). While UI refers to users' interaction with computer systems, software, and applications, UX focuses on the overall experience users have with a brand, product, or service.

## *Marketing perspectives on gamification*

Gamification refers to the implementation of game design concepts in non-game environments. It is used to make a company's offering—such as an application, product, or service—more entertaining, engaging, and compelling. In addition, Andrade and de Carvalho (2013) define it as the art and science of transforming an organization's customers' ordinary interactions into games that support its goals. According to some scholars, gamification can be understood as a set of design concepts, techniques, and systems (Parra & Torres, 2018) used to influence, engage, and inspire individuals, organizations, and communities, thereby shaping behavior and producing the intended outcomes (Garcia-Magro & Soriano-Pinar, 2019). Game dynamics, gaming strategies, and game-style incentives originating from gaming software have increasingly been applied in commercial contexts to enhance consumer engagement. Consequently, gamification has emerged as a rapidly growing trend in non-gaming contexts, including marketing, often involving the development of applications with game-like features.

Most gamification research in marketing focuses on branding and highlights the significant benefits of applying game principles. For instance, gamification relates to key marketing constructs such as brand engagement, brand attitude, brand awareness, co-creation experiences, and brand love. In addition, Ciuchita et al. (2022) demonstrate that the use of game dynamics in marketing contexts increases consumer loyalty and sales. For example, integrating reward or point systems into marketing strategies encourages customers to repeatedly purchase from a brand to redeem points for promised benefits, such as discounts or monetary rewards (Korcsmaros et al., 2019). This strategy increases sales while simultaneously strengthening customer loyalty. Furthermore, gamification enhances services by providing affordances for gameful experiences that support users' overall value creation (Suciu et al., 2016). It is therefore applied in concepts such as value-in-use, service packaging, and service systems within service marketing. As a result, e-commerce platforms can use gamification technologies to create content, convert customers, increase value creation, and strengthen loyalty.

Given the conceptual gaps in the literature on gamification and marketing, some organizations have attempted to provide definitions and insights to guide practitioners in its implementation. For example, the American Marketing Association defines gamification as

leveraging the psychological and sociological mechanisms that drive engaging gaming experiences for consumer evaluation (Conaway & Garay, 2014). This definition considers how players' behaviors and their social and emotional responses can be used to better understand and target consumers in marketing efforts. Similar ideas are presented in research by Milanese et al. (2022), which suggests that game mechanics incorporated into gamified marketing experiences can influence motivation. The authors identify three primary dimensions of game-related motivation: "immersion-related, achievement-related, and social interaction-related dimensions" (p. 4). The immersion-related dimension involves players' deep engagement in self-directed exploration through features such as role-playing, avatars, and narrative structures. For example, role-playing allows players to assume a character and participate in the game's fictional environment (Shpakova et al., 2020). Such participation enhances player involvement and may positively influence marketing outcomes, including brand recall.

Achievement-related aspects, in contrast, focus on strengthening players' sense of success. Game mechanics such as challenges, missions, goals, badges, and progression metrics allow players to advance through success levels embedded in the game structure (Kinnett & Steinbach, 2021). Finally, interaction-related characteristics facilitate social interaction among players through structures such as teams, groups, communities, and competitive dynamics. Marketing research shows that achievement- and social interaction-related gamification characteristics are positively associated with emotional, cognitive, and social brand engagement, as well as brand equity (Leite et al., 2022). As a result, gamification is widely regarded as an effective tool for brand management.

Gamification also has the potential to significantly enhance player motivation and emotional engagement, both of which are critical in marketing. Two types of motivation are commonly identified: intrinsic and extrinsic. Extrinsic motivation refers to external rewards such as money or other tangible benefits. In marketing contexts, firms often use incentives such as discounts and coupons to encourage customers to engage with or purchase products and services. Intrinsic motivation, in contrast, relates to internal satisfaction and positive feelings associated with personal achievement (Torres et al., 2018). For example, community-building initiatives can create participatory experiences that foster positive emotions and individual satisfaction among customers or prospects. Gamified marketing experiences often encourage players to learn, join, or continue participating in an activity, thereby increasing consumers' knowledge of the product or brand (Lynch & Ghergulescu, 2017). For instance, storytelling elements in game design may provide players with additional information about a brand or its products and services.

In such experiences, players typically progress through levels based on their achievements and accumulated points. Consequently, participants learn while engaging with the gamified experience, which may encourage them to interact with or purchase from the promoted brand. This process can lead to increased sales, stronger engagement, and enhanced customer loyalty (Rocha

et al., 2019). These findings suggest that when individuals are genuinely motivated, they develop enthusiasm for the activity and derive greater enjoyment from participation.

However, marketing strategies that rely primarily on extrinsic motivation often prove less effective in generating long-term loyalty than approaches based on intrinsic motivation. Contemporary marketing research indicates that membership systems, loyalty programs, and point-based reward schemes centered on tangible incentives are generally less effective than strategies that foster internal satisfaction and a sense of achievement, such as gamification (Milanesi et al., 2022). The literature identifies four key considerations that can improve the effectiveness of gamification in marketing. First, game mechanics should support competition and reward attainment. Second, game techniques may function differently across populations. Third, gamification tends to be more effective when implemented as a long-term engagement strategy rather than a one-time initiative. Finally, gamification practices should encourage users to complete specific tasks without attempting to excessively manipulate or alter their attitudes or behaviors. Understanding these perspectives can help marketers and designers develop effective gamification strategies that achieve marketing objectives while creating meaningful gameful experiences for target audiences.

### *Benefits of gamification in marketing*

Gamification marketing creates immersive, engaging, and enjoyable experiences that help customers remember the brand. It represents a marketing opportunity that allows businesses across industries to deliver messages effectively and creatively to their target audiences (Li et al., 2021). As a result, marketers increasingly leverage this strategy to maximize their marketing initiatives and achieve desired objectives. This section explores the benefits of gamification in marketing and provides insights into how organizations can leverage these benefits to enhance organizational performance and productivity.

### *Facilitating brand value co-creation*

With rapid technological advances in the digital era, interactive value co-creation has become essential in marketing. Consumers no longer wish to remain passive recipients of marketing messages. Instead, they prefer a two-way communication process in which their opinions and feedback are incorporated into the brand's value-creation processes. As a result, gamification has emerged as a marketing strategy that enables brands to engage their target audiences in promotional activities. Nobre and Ferreira (2017) explain that gamification can be understood as a service system composed of processes that are co-created by designers and players. In this context, these stakeholders apply their knowledge and skills to support value creation through marketing activities, consumption, and feedback.

Value co-creation in gamified marketing occurs in two main forms: experience value co-creation and brand value co-creation (Merhabi et al., 2021). Experience value co-creation occurs when consumers' involvement is limited to participating in a gamified experience that ultimately enhances brand loyalty. In contrast, brand value co-creation refers to consumers' participation in business-related activities such as endorsing, promoting, collaborating, and sharing expertise with firms, which can lead to brand innovation and growth (Makris et al., 2018). Moreover, the service-dominant logic perspective suggests that brand value is co-created through networks of relationships and social interactions among stakeholders, including consumers and communities (Nobre & Ferreira, 2017). These perspectives indicate that customers act as operant resources in both the game and the brand value co-creation process. Therefore, gamified systems can be considered innovative management tools for fostering brand innovation while strengthening a firm's image of innovativeness and its overall brand perception and reputation.

Another way gamification facilitates brand value co-creation is through social interaction. Nobre and Ferreira (2017) also note that gamification can be integrated with online social networks through game elements such as leaderboards. These networks create an informal environment in which players can interact and exchange information with peers, including performance-related data, thereby making the experience more enjoyable. In this context, players share information that designers and marketers can use to enhance brand value (Markova et al., 2019). For instance, when players share experiences related to promoted products, services, or gaming features, designers and marketers can use these insights to improve both the gamified experience and the associated offerings (Marco et al., 2019). Furthermore, many players value incentives, rankings, social recognition, and interaction through social networks. Consequently, implementing more active engagement strategies across business activities can strengthen leadership capabilities while increasing consumer participation and collaboration with the firm.

### *Building virtual communities*

A community consists of individuals who voluntarily collaborate because they share common interests and wish to learn from one another in order to expand their knowledge and capabilities. Communities exist in multiple contexts, including government institutions, business associations, the social sector, and organizations (Mehrbod et al., 2017). Such communities may develop through either top-down or bottom-up initiatives and typically persist as long as participants perceive value in their involvement.

In gamification contexts, games bring together individuals interested in shared gaming experiences, thereby forming virtual communities of practice (Miciula & Miluniec, 2019). These communities allow players to interact and exchange experiences and knowledge about game mechanics, such as strategies for progressing through achievement levels. Organizations can leverage these communities to build loyal customer bases by offering incentives that reinforce

interaction and collaboration (Makris et al., 2018). For example, team-based games require players to collaborate to achieve specific outcomes. In such cases, participants may use integrated social networking platforms or forums to share practical knowledge and strategies, thereby strengthening relationships and increasing commitment and motivation.

Several factors should be considered when designing effective online communities. First, member behavior is critical. Gamification as a marketing tool requires a community manager who understands the members, their objectives, the benefits they derive from the community, and the factors that unite them (Raftopoulos, 2015). This understanding helps ensure that the gamified experience and its features align with the needs and expectations of community members, thereby strengthening their motivation to participate (Dzandu et al., 2022). Gamification initiatives are more likely to succeed when participants' motivations are clearly understood. Second, realistic objectives are essential. The overall goal is to motivate consumers to achieve specific outcomes, such as purchasing promoted products or services (Mindeguia et al., 2019). However, complex or unrealistic goals may discourage participation and lead to dissatisfaction. Therefore, establishing achievable objectives is essential for maintaining engagement and achieving marketing goals.

### *Increasing engagement*

Customer engagement (CE) refers to the depth and breadth of consumer relationships with key elements such as brands, communities, activities, platforms, and processes. Highly engaged customers are more likely to advocate for a brand, participate in collaborative activities, and share their knowledge with others (Moreno-Delacruz et al., 2021). Consequently, such customers often develop long-term relationships with firms.

Given the growing importance of building engaged customer bases, organizations seeking to co-create value with their customers face significant challenges in developing CE. However, previous studies indicate that firms can enhance CE by providing effective interactive platforms (Pamfilie et al., 2020). Gamified marketing initiatives represent one such platform designed to create, manage, and sustain engagement. Trigo-De la Cuadra et al. (2020) define gamification as the use of game-related concepts to influence stakeholder behavior and outcomes in non-game contexts. The authors suggest that this concept has recently gained attention among practitioners, partly because it is perceived as an effective way to enhance user satisfaction and generate CE. Furthermore, research in educational sciences suggests that gamification mechanics can facilitate learning and resource integration, two key processes underlying CE (Reginato et al., 2017). Consequently, various domains—including intra-organizational management, mobile marketing, and e-commerce—are increasingly adopting gamification as a marketing tool to increase consumer engagement and its associated benefits, such as increased sales, brand awareness, and brand loyalty.

Engagement is frequently considered a central concept in gamification research. Accordingly, studies indicate that gamification can influence four levels: in-game, intra-organizational, customer, and transformational (Bitrián et al., 2021). At the in-game level, gamification enhances the user experience by increasing effort, persistence, and usage intentions. For example, engagement may be stimulated through challenges that require players to complete specific tasks to overcome obstacles (Leclercq et al., 2018). In such cases, varying levels of difficulty make task completion and reward attainment uncertain, thereby increasing the appeal of the experience. Trigo-De la Cuadra et al. (2020) explain that when participants face uncertainty, they learn to master tasks and overcome difficulties by accepting challenges, generating feelings of success and competence.

At the intra-organizational level, gamification is associated with higher levels of employee engagement and productivity. Gamified experiences increase motivation by encouraging employees to focus on their work and complete tasks more efficiently (Jipa & Marin, 2014). At the consumer level, previous research provides evidence supporting the use of gamification in customer relationship management, particularly within loyalty programs, where it has been shown to increase loyalty, participation, and application downloads (Bitrián et al., 2021; Parapanos & Michopoulou, 2022). Furthermore, gamification can enhance marketing effectiveness by influencing outcomes such as user commitment, customer referrals, willingness to pay, acceptance of product innovations, and perceptions of brand equity (Otero et al., 2017). Finally, at the transformational level, gamification has been shown to encourage behaviors related to fitness, healthy eating, and sustainable energy consumption. The activities and outcomes observed at these levels demonstrate gamification's potential to enhance CE.

### *Enhancing employee learning experience and performance*

The ongoing Industry 4.0 transformation requires employees to possess digital capabilities that enable them to integrate emerging technologies into their work processes. Achieving effective marketing outcomes therefore requires skilled and knowledgeable employees (Adhiatma et al., 2022). As gamification increasingly influences how consumers interact with brands and respond to promotional activities, ensuring that employees possess adequate digital competencies has become essential. Consequently, gamification is increasingly being used as a learning tool to improve employee experience and performance (Ashley, 2019; Rakhmanita et al., 2022).

Gamified training programs incorporate game mechanics into learning processes. Such programs help address the limitations of traditional training approaches (Bolton et al., 2018), which often rely on text-based materials, static images, e-learning modules, or conventional face-to-face lectures (Sanchez et al., 2017). In many cases, employees attend passive sessions where they listen to lectures or watch presentations that may not effectively capture their attention. In contrast, gamified learning can offer a self-directed, engaging, and rewarding learning experience. For example, gamification can stimulate the release of neurotransmitters associated with positive

emotional responses, thereby increasing motivation and reinforcing learning (Oliver, 2017). Dopamine, for instance, is released when individuals receive rewards for completing tasks, while serotonin is associated with improved mood and may be stimulated through game elements such as badges.

Additionally, gamification in training environments can create conditions conducive to learning by leveraging both intrinsic and extrinsic motivation. Trainers can capture employees' attention more effectively by incorporating game elements into instructional activities (Kornevs et al., 2019). For example, earning rewards or advancing on leaderboards can maintain participants' interest in learning objectives. More importantly, such mechanisms can appeal to deeper motivations, including the desire for purpose, skill development, and achievement (Ikhide et al., 2022). Therefore, gamifying workplace training can increase engagement, support behavioral change, and ultimately improve employees' skills and performance.

## Discussion

Gamification uses game mechanics, design, and elements in non-game contexts to increase motivation, engagement, and participation. To be effective, gamification must be designed according to specific principles. By providing clear goals and objectives, rewards and feedback, a sense of achievement, challenge and difficulty, interactivity and engagement, personalization and customization, and social interaction and collaboration, businesses can create more effective and engaging experiences that drive participation and achievement, as suggested by several researchers (e.g., Garcia et al., 2018; Garcia-Fernandez et al., 2017; Panasenکو et al., 2018; Robson et al., 2015; Uribe et al., 2020).

Nobre and Ferreira (2017) and Merhabi et al. (2021) argue that gamification can facilitate brand value co-creation by creating opportunities for customers to actively participate in the development and delivery of value propositions. By engaging customers in a gamified experience, businesses can leverage their creativity, knowledge, and preferences to co-create value that meets their needs and expectations (Makris et al., 2018; Markova et al., 2019).

As Mehrbod et al. (2017) and Miciula and Miluniec (2019) note, gamification can be a powerful tool for building virtual communities by creating engaging experiences that bring people together around shared interests, goals, or values. By gamifying the community-building process, businesses can incentivize participation, encourage collaboration, and foster a sense of ownership and commitment to the community (Dzandu et al., 2022).

Gamification can also be a powerful tool for increasing engagement by creating an interactive and rewarding experience that motivates people to participate and interact with a brand. By leveraging game mechanics such as points, badges, leaderboards, and challenges,

businesses can create a sense of enjoyment and competition that encourages ongoing engagement, as suggested by Bitrián et al. (2021), Leclercq et al. (2018), Pamfilie et al. (2020), and Reginato et al. (2017).

In addition, gamification can effectively enhance employee learning experiences and performance by creating a more engaging and interactive training environment (Adhiatma et al., 2022; Ikhida et al., 2022). By incorporating game elements into training programs, businesses can increase employee motivation, improve retention, and create a more enjoyable learning experience (Ashley, 2019; Kornevs et al., 2019; Rakhmanita et al., 2022).

## Conclusions

Current technological advances and human-computer interactions are significantly transforming marketing approaches. Unlike traditional marketing, in which consumers passively consume promotional materials, modern consumers seek to be actively involved throughout product development. For instance, platforms such as social media enable user-generated content, including customer feedback, opinions, and complaints about products and services. Beyond social media, gamification has emerged as a technique that fosters high user engagement by integrating game elements into non-gaming contexts. Examples of these elements include challenge, design, fun, play, and transparency. As a result, gamification is increasingly used as a marketing tool to attract and engage customers.

The research identifies several ways in which gamification is used in marketing. First, gamification is presented as a critical tool for branding. Game design elements such as challenges and rewards encourage players to focus on overcoming specific barriers to achieve certain goals. As a result, this gameful experience and interaction lead to increased brand awareness, brand attitude, brand engagement, brand love, and brand value co-creation.

Second, gamification increases sales and organizational performance. For instance, integrating a reward or point system into a gamified marketing approach encourages customers to purchase repeatedly from a brand. This practice results in higher sales volume and improves company performance and productivity.

Third, gamification facilitates value co-creation, an essential element of contemporary marketing. It fosters social interaction through online forums that allow players to share their experiences, knowledge, and feedback. The data gathered from these interactions can improve a company's offerings and promotional capabilities.

Gamification offers numerous opportunities and benefits that marketers and organizational leaders can use to enhance their marketing campaigns and achieve specific goals. For example,

game design elements such as team challenges help foster virtual communities. Players interested in particular games can create group forums to share knowledge and improve their skills. Businesses can engage with these virtual groups to market relevant products and services.

In addition, gamification boosts customer engagement and strengthens relationships through activities, games, and communities. The motivation to top a leaderboard can drive players to increase their effort, persistence, and level of use. Furthermore, gamification enables organizations to deliver enjoyable and effective workplace training that helps employees develop and maintain the digital skills needed to serve modern, technology-oriented customers. Overall, these advantages position gamification as a significant innovation in marketing, helping companies improve their competitiveness, performance, and productivity.

### *Contributions to theory and practice*

This study offers significant theoretical and managerial insights by examining gamification as a strategic innovation in marketing. A primary contribution of this research is the finding that gamification increases engagement through immersive experiences that capture consumers' attention and encourage deeper interaction with brand offerings. Furthermore, integrating brand values and messaging into these game elements enhances brand awareness, thereby increasing visibility and recognition.

The research also indicates that gamification is a powerful tool for strengthening customer loyalty, as it fosters emotional connections that support higher retention. Beyond relationship building, these strategies facilitate the collection of valuable data on consumer preferences and behaviors, which can be leveraged to personalize experiences and refine broader marketing strategies. Ultimately, the study highlights how gamification motivates purchasing behavior by providing tangible incentives—such as rewards or discounts—for reaching specific milestones, thereby directly increasing sales.

From a managerial perspective, understanding the relevance of gamification within marketing strategies is essential for improving consumer communication, fostering retention, and delivering value-added services. By implementing these strategies, organizations can collect user data directly and deliver highly customized messages to targeted segments. To cultivate engaging and interactive consumer experiences, managers can deploy gamified elements such as structured reward systems and point-based loyalty programs, in which customers earn points for every purchase. Interaction can also be stimulated through challenges and quizzes that provide personalized product recommendations while encouraging participation through discount codes or giveaway entries. Additionally, leaderboards and competitive goals allow top performers to compete for branded merchandise or exclusive subscriptions, strengthening their connection to the brand. Finally, integrating urgency through countdown timers and time-limited offers can

encourage immediate action, ensuring that consumers remain active and responsive to exclusive benefits.

The importance of customer loyalty has increased during periods of disruption and rising uncertainty. One-size-fits-all approaches are no longer effective and have been replaced by decentralized and multidimensional ecosystems that establish emotional connections with customers while supporting personalized segmentation through positive customer experiences enabled by innovative technological tools. Marketing professionals should therefore understand game elements and their impact on players' emotional responses and engagement in order to implement gamification strategies that create more engaging, interactive, and personalized customer experiences, ultimately increasing brand loyalty, sales, and customer satisfaction.

### *Limitations and future research*

This study has some limitations that should be addressed in future research. The first limitation concerns the limited coverage of the two databases. Although Scopus and the Web of Science are comprehensive, they may not include all journals or disciplines. Consequently, relying exclusively on these databases may result in the omission of relevant studies that are not indexed within them. Another limitation relates to search bias. The search terms used in both databases, as well as the search algorithms employed, may differ. These differences can produce variations in search results, and combining searches across databases may introduce bias.

Gamification is a powerful business tool for engaging customers, strengthening brand loyalty, and increasing sales. As a strategic marketing innovation, it can be applied in multiple ways, such as incentivizing customer behaviors, increasing social media engagement, or creating more immersive brand experiences. Gamification therefore holds significant potential as a strategic marketing innovation, and future research can help businesses harness this potential to develop more engaging and effective marketing strategies.

Building on the current understanding of gamification as a strategic marketing innovation, several promising avenues for future research emerge. One critical area involves the transition toward hyper-personalization, in which researchers may explore how artificial intelligence and machine learning can be leveraged to tailor gamified experiences to individual consumer preferences and real-time behaviors.

Closely related to this technological evolution is the integration of gamification with immersive emerging technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR). Future studies should investigate the potential of these tools to deepen consumer engagement and create new interactive opportunities for businesses operating within increasingly digital ecosystems.

Beyond purely commercial objectives, the scope of gamification research should also expand to address broader societal and organizational challenges. This includes examining the role of gamified systems in promoting sustainability and environmental awareness, particularly how these mechanisms might encourage consumers toward greener behaviors such as energy conservation or the use of public infrastructure.

Internally, there is also significant potential to explore how gamification can transform corporate culture and employee engagement. Future research could examine its effects on productivity, specialized training, and collaborative teamwork.

Ultimately, the field is invited to consider the potential of gamification to contribute to broader social change by investigating how these strategies might be used to support social causes and stimulate proactive consumer engagement.

## Acknowledgements

The authors want to thank the Editor and the reviewers for their valuable suggestions and improvements. This study was supported by the GOVCOPP Research Center of the University of Aveiro and UNIDCOM/IADE, Unidade de Investigação em Design e Comunicação.

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