

**“CAVIAR FOR ALL” A CASE STUDY OF AN INNOVATIVE APPLICATION FOR
CATERING, TOURISM AND CULTURE**

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Abstract

Many people think that when we want something like a product or a service it comes from a financial point of view, but what really makes businesses sustainable and growth is creativity and innovation.

This paper presents a real case study that exemplifies the notion of “idea to product” of an innovative application for the information and propagation of catering, tourism and culture (*caviar.pt*). This is an uninterrupted service, which is oriented to give “real time” information about catering services and regional or nearby culture and touristic points of interest. It also allows the promotion of gastronomic or cultural events with information relevant to the idea of the application.

This project intends to create a new catering, touristic and cultural notion with a high level of interaction with clients and their necessities or wants, bringing to daylight a new touristic concept: “*online assessment tourism*”.

Keywords: creativity, innovation, tourism, *caviar.pt*.

1. Introduction and research context

Many people think that when we want something like a product or a service it comes from a financial point of view, but what really makes the business sustainability and growth are creativity and innovation.

This paper presents a real case study that exemplifies the notion of “idea to product” of an innovative application for the information and propagation of catering, tourism and culture (caviar.pt). This is an uninterrupted service, which is oriented to give “real time” information about catering services and regional or nearby culture and touristic points of interest. It also allows the promotion of gastronomic or cultural events with information relevant to the idea of the application.

Like all projects in informatics it comes to satisfy a basic customer need, defined as ‘Where can I eat (this dish) today?’ and ‘Is this establishment open today?’

Based on these questions and researching the internet about the possible applications, it was possible to verify that there aren’t any satisfying applications that could answer these questions properly. So the research problem can be defined by three questions: ‘What could be done to change that?’, ‘What are the possibilities available?’ and ‘What type of resources would be needed?’.

To solve this problem it was decided to use a creativity & innovation decision-making approach that could clarify all the elements needed to be in consideration for informing and interacting with the client based on identity, image and a clear, modern and distinctive efficient organizational business communication, culture, local and regional tourism.

2. Creativity and Innovation

In the early twentieth century, with the emergence of psychology, the concepts of creativity began to change, emerging approaches based on psychological studies of personality, psychometrics, cognition and behavior, among others. Creativity then appears to us as not dependent on a pre-defined background and as a process that cannot be described logically, as it is an irrational order phenomenon, which touches the random and the unpredictable. With the technological advancement, human labor will be phased out, delegating every physical effort

and part of the intellectual effort to machines, so only the monopoly of Human creative activities remain.

Vygotsky (1987) defines the creative activity as “any type of man’s activity that creates something new, be it anything from the outside world, a product of creative activity, or an organization of thought or feelings that acts and is present in man himself” (p. 5).

Creativity to Csikszentmihalyi (1998) is not the same as “creative thinking” to the extent that it takes place “in the interaction between a person’s thoughts and a sociocultural context. It is a systemic phenomenon, rather than individual” (p. 41). Creativity, with a capital letter (Csikszentmihalyi, 1998), or creativity H (Boden, 1999), is seen as the production of novelty that has a significant impact on a given field and is widely recognized and valued for its social significance. The creativity, with lower case (Csikszentmihalyi, 1998), or creativity P (Boden, 1999), also defines the social significance of the product, but on a different scale, i.e., the significance (meaning) that people give to that product in a limited scope.

Csikszentmihalyi (2004) presents creativity as a systemic process that arises from the relationship between different spheres of action (individual, field and domain) that are in different contexts (personal background, society and culture, respectively) that affect them, as shown in Figure 1.

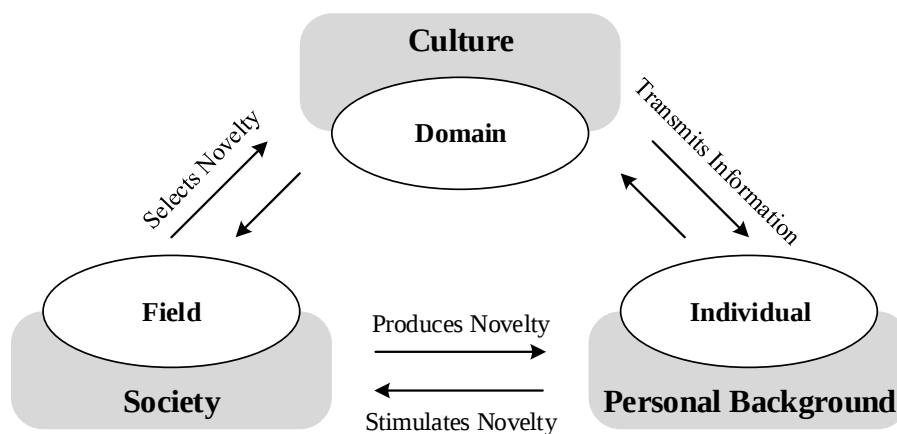


Figure 1. Creativity Systemic Process.

Source: Adapted from Csikszentmihalyi (2004).

Csikszentmihalyi (2004) states, as shown in Figure 1, that from the ‘individual’ point of view, it is necessary to analyze the cultural and social contexts in which this individual operates. The interaction between ‘individual’ $\diamond$ ‘domain’ fosters the transmission of information and the interaction between ‘individual’ $\diamond$ ‘field’ stimulate the occurrence of results with original

potential, producing and stimulating novelty, wherein the interaction between ‘field’ <> ‘domain’ selects novelty by the judgment and selection of what are the innovative results.

The ‘individual’ in itself is only a creative subsystem influenced by new particular symbols of a ‘domain’ and subject to the ‘field’ expert recognition (Rodrigo, & Tschimmel, 2009). Creativity is not present as an individual product, but as a result of a judgment of the systems with which the individual operates.

The ‘domain’ contributes to the creative process, affecting the action ‘field’ in the selection of novelty and affecting the ‘individual’ by transmitting information. The selection of novelty implies the existence of a set of “judges” that affect the cultural ‘field’ in which they operate, and that will or will not accept something as new or original (Csikszentmihalyi, 2004).

This wealth of features makes the concept of creativity an extremely complex and diffuse construct that involves many dimensions and therefore has not had as of yet, in the scientific community, a unconditional definition accepted due to the different research lines and phenomenon complexity. However, the various proposed definitions are grouped, centered and linked to the following four perspectives: (i) people; (ii) processes / techniques / means / actions; (iii) products / objects / purposes / goals; and (iv) climate / environments (Mumford, & Gustafson, 1988; Thomaz, 2005).

According to Torrance (1996) and Alencar (1996), among others, there may be considered three mental capacities closely linked to creativity: (i) Fluency (ability to think in a large number of different ideas or possible solutions to a problem); (ii) Flexibility (ability to change the course of thought or design different response categories); (iii) Originality (ability to think of unique or unusual possibilities, based on possible, but rare, infrequent or unusual responses).

If creativity is a manifestation of a creative potential or capacity as human action or expression; so Creativity is the expression of human potential ability to execute, through inventive originality or human innovation activity, products in the course of its process (adapted from Sakamoto, 1999, 2000).

Figure 2 shows a possible set of elements of creativity.

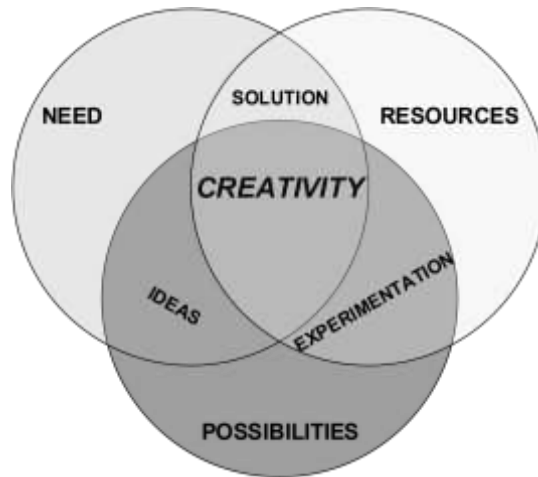


Figure 2. Elements of Creativity.

The modern models of the creative thinking process are more complex and of higher cognitive abstraction, as the complexity involved in the act of balancing analysis and imagination is probably one of the reasons why creative ideas are so rare. So, the model of Plsek's "directed creativity" is the one that, integrating the developments of recent years in this area, it seems appropriate to be used because it allows the creative thinking development of the participants avoiding the individual and even group cognitive mechanisms difficulties and dangers, balancing imagination and analysis in a balanced manner to the necessary innovation (or creative ideas generation) (Plsek, 1996; Thomaz, 2005).

2.1 Plsek's Model of Creativity

Plsek (1996) refers three great ideas for a creativity model: (i) the creative process involves a determined analysis, the imaginative creation (or generation) of an idea and a critical assessment, appealing the balance between imagination and analysis; (ii) the old models considered that creative ideas result from subconscious processes, totally out of the thinker's control, while modern models consider that the generation of new ideas is under the thinker's direct control; and (iii) the creative process requires a move to action and implementation of these ideas, making it into concrete realities.

The model of "directed creativity cycle" of Plsek (1996) is a synthesis of creative thinking models and adds the concepts proposed in the last 80 years, as shown in Figure 3.



Figure 3. Plsek's Model of Directed Creativity.
Source: Adapted from Plsek (1996).

The Plsek's "directed creativity cycle" starts in Quadrant I – Preparation, with the careful "Observation" of the world and a reflective "Analysis" of how things work and fail. These mental processes create a set of concepts that are stored in our memory and through them we can proceed to the "Generation" of new ideas, meeting specific needs and active search for associations between these concepts. There are varieties of specific techniques, which may be used for making this association (analogies, decomposition of concepts, classic brainstorming, etc.). The choice of technique is not the most important but the key is the effort made to associate the concepts (Plsek, 1996).

In finding the balance between an acceptable solution (satisficing) and premature judgment, the stage of "Harvesting" was passed where more ideas were highlighted, performing an "Enhancement" before subjecting it to a final practice "Evaluation". However, it is not enough to have creative thoughts; the ideas have no value until they are passed to "Implementation". Every new idea that is applied in practice, changes the world and creates a situation of acceptability of "Living with it" to restart the cycle in the "Observation" and "Analysis" phases/stages.

"Directed Creativity" only means that we do mental activities directed to avoid the difficulties and dangers associated with cognitive mechanisms at each stage of this process of searching for new and useful ideas. Note that this model continues the tradition of creativity as a balance between imagination and analysis, avoiding the controversy over whether the

imagination is a conscious or subconscious mental ability and supports the notion that innovation is a step beyond the simple generation of creative ideas. Creative ideas have value only when they are implemented in the real world (Plsek, 1996).

2.2 Innovation

From the main approach and definition of “creativity”, it proved to be important to introduce the concept of “innovation”, since there is a close relationship between them, which can be mistaken as synonyms, especially in the organizational environment.

Ridderstråle and Nordström (2006) state that innovation is a process in which ideas gain an economic dimension, making possible the leap from the conceptual to the practical application. Innovation should not be confused with invention. The definition of the authors anticipates a connection between creativity and innovation, and their importance in the organizational context. The value of innovation depends on the market and therefore has a sustainable component closely linked to society’s needs. New and useful discoveries and changes are considered only if the environment in which innovative systems operate accept them. It is often that ‘time for ideas’ and ‘time of their acceptance’ to be different, and for socio-cultural and political reasons, the environment is not always prepared for change, creating barriers to innovation (Rodrigo, & Tschimmel, 2009).

Creativity is not an isolated individual act; it begins at the ‘individual’ and evolves into the conversation, sharing and discovery of innovative solutions and answers. The crucial factor for maintaining competitiveness is the “power of shared objectives”, experience, persistence and creativity (Ridderstråle, & Nordström, 2006).

Innovation could be defined, as stated by Ridderstråle and Nordström (2006), as the ability of an individual or group of individuals to use creativity and creative processes to generate new and differentiating ideas in order to put them into practice. These unknown and nonexistent ideas for the surrounding system become a real differentiating factor, which contributes to the value creation network.

By the comparison of the definitions of innovation and creativity, it is possible to differentiate these two concepts, although there are many points of contact between them. Both are a capacity of individuals, groups or organizations, both appeal to new perspectives and

solutions, but while creativity is an individual's cognitive ability to generate new ideas, innovation makes use of distinctive and useful ideas to place it in practice (Moreira, 2008).

Brabandere (1998) states some differences between creativity and innovation, shown in Figure 4, and the apparent existing paradox of these false synonyms, where innovation emerges as a collective process powered by the creative thinking of each individual.

	Creativity	Innovation
Procedure	Individual	Collective
Works	Collectively	Individually
Process	Discontinuous, instantaneous	Continuous, lengthy
Impact	Not measurable, likely	Measurable, certain
Condition	Climate	Letter, Procedure manual
Training	Learning of methods	Use of strategic tools
Type of reunion	Brainstorming	Project management
Fuel	Questions, admirations, strange and incomplete ideas	Good ideas, suggestions retained
Type of thought	Divergent	Convergent

Figure 4. Differences between Creativity and Innovation.

Source: Adapted from Brabandere (1998).

2.3 Creativity, Innovation and Decision Making

Clemen (1996) refers that creativity and innovation plays an important role in decision making because it can be much more than an activity that generates new alternatives that determine the limits (boundaries) of the decision. There is a tendency to think that decision making is essentially an analytical process, but the truth is that when we face a decision situation, the task focuses on the options available and the carefully choosing of the one that best suits the objectives.

This view, although incomplete, denies the creative nature of decision-making. An active decision maker looks for decision opportunities and tries to create them whenever possible, looking for new and better alternatives. This approach to decision-making is highly creative and is based on a learning process that incorporates this creative activity where the decision maker believes that the decision of opportunities and good alternatives exist and that the work is in discovering it, through diligent and introspective practice (Clemen, 1996).

The creative thinking improvement techniques should be the basis for developing new ideas and showing how the goals can provide fertile ground for the generation of new alternatives. Techniques such as fluent and flexible thinking, list construction, brainstorming and metaphorical thinking, can help people get high levels of creativity in decision-making processes. Group discussion techniques can promote creativity, through proper management of group interactions, improving the creative environment (climate of creativity). The purpose of the incorporation of creativity in decision-making models are necessary not only to create new alternatives, but essentially to develop new decision opportunities (Clemen, 1996; Thomaz, 2005).

To improve the organizations' creativity, the customers or the general public must be taken into consideration on the demand of their needs, to improve the products or services. Creativity is a change tool, and according to this, organizations must tend to put aside the product design to justify bold creativity, getting this to be considered a value element for the success of change processes (Palma, & Cunha, 1999).

Recent studies have treated creativity and implementation as indicative of the same underlying concept-innovation. For example, Axtell et al. (2000) demonstrated that although autonomy and self-efficacy were most strongly related to idea generation, participation in decision making and support for innovation emerged as the most powerful predictors of implementation. The concept is not easy when we refer decision making implications, creativity means (Miron-Spektor, Erez, & Naveh, 2011), building dynamic capabilities (Harreld, O'Reilly, & Tushman, 2007), enable sustainability (Cameron, 1986; Smith et al., 2011) and introduce novel innovations to achieve long-term sustainability, while exploiting operational efficiencies in existing products for short-term performance, facing an inertial pressure, in the structure (Henderson, & Clark, 1990), cognitive frames (Tripsas, & Gavetti, 2000), routines (Gilbert, 2005), and competencies (Leonard-Barton, 1992; Tripsas, 2009) that support these products. So we conclude that with more creativity and innovation we get to a better decision making process.

3. Tourism and catering

Catering is a vital strategic tourism function, and simultaneously one of the most explored in the creative point of view, being the creativity an indispensable attitude in tourism.

Catering covers the following areas of specialty: food and beverage, pastry and baking, hotel studies, culinary arts, beverage studies, math and bookkeeping (Williams, 2014). With the beginning of communication and technological information systems, the development of tourism has seen great expansion namely on catering services, and the improvement on professional education. The use of online catering services permits cost reduction, performance improvement in several areas, economics, financing and accounting, human resources and others, offering third entities, especially at banking, better information to get better ratings and less loans. A study of De Rose et al. (2014), refers hospitality, travel, tourism and catering, as the main courses offered on the e-learning segment; and Facebook appeared to be the main social media platform used to interact with learners. Catering services have many intangible aspects that, as said, can be improved and can minimize its stock cost, space, and props, with a personalized online service such as the example we here disseminate.

4. Caviar.pt case study

Caviar.pt is a case study that exemplifies the “idea to product” notion of an innovative application for the information and propagation of catering, tourism and culture (Amplified Creations, 2015; Thomaz, & Amplified Creations, 2015).

The basic objective of the application is to satisfy a basic customer need, defined as ‘Where can I eat (this dish) today?’ and ‘Is this establishment open now?’ These questions and the research of possible available applications, defined the research problem with three essential questions: ‘What could be done to change that?’, ‘What are the available possibilities?’ and ‘What type of resources would be necessary to do it?’

Based on a creativity & innovation decision-making approach and to satisfy the needs identified it was necessary to develop some ideas, based on the research done, that could be good solutions to this problem.

This project began with a requirements analysis based on a necessary set of strategy-focused interviews with catering customers and some recognized specialists of catering, distribution, tourism and culture, to define the set of needs and other major interests that could be highlighted by the application. Some of the reported needs could be solved with: (i) a search engine by dish and all other information available; (ii) the location and how to get there; (iii) the relevant information about cultural events and touristic points of interest; (iv) the menu or

list of products; (v) the schedule and information about ‘open’, ‘closed’, ‘near closing’; (vi) allow bookings, contacts and suggestions; (vii) photos of the catering establishment; (viii) a web page for each municipality with regional history and gastronomy, photos and references of touristic points of interest and its location on a map; (ix) all information is presented in an intuitive way with responsive web design (for all devices) and also smartphone applications.

These needs involve a specific set of human and technological resources, based on the type of the new application’s structure and design that are within the competences of the business strategy, web design & development team.

The team, during the research and development phase of the web application, demonstrated a good ability to think in a large number of different ideas and/or possible solutions to problems (fluency), changing, when necessary, the course of thought or design (flexibility) to obtain a unique or unusual response (originality). The prototype obtained was evaluated and demonstrated to be a good and interactive solution that met all the defined needs and interests with an acceptable cost-benefit for the clients and for the company.

This prototype of the application was demonstrated to a group of interviewed people and has obtained a very good acceptance by its intuitive design, readiness and information available. With this presentation some other needs emerged from the group and, when possible, taken into consideration for the next version of the application (already online).

Figure 5 shows the initial and establishment pages in the Caviar.pt web application.



Figure 5. Initial and establishment pages in Caviar.pt.

This web application is oriented to give “real time” information about catering services and regional or nearby gastronomy, culture and touristic points of interest. It also allows the promotion of gastronomic and/or cultural events with the relevant information.

The intention of this project is to create a new catering, touristic and cultural notion with a high level of clients’ interaction and their necessities or wants, bringing to daylight a new touristic concept: “*online assessment tourism*”.

5. Conclusions

Therefore the design of a facilitator product of the process of attraction and customer satisfaction through an image and organizational, modern and efficient communication of business facilitator of quality information regarding the service will consist on the following:

The Caviar.pt service allows, among other features, the preview of highlights and cultural events, the creation of a web page for establishment with the services provided, daily menu and/or product list, reference to regional cuisine and dishes, search for dish or product indicating the establishments where it is available, location and directions to the establishment or recommended nearest parking, contacts, bookings and suggestions. All municipalities have a tourism and culture web page with pictures, texts and points of interest. The application interacts with the client based on identity, image and a clear, modern and distinctive efficient business organizational communication, culture and local and regional tourism, encouraging the migration of small and medium enterprises to the digital environment being one of the main objectives of this project emerged late last year from this question: Where am I going to eat a bean stew?

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