Innovation, Technology, and Knowledge Management

Marta Peris-Ortiz
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Cultural and Creative Industries

A Path to Entrepreneurship and Innovation

Innovation, Technology, and Knowledge Management

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Foreword

Cultural and Creative Industries: A Way to Entrepreneurship and Innovation

Writing or editing a book on cultural and creative industries is not an easy task. The scope of these industries and the numerous topics discussed (or that could be discussed) by researchers is very broad. Adding the vast domains of entrepreneurship and innovation makes the task even more challenging but makes the whole endeavor much more significant and rewarding. Therefore, the editors and authors of the book have to be commended for undertaking this project.

There was no hesitation from my side when José Álvarez-García from the University of Extremadura, Cáceres (Spain), asked me to review the book and to write its foreword. Cultural and creative industries are not only an important component of the economy, stimulating the cultural development and well-being of local communities, but also attract significant numbers of tourists and improve their destination experience. That is why researching the entrepreneurial and innovation aspects of cultural and creative industries is an important contribution to the body of knowledge.

I approached the book from different angles. From a *theoretical perspective*, we can see that most of the chapters are directly related to core topics in cultural and creative industries research: the conceptual overview of cultural and creative industries; a bibliographic analysis of publications in the field; the relationships between the level of transborder activity and the creative potential of different visual arts in Tijuana (Mexico); the entanglement of art, science, and social change in the art collective Torolab in Tijuana (Mexico); cultural, social, and sustainable entrepreneurship in Tibet; an analysis of the international institutions involved in creative tourism; and the role of a culinary arts school for developing innovative culinary skills. At the same time, other book chapters discuss topics that are more indirectly connected to creative and cultural industries, but nonetheless provide a special flavor and richness to the theoretical content of the book and expand its theoretical scope beyond the traditional arrays of research in the field of cultural and creative

industries. Such topics include innovation and creativity in mobile health applications; the role of creative industries, gamification, and technologies in promoting healthy lifestyles; evolution, innovation, and competitiveness of the craft beer industry in Baja California (Mexico); wine tourism in Bullas' Wine Route in Murcia (Spain); and women's participation in the wine industry in Baja California (Mexico).

From a *research methods perspective*, we see that the authors approached the achievement of the aims and objectives of their research studies by adopting various research methods such as bibliographic analysis, qualitative studies (in-depth semi-structured interviews, content analysis), or quantitative methods such as econometric modeling. The authors definitely have a preference for qualitative methods, while quantitative methods for data analysis have received much less emphasis. Considering the aims and objectives of the book chapters, such choice seems logical and appropriate.

From a *geographical perspective*, most of the chapters of the book have a clear focus on Mexico and other Spanish-speaking countries, with the exception of one chapter that discusses entrepreneurship in Tibet, China. Although a broader selection of countries would have added value to the book and would have increased its international appeal, the current empirical context contributes to our understanding of how cultural and creative industries shape the cultural and economic scape in the analyzed countries.

From a *destination management (tourism policy) perspective*, the book gives tourism policy makers valuable insights into how to use cultural and creative industries to attract visitors to destinations and engage them in various activities in order to create memorable destination experiences.

From a *pedagogical perspective*, the book would be a suitable addition to the reading lists for undergraduate and master courses on cultural studies, cultural and tourism anthropology, cultural and creative tourism, or special interest tourism.

I trust the readers would enjoy the book and would find value in it chapters that could be referred to for research and/or used as teaching case studies. The ideas and problems set in the book could serve as firm groundwork for future studies as well.

Enjoy!

Varna, Bulgaria Stanislav Ivanov

Series Foreword

The Springer book series *Innovation, Technology, and Knowledge Management* was launched in March 2008 as a forum and intellectual, scholarly "podium" for global/local, transdisciplinary, transsectoral, public–private, and leading/"bleeding"-edge ideas, theories, and perspectives on these topics.

The book series is accompanied by the Springer *Journal of the Knowledge Economy*, which was launched in 2009 with the same editorial leadership.

The series showcases provocative views that diverge from the current "conventional wisdom" that are properly grounded in theory and practice and that consider the concepts of ***robust competitiveness***,[1] ***sustainable entrepreneurship***,[2] and ***democratic capitalism***,[3] central to its philosophy and objectives. More specifically, the aim of this series is to highlight emerging research and practice at the dynamic intersection of these fields, where individuals, organizations, industries, regions, and nations are harnessing creativity and invention to achieve and sustain growth.

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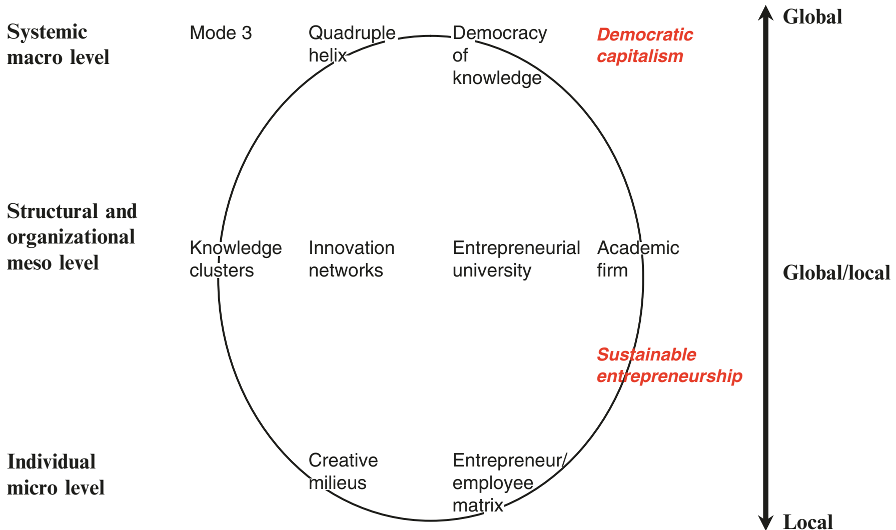
[1] We define *sustainable entrepreneurship* as the creation of viable, profitable, and scalable firms. Such firms engender the formation of self-replicating and mutually enhancing innovation networks and knowledge clusters (innovation ecosystems), leading toward robust competitiveness (E.G. Carayannis, *International Journal of Innovation and Regional Development* 1(3), 235–254, 2009).

[2] We understand *robust competitiveness* to be a state of economic being and becoming that avails systematic and defensible "unfair advantages" to the entities that are part of the economy. Such competitiveness is built on mutually complementary and reinforcing low-, medium-, and high-technology and public and private sector entities (government agencies, private firms, universities, and nongovernmental organizations) (E.G. Carayannis, *International Journal of Innovation and Regional Development* 1(3), 235–254, 2009).

[3] The concepts of *robust competitiveness* and *sustainable entrepreneurship* are pillars of a regime that we call "*democratic capitalism*" (as opposed to "popular or casino capitalism"), in which real opportunities for education and economic prosperity are available to all, especially—but not only—younger people. These are the direct derivative of a collection of top-down policies as well as bottom-up initiatives (including strong research and development policies and funding, but going beyond these to include the development of innovation networks and knowledge clusters across regions and sectors) (E.G. Carayannis and A. Kaloudis, *Japan Economic Currents*, p. 6–10 January 2009).

Books that are part of the series explore the impact of innovation at the "macro" (economies, markets), "meso" (industries, firms), and "micro" levels (teams, individuals), drawing from such related disciplines as finance, organizational psychology, research and development, science policy, information systems, and strategy, with the underlying theme that for innovation to be useful it must involve the sharing and application of knowledge.

Some of the key anchoring concepts of the series are outlined in the figure below and the definitions that follow (all definitions are from E.G. Carayannis and D.F.J. Campbell, *International Journal of Technology Management*, 46, 3–4, 2009).



Conceptual profile of the series *Innovation, Technology, and Knowledge Management*

- The "Mode 3" Systems Approach for Knowledge Creation, Diffusion, and Use: "Mode 3" is a multilateral, multinodal, multimodal, and multilevel systems approach to the conceptualization, design, and management of real and virtual, "knowledge-stock" and "knowledge-flow," modalities that catalyze, accelerate, and support the creation, diffusion, sharing, absorption, and use of cospecialized knowledge assets. "Mode 3" is based on a system-theoretic perspective of socioeconomic, political, technological, and cultural trends and conditions that shape the coevolution of knowledge with the "knowledge-based and knowledge-driven, global/local economy and society."
- Quadruple Helix: Quadruple helix, in this context, means to add to the triple helix of government, university, and industry a "fourth helix" that we identify as the "media-based and culture-based public." This fourth helix associates with "media," "creative industries," "culture," "values," "lifestyles," "art," and perhaps also the notion of the "creative class."

- Innovation Networks: Innovation networks are real and virtual infrastructures and infratechnologies that serve to nurture creativity, trigger invention, and catalyze innovation in a public and/or private domain context (for instance, government–university–industry public–private research and technology development coopetitive partnerships).
- Knowledge Clusters: Knowledge clusters are agglomerations of cospecialized, mutually complementary, and reinforcing knowledge assets in the form of "knowledge stocks" and "knowledge flows" that exhibit self-organizing, learning-driven, dynamically adaptive competences and trends in the context of an open systems perspective.
- Twenty-First Century Innovation Ecosystem: A twenty-first century innovation ecosystem is a multilevel, multimodal, multinodal, and multiagent system of systems. The constituent systems consist of innovation metanetworks (networks of innovation networks and knowledge clusters) and knowledge metaclusters (clusters of innovation networks and knowledge clusters) as building blocks and organized in a self-referential or chaotic fractal knowledge and innovation architecture (Carayannis, 2001), which in turn constitute agglomerations of human, social, intellectual, and financial capital stocks and flows as well as cultural and technological artifacts and modalities, continually coevolving, cospecializing, and cooperating. These innovation networks and knowledge clusters also form, reform, and dissolve within diverse institutional, political, technological, and socioeconomic domains, including government, university, industry, and nongovernmental organizations and involving information and communication technologies, biotechnologies, advanced materials, nanotechnologies, and next-generation energy technologies.

Who is this book series published for? The book series addresses a diversity of audiences in different settings:

1. *Academic communities*: Academic communities worldwide represent a core group of readers. This follows from the theoretical/conceptual interest of the book series to influence academic discourses in the fields of knowledge, also carried by the claim of a certain saturation of academia with the current concepts and the postulate of a window of opportunity for new or at least additional concepts. Thus, it represents a key challenge for the series to exercise a certain impact on discourses in academia. In principle, all academic communities that are interested in knowledge (knowledge and innovation) could be tackled by the book series. The interdisciplinary (transdisciplinary) nature of the book series underscores that the scope of the book series is not limited a priori to a specific basket of disciplines. From a radical viewpoint, one could create the hypothesis that there is no discipline where knowledge is of no importance.
2. *Decision makers–private/academic entrepreneurs and public (governmental, subgovernmental) actors*: Two different groups of decision makers are being addressed simultaneously: (a) private entrepreneurs (firms, commercial firms, academic firms) and academic entrepreneurs (universities), interested in optimizing knowledge management and in developing heterogeneously composed

knowledge-based research networks; and (b) public (governmental, subgovernmental) actors that are interested in optimizing and further developing their policies and policy strategies that target knowledge and innovation. One purpose of public *knowledge and innovation policy* is to enhance the performance and competitiveness of advanced economies.

3. *Decision makers in general*: Decision makers are systematically being supplied with crucial information, for how to optimize knowledge-referring and knowledge-enhancing decision-making. The nature of this "crucial information" is conceptual as well as empirical (case study-based). Empirical information highlights practical examples and points toward practical solutions (perhaps remedies); conceptual information offers the advantage of further-driving and further-carrying tools of understanding. Different groups of addressed decision makers could be decision makers in private firms and multinational corporations, responsible for the knowledge portfolio of companies; knowledge and knowledge management consultants; globalization experts, focusing on the internationalization of research and development, science and technology, and innovation; experts in university/business research networks; and political scientists, economists, and business professionals.
4. *Interested global readership*: Finally, the Springer book series addresses a whole global readership, composed of members who are generally interested in knowledge and innovation. The global readership could partially coincide with the communities as described above ("academic communities," "decision makers"), but could also refer to other constituencies and groups.

Washington, DC, USA Elias G. Carayannis

Contents

1 Cultural and Creative Industries: An Overview 1
Marta Peris-Ortiz, Jaime A. Gomez, and Monica López-Sieben

2 Creative Arts Industries: Analysis of Scientific Production 15
Claudia Patricia Maldonado-Erazo, María de la Cruz del Río-Rama, Carlos Rueda-Armengot, and Amador Durán-Sánchez

3 Creative Potential and Social Change: Independent Visual Arts Spaces in Tijuana 43
Norma Iglesias Prieto

4 A Model of Innovative, Social and Sustainable Entrepreneurship Under the Roof of the World 63
Mariella C. Remund, An Hong, and Marta Peris-Ortiz

5 Creative Tourism as a New Challenge to the Development of Destinations: The Portuguese Case Study 81
Paula Remoaldo and José Cadima-Ribeiro

6 Education and Innovation in Gastronomy: A Case Study of Culinary Art School in Tijuana, Mexico. 101
Jorge Francisco Sánchez-Jofras and Ingrid Kuri-Alonso

7 Innovation and Creativity in the Mobile Applications Industry: A Case Study of Mobile Health Applications (e-Health Apps) 121
Pedro Palos-Sánchez, José R. Saura, and José Álvarez-García

8 Gamification and New Technologies to Promote Healthy Lifestyles and Its Role in Creative Industries 137
Borja Sañudo-Corrales, Antonio J. Sánchez-Oliver, and María de la Cruz del Río-Rama

9 Innovation and Collaboration in the DNA of a Cultural Industry: Craft Beer in Baja California 155
Mayer Rainiero Cabrera-Flores, Alicia León-Pozo, and Eduardo A. Durazo-Watanabe

10 Wine Tourism and Wine Vacation as a Cultural and Creative Industry: The Case of the Bullas Wine Route 181
Inmaculada Carrasco, Juan-Sebastián Castillo-Valero, and Ana Pérez-Luño

11 Wine Industry in Baja California, Mexico: A Gender Perspective . . 197
Alicia León-Pozo, Lino Meraz-Ruiz, and Diana E. Woolfolk-Ruiz

Index 215

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Chapter 1
Cultural and Creative Industries: An Overview

Marta Peris-Ortiz, Jaime A. Gomez, and Monica López-Sieben

Abstract The aim of this chapter is to describe the basic theoretical aspects of cultural and creative industries and to present the remaining ten chapters which comprise this book. As essential characteristics of these industries, this book highlights their diversity and symbolic nature. With regards to their diversity, they range from companies or activities which are founded on arts or handicrafts to companies founded on technology; they may be capital-intensive or knowledge-intensive organizations, where the symbolic nature of their products is what undoubtedly characterizes these industries as cultural in all cases. A final issue to be highlighted is the way in which, based on intangible ideas and emotions, the tangible aspect of the products is sought in the cultural companies or on the contrary, the way in which inputs and tangible technology are used to search for the intangible aspect of the symbolic and cultural nature of the product.

Keywords Culture · Creativity · Innovation · Cultural industries · Creative industries

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1.1 Introduction

This introductory chapter aims to establish the framework for the rest of the chapters which comprise this book. Expressed in different ways, the cultural-creativity-innovation relations are the leitmotiv which extends throughout all the chapters, at the same time, the way in which routines and creativity become compatible is also discussed in an explicit or implicit way in all the analyzed topics.

The literature about cultural or cultural-creative industries usually eludes the classic topics of the scale of production or efficiency, placing emphasis on the symbolic nature of the products as the essential aspect of the competitiveness; nevertheless, several cultural-creative industries based on handicrafts or on the intensity of knowledge and capital—vineyard-wine production or architecture—must necessarily compete, combining the efficiency of their production with the symbolic nature of their products.

Section 1.2 first refers to the importance of the last link in the value chain of the company which is what relates its productive activity to the market, since it is here where the symbolic nature of the product must be founded and accordingly; this must be perceived by the consumer. Secondly, it presents the relation of the cultural-creative companies proposed by the UK Government Department for Culture, Media and Sport, whose variety provides an idea of the complexity which is involved in its analysis. Finally, it discusses the apparent contradiction between culture and creativity, highlighting that it is precisely the depth of the culture which fuels creativity and innovation. In this sense, it also alludes to the companies which are capital-intensive and knowledge-intensive and the management culture based on which it is possible to explain the innovation in these companies. In this way, it broadens the meaning which is provided to several concepts in the specific studies on cultural industries.

Section 1.3 deals with viability and the competitive advantage of the cultural-creative industries and discusses the convenience that these companies combine the efficiency of their production with the symbolic nature of their products. This issue is essential when the creative and innovative companies are capital-intensive and knowledge-intensive. Efficiency, effectiveness of the idiosyncratic mix of resources and handicrafts or art are three components which to a certain extent, explain the viability and the competitive advantage in the cultural and creative industries.

Section 1.4 deals with four paradoxes that exist in the literature. The first three paradoxes are the necessary adjustments between *standardization and creativity*, *culture and creativity* as well as *novelty and familiarity*. The second paradox reveals that the wealth of novelty is fueled by tradition. This is evident in haute cuisine as well as in music or dance or in the wine industries, and it is a generalized issue—although at a different level—for all the cultural industries. The third paradox refers to the market and emphasizes the necessary balance between the habits acquired by the consumers and innovation and change, the simultaneous need for familiarity and novelty. Finally, in the fourth paradox the cultural-creative industries of material goods enclose them with a symbolic-intangible nature which is an important part of their

value; on the other hand, other cultural companies whose productive material are ideas and emotions, transform them into the tangible material of images and/or sounds. By different paths, the cultural industries need to unite what is material and tangible with ideas and emotions.

Section 1.5 briefly describes the contents of each of the ten chapters and finally Sect. 1.6 provides some brief conclusions.

1.2 Cultural and Creative Industries

Cultural and Creative Industries (CCI) signify the intrinsic manifestation of humanity's capacity to think, create, innovate, and design that generates economic value. These industries whose origin lies in talent, skill, and creativity are now enriched by technology. For example, in music the production of successful records (traditionally in studios) now takes place in university residence rooms, house garages, basements, or even small smartphones or computers, then it is uploaded to online platforms and finally purchased through nontraditional payment systems. Book production, distribution and selling, architectural design, advertising, and film making are just a set of examples that implies a synergistic combination of talent, skill, and creativity and technological advances.

Economically, CCI are tremendous contributors to the creation of jobs, companies, and quality of life across all markets. According to a report produced by Ernest and Young (2015), "CCI revenues worldwide exceed those of telecom services (US$1570b globally), and surpass India's GDP (US$1900b). Within the total, the top three earners are television (US$477b), visual arts (US$391b), and newspapers and magazines (US$354b). With 29.5 million jobs, CCI employ 1% of the world's active population. The top three employers are visual arts (6.73m), books (3.67m), and music (3.98m)." All of this is roughly equivalent to 3% of global GDP.

From a market perspective, the combination of CCI and technology advances is producing innovative and trend-setting new business models that respond to the changing modes of distribution and purchasing. As main examples we have Amazon, Netflix, and Google. These companies, and many others, are revolutionizing the way to sell digital cultural goods. These new business models include: (a) easy access (mainly through internet and portable devises); (b) individualized advertising/consumption via massive use of business analytics tools; (c) peer-to-peer referrals and development of international communities who enjoy similar life-styles.

In its different chapters, this book describes and aims to understand several aspects of the CCI. As Baudrillard (1983) states, all products and services provided by industries possess value in a specific cultural context and accordingly, they are cultural products. However, this undeniable affirmation which is founded on the scenario that everything is impregnated and conditioned by culture, obscures the fact that in certain products, the consumer searches for their functional utility while there are other products in which their appeal for consumption resides in their symbolic nature. As defined by Lawrence and Phillips (2002: 431), "cultural products

are goods and services that are valued for their 'meaning'(and) are consumed in an act of interpretation rather than being used in some practical way to solve some practical problem." This means, the symbolic interpretation or the functional use are the two frontiers which separate the cultural industries and the goods and services companies focused on resolving material and practical needs.

However, three issues that must be added, in the first place, include the importance which consumption of a symbolic nature has on the value chain of the product. The meaning or the symbolic nature which the consumer attributes to the good means that the last link of the value chain—which connects the good to the market—has extraordinary importance (Lawrence & Phillips, 2002). If the symbolic nature is what is important, everything will depend on how the good is perceived. Secondly, it is important to note that the space which separates the frontiers of the cultural industries and the goods and services companies characterized by their usefulness, in many cases is clearly scarce or almost nonexistent, which leads to different paradoxes regarding these companies or industries. Thirdly, the diversity of the characteristics of the industries considered as cultural and creative hinders a general theoretical interpretation about them and in some cases, exacerbates the paradox between standardization and creativity.

The UK Government Department for Culture, Media and Sport (DCMS, 2015) describes several creative industry sectors: advertising and marketing; architecture; crafts; products design, graphic and fashion design; films, TV, video, radio and photography; IT, software and computer services; publishing; museums, galleries and libraries; and music, performing and visual arts. To which it is possible to add, among other industries, haute cuisine (Svejenova, Mazza, & Planellas, 2007), the design and production of games and video-games (Tschang, 2007), and the state of flux of "the very equipment ('hardware') over which it (the information and data) would be transmitted and received" (Hirsch, 2000: 358). This broad set of industries requires that we pause to focus on their diversity and see if their companies are characterized by being "symbol-intensive organizations" (Lawrence & Phillips, 2002: 431), or they are capital-intensive and/or knowledge-intensive organizations. The intensity in the productive capital, in the knowledge, or in the symbolic nature of the products makes it possible to identify industries and perceive differences among them which have a cultural-creative nature.

Finally, a matter to be clarified before moving on to other headings is the culture-innovation relation and why we refer to CCI, instead of talking about cultural *or* creative industries. The key to this answer is provided by DeFillippi, Grabher, and Jones (2007). For these authors, *the depth of the culture* explains how the contents are originated in the works by the authors, designers, or composers as well as, extending the logic of reasoning to entrepreneurs; and this depth, also explains the way in which they carry out the interchanges, the reproduction of materials, the manufacture, the criticism of the ideas and the education, the safeguarding and archives of culture itself. This all implies a clear connection between culture and innovation, denying "the tradition of consigning creativity to that mysterious primal moment of genesis in the mind of the lonely prodigy" (*Ibid.*: 512).

This position is not unanimous in the literature. Jones, Svejenova, Pedersen, and Townley (2016) to a certain extent, opt for the dissociation between culture and creativity. In any case, tradition and novelty encompass the paradox of the creative industries which at the same time in the majority of cases are industries whose cultural roots provide basic elements for creativity (Islam, Endrissat, & Noppeney, 2016). This is clearly the case in the industries whose production method is close to handicrafts, such as what occurs with haute cuisine. However, this can also be fulfilled in the innovator industries which are capital-intensive and knowledge-intensive, whose trajectory and culture in the management sector ensure the innovation (Nonaka & Takeuchi, 1995; Nonaka, Toyama, & Konno, 2000). It is necessary to note that in addition to the local cultures, there is a culture of intelligence and management, entrepreneurship and creativity (Nonaka, 1991, 1994; Penrose, [1959] 1995; Schumpeter, [1934] 2008; Weick, 2009) which knows how to outsource what is required by routines and standardized procedures or to establish spaces for experimentation, encounter and suggestion, by making standardization and experimentation compatible.

1.3 Viability and Competitive Advantage of Cultural and Creative Industries

Due to their current expansion in different countries and their contribution to the wealth of said countries, it is important to understand the relevance of these industries and the way in which their corresponding companies are viable and achieve competitive advantages. The diversity of these companies makes it necessary to possess general concepts which make it possible to identify and know their most relevant aspects and distinguish how their adjustment occurs with the demands from the markets, the way they are organized as well as their viability and competitiveness. Several key concepts are provided by this quote from Lawrence and Phillips (2002: 431. "[F]rom a management perspective the difficulty is to create an organization capable of management the symbolic aspect of the product in a way that is sustainable and valued by consumers in the long term. Management must therefore deal with a new form of organization: not a capital-intensive or knowledge-intensive organization but a symbol-intensive organization."

These concepts are absolutely relevant for the cultural and creative companies and consequently, we share the quote by Lawrence and Phillips; however, the meaning in which some of them are used by the authors seems highly debatable to us. Immediately before the above quote, the authors state that "[m]anaging in cultural industries is (…) not about efficiently producing a product but about creating and maintaining an organization that can produce and sell meaning." (*Ibid.*, 431). The meaning of this quote is clear in the framework of the article; the company will not have a cultural and creative nature if this is not due to the symbolic importance of their products; however, wouldn't there be capital-intensive companies in any of

these industries? If they exist, wouldn't the efficient handling of their scale of production be important? Does the symbolic nature of the product permit eluding the market? Wouldn't there be other companies with symbolic products with an equal or similar range which would be more or less efficient? If the technical conditions of the industry or the company make large scale of production unavoidable, the companies will be capital-intensive and the efficiency will be an essential condition for their viability and competitiveness (Williamson, 1985, 2013).

The foregoing is important if we wish to understand the CCI and this is also the case when the companies are knowledge-intensive organizations. In this case, the symbolic nature of their products will be closely linked to their technological innovation capacity, such as what may occur in IT industries. The competitive capacity, the in-house innovation, and their symbolic nature here will depend on the idiosyncratic mix of their resources as indicated by RBV or DCV (Barney, 2001; Helfat & Peteraf, 2015; Santos & Eisenhardt, 2005; Teece, 2014). There are high-tech companies or firms based on artistic and handicraft knowledge where the capital-intensive, knowledge-intensive, and symbolic-intensive dimensions of the organization will be added, with efficient and effective management needs. Perhaps the large museums due to their public management and financing which removes them from direct market competition are an example of the necessary mix of organizational efficiency, the idiosyncratic management of their knowledge and resources, and consequently, the enhancement of their symbolic nature.

All the above without denying that in the world of cultural and creative companies, in their closest dimension to art, high culture and also their most artisanal dimension, the symbolic nature of the product can be more decisive than the organizational effectiveness and efficiency. This will probably depend on the size. Situated in the extremes, in the case of an individual artist, everything depends on the symbolic nature of their art—or product, how it is interpreted and the value which is attributed to it; however, if this involves the mass production of artistic-handicraft objects—the Spanish company, Lladró, for example, then the efficiency and idiosyncratic mix of their resources are the required foundation so that their product is simultaneously symbolic and competitive.

Efficiency, effectiveness of the idiosyncratic mix of resources and handicrafts or art are the three components which in different degrees, based on the industry and the corresponding company characteristics, explain the viability and the competitive advantage in the cultural and creative industries.

1.4 Paradoxes in the Cultural and Creative Industries

As the last heading before introducing the different chapters, let's review four paradoxes or contradictions which are frequent in the literature about CCI. When related to the industries or companies of this sector of the economy, these paradoxes illustrate several basic aspects of these activities.

The first paradox, *the contradiction between standardization and creativity*, is the most important and most general and extends to all types of companies, although it perhaps has special relevance in the cultural-creative industries. The standardization of procedures is linked, above all—although it extends to all artistic, productive, or distribution activities, to the large-scale companies, and the repetition of guidelines and routines is essential for any activity and so that it has an efficient relation with the market (Moreno-Luzón, Peris, & González, 2001). Although this efficiency through the fulfilment of the routines does not reduce the need for creativity in the cultural-creative companies.

The solution could be to separate the most routine from the most creative tasks, or to create gaps and spaces of suggestion and cooperation in the specific routines established so that they can simultaneously contribute to the creativity. This is close to what is described by Nonaka and Takeuchi (1995) in reference to the Kao or Matsushita companies, and it is also close to different contributions from Galbraith on the design of organizations (Galbraith, 1994, 2014; Galbraith & Kazanjian, 1986). Although the examination of cases such as the haute cuisine company of Ferrán Adrià (Svejenova, Mazza, & Planellas, 2007) or the innovator teams in Hollywood (Perretti & Negro, 2007) show solutions to acquire creativity, however, the requirements of standardization can be almost as varied as the existing number of companies. Each different company can find a different solution to combine standardization and creativity, to stimulate the novelty and the innovation in their philosophy and in their practices from the depth of their culture and the tradition in their established habits and knowledge. This mix is what permits the continuous path of creativity. Chapters 11 and 12 of this book, based on the wine industry, illustrate how innovation or new management methods are rooted in culture and tradition, with standardized methods of harvest, production, and storage which this involves; while Chaps. 8 and 9 make it possible to see from the new culture and standardized IT procedures, that applications can be created with the aim to improve and control one's health, or games which encourage healthier life style habits.

Another paradox that becomes evident in the productive activity is the *necessary adjustment between culture and creativity* which can be expressed in different ways. One of them is the required mix among members with experience or old-timers and newcomers who are able to contribute a fresh perspective and new suggestions. The necessary combination of these two forces frequently appears in the literature about cultural-creative companies and to a certain extent, it is expressed in the productive company in two terms which define this paradox: *culture*, founded and established in the habits and tradition; and *creativity*, which should lead to innovation and change. A balanced synthesis is required between these two forces, as stated by different authors (Islam et al., 2016; Lampel, Lant, & Shamsie, 2000; Lawrence & Phillips, 2002; March, 1991; Perretti & Negro, 2007). Another variant of the necessary culture-creativity synthesis, as we mentioned in Sect. 1.2, is contributed by DeFillippi, Grabher, and Jones (2007: 513) when they state that the *depth of culture* is what sustains the *innovation capacity*. With almost the same words and almost the same contents for this matter Jones et al., 2016: 756) insist when they affirm that if the mainstreams are now non-conformist or dissidents with habits and culture, this

would facilitate change and innovation. To which we may add, in order to complete the reasoning (DeFillippi et al., 2007: 512), that innovation is generally not the result of the "mysterious primal moment of genesis in the mind of the lonely prodigy," but that "as 'systems' theories of creativity reiterate, they are mobilized and channeled by that very context of intersecting and interacting relationships."

Thirdly, the tension of the above paradox between what is established in the habits and tradition and that which corresponds to the creativity and innovation is also related to another paradox linked to the market. Jones et al. (2016), in reference to the consumers and customers, state that "[n]ovelty and familiarity encompass the innovation paradox in the creative industries. Innovators are faced with the difficulty of balancing two contradictory demands: being sufficiently different to be recognized as innovative in form or expression, yet not too different so that categories become difficult to identify". Again, it is the balance between tradition and novelty which must guide the company's behavior.

Finally, given the existing diversity of the companies in the cultural-creative industries, several of them are characterized in this activity by the movement from the material to the symbolic, from the tangible to the intangible (in a very different way with each other as shown in Chaps. 6–10 of this book); while on the contrary, other activities or business actions range from ideas, sensibility, and emotion to their materialization in tangible objects, signs, or symbols (Chaps. 3 and 4 of the book). In the first case, industries from different sectors—quality wines with trademark, IT applications, or games—combine their resources (Helfat & Peteraf, 2015) to add an intangible cultural value to their tangible products. Architecture, as an exceptional example, at any historical moment (Gombrich, 1997) and at the present time, unites its material nature and its functional utility with its extraordinary symbolic importance: it transforms its hard materials, stone, and cement into the key signs of each civilization; it joins their major functional value with their extraordinary symbolic value and achieves the intangible from the tangible. In the second case, the sensibility and the ideas are materialized in the companies which organize dance companies, operas, symphonic orchestras, theaters, cinemas, museums; in the art which aims to paint the atmosphere, convert matter into a symbol; into sculpture; everything in a way that transform the soft aspect of vision, thought and ideas into tangible products. This paradox, a paradox, which when contemplated moves us, here is *the necessity which cultural-creative industries have to combine utility and meaning,* to combine matter, handicrafts, intelligence and art, although sometimes this is only done with the aim to gain market share.

1.5 Overview of Book Contents

As mentioned above, this book presents Chapters in which art or beauty improves society or makes it possible to satisfy the consumer desires (Chaps. 3 and 4); Chap. 2 provides a bibliometric study about the industries based on art; Chap. 5 refers to the creative industries related to tourism; and the rest of the Chapters, in their

different studies, range from the traditional industries of gastronomy and beer and wine production (Chaps. 6, and 9–11), to the new IT/information technologies and their capacity to improve health (Chaps. 7 and 8):

We present each of the Chapters below:

Chapter 2: Creative Industries of the Arts: Analysis of Scientific Production by Maldonado-Erazo, Del Río-Rama, Rueda-Armengot and Duran-Sanchez.

The purpose of this chapter is focused on the development of a bibliometric study through a systematic review of the scientific production developed around the creative industries which focused on arts. The chapter serves as a guide for researchers who are developing their studies in this field. The search for the bibliographic material was carried out in the international Scopus database, which has been edited by Elsevier. A total of 402 publications have been identified.

This chapter improves knowledge in regard to what are the most relevant articles on the subject, who the most productive authors are, or which scientific journals have the greatest number of publications.

Chapter 3: Transborder Practices and Creative Potential. Visual Art in Tijuana by Iglesias Prieto.

This chapter reveals how the transborder condition/practices of some visual artists in Tijuana stimulate their creative potential and their capacity to critically interrogate their time/space. It also shows how transborderism is expressed in artists' careers, activities/practices, networks, topics of their art pieces, level of criticism of their reality and condition, forms and aesthetics of art production, characteristics of artistic events, as well as the profile of audiences. As a result, this study contributes to the understanding of CCI, especially in the visual arts sector.

Chapter 4: A Model of Innovative, Social and Sustainable Entrepreneurship under the Roof of the World by Peris-Ortiz, C. Remund and Hong.

This chapter presents a case-study that provides a broad view of a successful and innovative approach to cultural, creative, and social entrepreneurship. It reveals how an entrepreneur who was new to the hospitality market segment, applied fresh approaches and thinking to a mature established market and was able to create added value for the organization and the community. The findings of the case are based on a literature search, personal interviews in Lhasa, Tibet and direct observation from the authors.

Chapter 5: Creative Tourism as a new challenge to the development of destinations: the Portuguese case study by Remoaldo and Cadima Ribeiro.

This chapter aims to analyze the international institutions that are involved in creative tourism and the position of the Portuguese institutions. Research was accordingly conducted in Google and a database with 20 items was created. The main results show that the majority of cultural-creative initiatives occur in Southern Europe. Concerning Portugal, the initiatives are "creative experiences" and in fact, they are related to co-creation. This is not the case of other initiatives developed in other countries, where the authors found that some institutions have more learning experiences than creative ones.

Chapter 6: Education and Innovation in Gastronomy: The Culinary Art School Case Study by Sánchez, Kuri Alonso and Santana-Serrano.

The purpose of this chapter is to explore the content of innovative culinary competence, through the educational model of the Culinary Art School, which is based on learning by doing practices with high international cuisine standards. It demands high standards for students, builds a close relation with industry professionals, and provides learning opportunities in real work scenarios. Based on the relationship between culture, creativity, and innovation, a gastronomy school has taken advantage of its location in a very dynamic region.

Chapter 7: Innovation and Creativity in the Mobile Applications Industry: A Case Study of Mobile Health Applications (e-Health Apps) by Palos-Sánchez, Saura and Álvarez-García.

The development of new technologies has driven the growth of creative industries, specifically, the Mobile Health Applications industry.

This chapter focuses on the analysis of this industry that has evolved exponentially in the last years. In order to measure the impact of this type of e-Health applications, the authors have carried out a systematic literature review in the main scientific databases. These applications have developed processes for the improvement and monitoring of degenerative diseases as well as chronic illnesses and have helped users to follow patterns and healthy consumption habits. The findings show that the use of these applications in the long term improves health due to the users' belief which stimulates their use and health awareness.

Chapter 8: Gamification and New Technologies to Promote Healthy Lifestyles and their Role in Creative Industries by Sañudo.

The aim of this study is to develop a mobile application implementing gamification design principles to promote healthy lifestyles and enhance overall well-being. The creative industries can play a significant role to face the great societal challenges related to sustainability, quality of life, and the promotion of inclusive societies.

GameMyHealth is an App designed to help users record and monitor lifestyle-related outcomes. By using associated wearable sensors, the information related to users' eating habits (Food Frequency Questionnaire) and activity habits can be recorded (e.g., number of steps, sleep, energy consumption). The implementation of gamification mechanics, badges, leader boards, points and levels, challenges and quests, as well as social engagement are provided. Challenges are updated daily to provide user options to keep them motivated; in addition, "lifestyle quests" are also provided.

Chapter 9: Analysis of the Craft Beer Industry in Baja California by Cabrera Flores, León Pozo and Durazo Watanabe.

The purpose of the chapter is to describe the dynamics and structure of the craft beer industry in Baja California. The innovation and competitiveness aspects of this cultural and creative industry have been identified, as well as its evolution toward its current situation.

The Craft Brewing sector of Baja California has been positioned as one of the top producers in Mexico. The authors observe that the interrelation on both sides of the border has been a major benefit for the Mexican producers. However, this has created a strong dependence in the supply chain, which in turn has limited the growth

of this industry on the Mexican side. The study suggests that it is essential for the Baja California producers to stimulate their innovation strategies in both the production processes and business models in order to enhance their growth and development and hence attain a better situation to face global competition.

Chapter 10: Wine Tourism and Vacation as a Cultural Industry. The Case of Bullas' Wine Route by Carrasco Monteagudo, Castillo Valero and Pérez-Luño.

Wine is an integral part of Mediterranean culture which little by little has taken root in other parts of the world. The link between culture, intangibles, and economy is complex and requires an open focus. Thus, the purpose of this chapter is to feature wine vacations and wine routes as a derivative of the wine industry that takes advantage of local cultural traits to create wealth and also contribute to sustainable development and the preservation of cultural heritage.

To achieve this goal, we have used the study case of Bullas' wine route in Murcia (Spain). Some archeological discoveries date the existence of vineyards and wine activity in this area since the Roman era. More than 200 traditional wine cellars are still functioning, most of them since the eighteenth and nineteenth centuries. History and Culture are the framework for a recent avant-garde project of a wine route in a participative and sustainable model of social, economic, and environmental development. This case study has been selected since it presents ethnographic, historic, cultural, recreational, productive, social, landscape, and environmental synergies; it represents a highly interesting initiative.

Chapter 11: Wine Industry in Baja California, Mexico: A Gender Perspective by León Pozo, Meraz Ruiz and Woolfolk-Ruiz.

The aim of this chapter is to analyze specific cases of women's participation in a cultural industry. It provides an in-depth vision of the Baja California wine industry, where more than 90% of the Mexican wine is produced. The implemented methodology is a qualitative study which uses in-depth interviews focused on the women who collaborate in the Baja California wine industry. Based on this information, the study characterizes the inclusion of women in this sector. Furthermore, in order to accomplish this task, the chapter develops the analysis of their profile, their motivations, achievements and challenges, which have shaped their experiences within this cultural industry. Finally, this study also addresses the lack of research regarding women entrepreneurship within the Baja California wine industry.

1.6 Conclusions

All products and services provided by industries possess value in a specific cultural context and accordingly, they are cultural products. However, what the consumer seeks in some products is their functional utility while in others their appeal for the consumer resides in their symbolic nature. In this chapter, a short description of the author's contribution is provided. In them, we can observe the major diversity of this industry.

This chapter features a theoretical introduction to a well-organized and richly illustrated study of CCI. It provides an opportunity to advance our understanding about these industries and address the main critical aspects approached in the different chapters.

In the societies in which the economy advances and improves per capita income levels, the cultural and symbolic nature of the products, in addition to their utility, is a characteristic which must be increasingly taken into account by the companies as an essential aspect for their competitiveness, with an inevitable repercussion on their R&D + i policies, their production forms and their relations with the market. To a certain degree but in an unmistakable way, an increasingly higher number of industries are approaching what we call CCI.

We expect this book to provide a useful contribution to academic researchers and policy makers by offering a comprehensive understanding of how CCI are a path to entrepreneurship and innovation.

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Chapter 2
Creative Arts Industries: Analysis of Scientific Production

Claudia Patricia Maldonado-Erazo, María de la Cruz del Río-Rama, Carlos Rueda-Armengot, and Amador Durán-Sánchez

Abstract There has recently been an increase in the recognition that creative industries have obtained worldwide, due to their role as promoters of economic and social development. The purpose of this research is focused on the development of a bibliometric study, through a systematic review of the scientific production developed related to creative industries focused on the arts, with the purpose of serving as a tool for researchers in the development of their future studies. It also improves their knowledge on the most relevant articles, the most productive authors, or the scientific journals with the highest number of publications among other relevant points for research positioning. The methodology used was structured from a bibliometric analysis, classified as the most used tool for these types of studies, which is comprised of mathematical and statistical processes that establish the behaviour of existing scientific information at different levels. The search of the bibliographic material was done in the international database Scopus, through an advanced search of terms, obtaining a total of 110 publications. Almost two decades of scientific production is observed among the main results, as well as the identification of seven approaches.

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The main contribution of this work is to provide an overview and become the first bibliometric study that develops a diagnosis of this subject, which is not only limited to a theoretical formulation.

Keywords Creative industries · Scenic arts · Visual arts · Bibliometric · Scientific production

2.1 Introduction

Cultural and artistic activities have undergone a series of ups and downs in their development throughout history, mainly due to their dependence on subsidies to continue their progress. However, before observing these activities as a burden which the economy must bear, it is necessary to develop the thought proposed by Boal & Herrero (2017), who mention that cultural activities are characterised by a high participation of knowledge, a fact that positions them as a viable sector for the growth and diversification of the productive structure of local or regional economies. This statement has been supported in the last decade with the development of the concept of "Creative Economy". Therefore, there are many researchers who agree that these activities are a source of employment creation, while allowing for the generation of economic benefits, as well as becoming an attractive sector for introducing new activities linked to other sectors of creative industries such as contents, design, media, etc. This attractive effect constitutes a strong differentiating factor of territories (Richards & Wilson, 2004).

On the other hand, it is difficult to really establish what their true contribution to the economy of a country is because this sector covers a wide variety of activities that can go "from the purest core of artistic creation to products with a commercial nature of cultural and creative industries" (Boal & Herrero, 2017), element that has caused problems at the moment of establishing their precise delimitation. Aspects such as the lack of homogeneity between the activities lead to the selection of a classification that guides the development of the research.

In this context, the purpose of this research is to identify the existing scientific production in relation to the Creative Industries of Art, with the aim of identifying the maturity in the research of this field of study.

This chapter is structured into five sections. After contextualizing the subject and setting the objective, the scientific literature is reviewed in order to define the concept of creative industry and in particular to delimit the subsectors that make up the Creative Arts Industries. In the third and fourth sections, the methodology used is presented and the results obtained from the bibliometric analysis are discussed. Finally, the conclusions and limitations of the work are expressed in the last section.

2.2 Literature Review

Until now there has been a continuous debate about: what is creativity?, due to being gradually introduced in different areas, leading to its interpretation being developed according to the area in which it is studied. There are many studies focused on studying creativity linked to different sectors in depth, and a special interest in creative industries has been developed, which in the literature are observed related to the use of terms such as culture industries, creative industries and a mixture of both, called the culture and creative industry.

2.2.1 Culture Industries

This term arises during the post-war period from the hands of the Frankfurt School, through which derogatory and pejorative reference is made to growing mass entertainment, making it difficult to understand the possible emergence of a relationship between culture and industry, which the scholars of that time described as an aberration (Szpilbarg & Saferstein, 2014). According to Horkheimer and Adorno (1944), in their book Dialectic of Enlightenment to the Culture Industry, this type of industry "was nothing more than an instrument of the capitalist elite to depreciate artists and their works, when they are transformed into individual pseudo products" (Rey, 2009), meaning that this industry turned out to be like any other capitalist enterprise, which minimised its real value (Szpilbarg & Saferstein, 2014). This assertion led to its use as an expression of contempt for those sectors that sought to commercialise with arts (United Nations Development Program, 2010).

With this image, renewing the existing perception regarding these words turned out to be a great effort, which was effective through its gradual introduction with the entry of the Economy of Culture during the 1960s, where it is decided on its plural use and supporting the positive meaning of these words (Rey, 2009). Actions that were supported by understanding that commercialising with culture does not always result in a threat to the state of cultural expression (United Nations Development Program, 2013), thus influencing the development of new processes of industrialisation, distribution and consumption of culture. In addition to rethinking what is meant by culture, leaving aside its bonding relationship only with the arts (Szpilbarg & Saferstein, 2014).

By accepting that these industries do not constitute a confrontation between the elite culture versus the mass culture and even the fine arts versus commercial entertainment, it is UNESCO in 1980 that expresses one of the most accepted definitions, which establishes that.

> they combine the creation, production and commercialisation of contents that are immaterial and cultural in nature. These contents are usually protected by copyright and may take

> the form of goods or services. This dual nature – cultural and economic – builds the distinctive profile of culture industries (United Nations Conference on Trade and Development, 2008).

From this definition, a clear economic delimitation and cultural recognition is observed, thus, duplicity between the cultural and economic is generated, which is an action that contributes to their clear differentiation with other industries.

2.2.2 From Culture Industries to Creative Industries

The transition from culture to creative industries began in the 1990s, with the emergence of the concept of creative economy (UNESCO, 2010), specific reference is made to Australia in 1994 with the launch of the report, Creative nation: Commonwealth cultural policy, which provides the first approach of culture industries to creativity by mentioning that the creativity level mainly determines the ability of States to adapt to the new dominant economic trends (Analysis & Policy Observatory, 2018). Besides highlighting that culture in itself is rich by studying the significant contributions it generates.

These first evaluations led to a series of debates at different levels on the usefulness and implications that this report presented to the nations and even the academy, but it is not until the preparation of the report of the Department of Culture, Media and Sport (DCMS) of Great Britain in 1998 that the subject of creative industries gains real momentum (Bendassolli, Wood, Kirschbaum, & Pina e Cunha, 2009).

According to Flew (2005), the four major contributions of this report are: (1) it places these industries as the central scenario of the "post-industrial" economy of the United Kingdom, (2) it emphasises that these industries are not only demanding sectors of income but also contribute to the creation of wealth and economic performance, (3) the debates on these are transferred to more relevant areas such as trade policy, copyright and intellectual property, urban development and educational future, (4) the first list is generated that details the industries that range from the commercial media to the publicly subsidised arts, which shows the convergence of technology, the information society and the "new economy".

Based on these two iconic facts, it is stated that creative industries emerge from talent, skill and individual creativity, which have the value to produce wealth and employment sources, through the creation and use of intellectual property (UNESCO, 2010). In addition to this definition, there are others that provide a better understanding of the transition from culture to creative industries such as the Department for Culture, Media and Sport (1998), Jeffcutt (2000), Cornford & Charles (2001), Howkins (2001), and Hartley (2005).

Finally, the UNESCO addresses an inclusive definition of both dimensions "Culture and Creative Industries" that it determines as "sectors of activity whose

main purpose is creativity, production or reproduction, promotion, dissemination and marketing of goods, services and activities of cultural, artistic or heritage content" (UNESCO, 2017), thus this definition is not limited only to the production of content, but takes into account a value chain that is organised according to five taxonomic levels (Passarinho, de Sousa, Nunes, & Silva, 2013).

2.2.3 Classification of Creative Industries

The concept of Creative Industries is adapted by the different sectors in order to obtain a definition for each scope and context of application, with numerous definitions emerging. In the same way, the classification of these industries has been delimited through different models over the years (Tables 2.1 and 2.2).

Table 2.1 List of terms associated to each sustainability sphere (parte I)

<table>
<tr><th>DCMS model</th><th colspan="2">Symbolic texts model</th><th colspan="2">Concentric circles model</th></tr>
<tr><td>Department for Digital, Culture, Media & Sport (2001))</td><td colspan="2">Hesmondhalgh (2002)</td><td colspan="2">Throsby (2001, 2008)</td></tr>
<tr><td>15 domains</td><td colspan="2">3 groups and 12 domains</td><td colspan="2">4 groups and 15 domains</td></tr>
<tr><td>– Advertising
– Architecture
– Art and antiques market
– Crafts
– Design
– Fashion
– Film and video
– Music
– Performing arts
– Editorial industry
– Software
– Television and radio
– Video games and computer games</td><td>Core cultural industries:
– Advertising
– Film
– Internet
– Music
– Publishing
– Television and radio
– Video and computer games</td><td>Peripheral cultural industries:
– Creative arts
Borderline cultural industries:
– Consumer electronics
– Fashion
– Software
– Sport</td><td>Core Creative Arts:
– Literature
– Music
– Performing arts
– Visual arts
Other core cultural industries:
– Film
– Museums, galleries, libraries
– Photography</td><td>Wider cultural industries:
– Heritage services
– Publishing and print media
– Television and radio
– Sound rcording
Video and computer games
Related industries:
– Advertising
– Arquitecture
– Design
– Fashion</td></tr>
<tr><td colspan="3">Statistics on cultural industries, UNESCO</td><td colspan="2">WIPO copyright model</td></tr>
<tr><td colspan="3">UNESCO (2007)</td><td colspan="2">World Intellectual Property Organisation (2003)</td></tr>
<tr><td colspan="3">2 groups and 18 domains</td><td colspan="2">3 groups and 20 domains</td></tr>
</table>

(continued)

Table 2.1 (continued)

DCMS model	Symbolic texts model	Concentric circles model	
Industries in core cultural domains: – Museums, galleries and libraries – Performing arts – Festivals – Visual arts, crafts – Design – Publishing – Television, radio – Film and video – Photography – Interactive media	*Industries in expanded cultural domains*: – Musical instruments – Sound equipment – Architecture – Advertising – Printing equipment – Software – Audiovisual hardware	*Core copyright industries*: – Advertising services – Copyright collection management societies – Motion picture and video – Music – Theatre and opera – Press and literature – Software and databases – Television and radio – Photography, visual and graphip art *Partial copyright industries architecture*: – Clothing, footwear – Design – Fashion – Household goods – Toys	*Interdependent copyright industries*: – Blank recording material – Consumer electronics – Musician instruments paper – Photocopiers, photographic equipment – Manufacture, wholesale and retail of TV sets – Radio – CD recorders computers and equipment – Cinematographic instruments

Source: Throsby, 2008; United Nations Development Program, 2013; ESSnet-Culture, 2012; Red de Industrias Creativas, 2017

In this work, the model of the Network of Creative Industries of Spain is considered, which indicates that Cultural and Creative Industries (CCI) are characterised by seven dynamic vectors (Creative Industries Network, 2014).

- Crossroads between economy, culture and law.
- Creativity as a central component of production.
- Artistic, cultural or heritage content.
- Goods, services and activities protected by intellectual property.
- They generate wealth and employment.
- They generate values and meaning.
- They understand and anticipate the demands and needs that are not yet evident.

Table 2.2 List of terms associated to each sustainability sphere (parte II)

Americans for the arts model	ESSnet-culture models	Model of the creative industries network of Spain
Americans for the Arts (2005)	ESSnet-Culture (2012)	Creative Industries' Network (2017)
11 domains	10 domains	4 groups and 9 domains
– Advertising – Architecture – Art and service schools – Design – Cinema – Museums, zoos – Music – Performing arts – Editorial industry – Television and radio – Visual arts	– Heritage – Archives – Libraries – Book and press – Visuals arts – Performing arts – Audiovisual and multimedia – Architecture – Advertising – Art crafts	*Cultural heritage* – Cultural sites – Traditional culture *Arts* – Visual arts – Performing arts *Functional creations* – Creative services – Design – New media *Media* – Audiovisuals – Publications

Source: Throsby, 2008; United Nations Development Program, 2013; ESSnet-Culture, 2012; Creative Industries' network, 2017

As can be seen, a wide range of domains are grouped within CCI, making it necessary to delimit the coverage of the study, for which the Creative Arts Industries is taken as a case of analysis.

According to the Creative Industries Network, (2014), within this group of industries, the following domains are grouped:

- Visual arts, which according to the (UNESCO, 2009), focus on works of visual nature, which include paintings, drawings, sculptures and photography.
- Performing arts or performance, which includes all expressions of live cultural events such as theatre, dance, opera, puppets and music in their entirety, regardless of the format (UNESCO, 2009).

2.3 Methodology

The methodology is structured based on an exploratory-quantitative bibliometric analysis, which is applied to the scientific production identified in relation to the Creative Arts Industries within the international database Scopus of the Elsevier group.

This type of analysis, known initially as "statistical bibliography", modified its denomination afterwards to "bibliometrics" in order to highlight the interpretation and description processes that are performed on the data obtained. To develop

bibliometrics, the application of a highly diverse set of bibliometric indicators is used (Spinak, 1996), which according to Escorcia-Otálora & Poutou-Piñales (2008) are divided into two groups. The first group is established as activity indicators that allow us to know the real state of science in relation to quantity, productivity, dispersion, collaboration and networks, ageing, among others; while the second group are the impact indicators focused on showing information in relation to the most cited documents, impact factor or immediacy index, H index, among others.

Establishing the existence of a star combination for the development of these types of studies has been until today a somewhat difficult agreement to achieve. For authors such as Bonilla, Merigó, & Torres-Abad (2015), the quality and relevance of the analysis is largely determined by the indicators applied for the evaluation of the selected documentary units, being a somewhat inflexible position, as the use of indicators should depend to a large extent on the research approach (Alonso, Cabrerizo, Herrera-Viedma, & Herrera, 2009), and it is necessary to base the choice depending on the adaptability they have for the purposes to be achieved. In this way, for the purposes of application in this study, the use of production indicators (by authors, years and institutions), collaboration, dispersion and impact is established (Del Río-Rama, Durán-Sánchez, Peris-Ortiz, & Álvarez-García, 2017; Durán-Sánchez, Álvarez-García, Del Río-Rama, and Gil-Lafuente, 2017, Durán-Sánchez, Del Río-Rama, and Álvarez-García, 2017).

In this study, the Scopus database is used taking into account its characteristics; it has a greater coverage of multidisciplinary content, with the option to develop metadata downloads with a maximum capacity of 2000 references, whereby you can obtain citation data, bibliographic information, summary, keywords, financing details and other information, which is subject to standardisation processes that allow obtaining an exceptional quality of information (Fernández, Bordons, Sancho, & Gómez, 1999).

Finally, we proceed to structure the combination of keywords as a reference framework for implementing document tracking based on advanced search of terms within the field of “Article Title, Abstract, Keywords”, which in turn a filter of limitation in the field of type of document is applied, noting only Articles, so the other types of typologies are excluded. The application of this first filter is developed based on the rapid access to scientific literature that the article allows for (Frank, 2006), as well as the quality and relevance of the information they have, which is one of the most valuable contributions that has been carried out within the scientific field (Goldschmidt, 1986).

The search terms applied were: *“creative industries” AND Arts; “creative industries” AND “Visual arts”; “creative industries” AND Music; “creative industries” AND Theatre; “creative industries” AND Dance; “creative industries” AND Opera; “creative industries” AND Painting; “creative industries” AND Sculpture; “creative industries” AND carving; “creative industries” AND Photography; “creative industries” AND Antiques.* The search was subject to an elimination process

obtaining a total of 110 articles that make up the data matrix developed in the Microsoft Office Excel software.

2.4 Results

2.4.1 Documents

A total of 110 articles developed in a period of 17 years are obtained. The first document in relation to the subject was identified in 2002 from the combination of terms *"creative industries" AND arts*. In addition, it can be seen that 2014 is the highest productivity year with 14 articles indexed within the base.

With respect to the line of evolution of the subject, it is developed from 2002 to 2018 (Fig. 2.1), which clearly shows two of the three behaviour phases defined by López López (1996). The first one, the precusors phase, from the years 2002 to 2005 (4 years), which shows a reduced production and focuses mainly on giving the introductory steps to the subject, 1 article/years is observed. The second phase, known as exponential growth, starts from the point where an increase in scientific production is evident, at this point the subject starts to buzz as an element of interest among the scientific community circles, which covers 2006–2017 (12 years) with 8.7 articles/years. Finally, the last phase known as linear growth of production has not been identified because during the period analysed this subject did not manage to reach this phase, but depending on its growth, reaching this phase in the next 5 years is not dismissed.

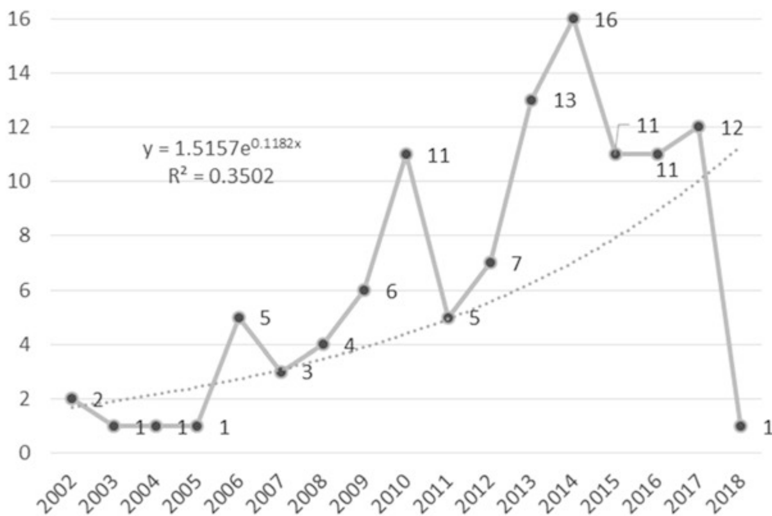

Fig. 2.1 Evolution of the production in general of the subject. *Source*: Authors

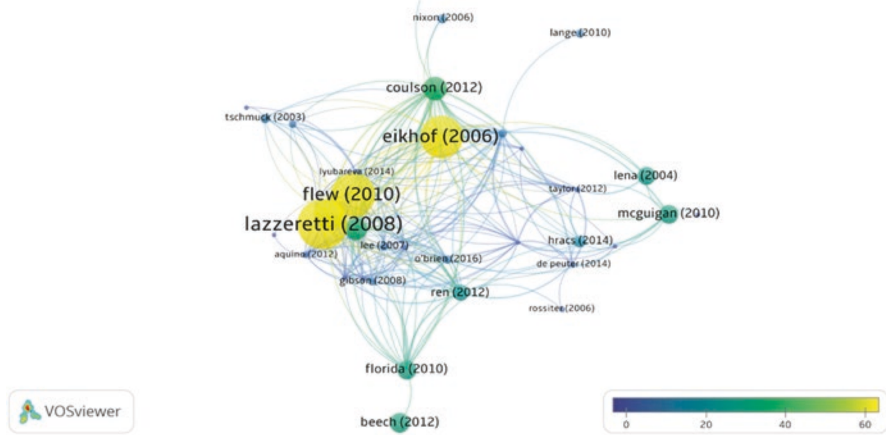

Fig. 2.2 Evolution of the production in general of the subject. *Source*: Authors

Taking into account the behaviour shown by the line of evolution, we can confirm compliance with the Law of Price, which states that after a period of 10–15 years, the information related to any area of knowledge is duplicated, giving rise to the exponential growth phase (Price, 1963). Finally, it is identified that the document with the highest number of citations is the article entitled: *Do creative industries cluster? Mapping creative local production systems in Italy and Spain* by Lazzeretti, Boix, and Capone (2008), which records a total of 105 citations. Behaviour can be seen in the mapping of the coupling relationship between documents (Fig. 2.2), which shows the bibliographic coupling links generated by having one or more references in common.

2.4.2 Authors

In relation to author production, 194 authors have been identified, generating a Productivity Index (PI) per author of 1.04 articles. The most prolific authors are shown in a ranking that determines that only seven authors of the analysed group have two or more articles within this topic, which shows that 96% of the authors have participated with only one article (Table 2.3).

The h Index was then applied, which allows us to quantify the production relevance of each author, which is obtained by dividing the number of articles produced by the number of citations received so far, obtaining a value equal to or greater than 0 (Hirsch, 2005). In this way, it is observed that the authors with a career of greater relevance are Smith, D. with $h = 37$, followed closely by Florida, R. with $h = 36$.

Table 2.3 Most productive authors

Author	No. articles	*H* index	Lotka
Gibson, C.	2	31	0.301
Cloonan, M.	2	9	0.301
Hracs, B.J.	2	7	0.301
Bendassolli, P.F.	2	5	0.301
Černevičiute, J.	2	4	0.301
Daniel, R.	2	2	0.301
Jureniene, V.	2	2	0.301

Source: Authors

Another index applied in the study is the Lotka Index, which is obtained by applying the decimal logarithm to the number of publications of each author; this value allows us to group the authors into three groups: (1) small producers, those who have one publication and a productivity index equal to 0, (2) medium producers, those authors who have between two and nine publications with a productivity index greater than 0 or less than 1 and (3) large producers, authors with ten or more publications and a productivity index equal to or greater than 1. After calculating the Lotka Index, all the authors identified in Table 2.3 are medium producers and the rest of the authors belong to the small producers group (187), with a Lotka Index of 0.000 and a single publication. No large producers are found in this subject.

Finally, in an authorship analysis it is observed that 52 articles have been published by a single author, 34 articles with two authorships, 17 articles with three authorships, six with four authorships and only one article was signed by six authors. The authorship index (average number of authors per document) is 1.83 authors, supporting this value by having 52.7% of articles signed with more than one signature.

2.4.3 Affiliations

Continuing with the analysis of the data available on the authors, it begins with the study of the affiliation or the relationship that each author registers with an institution or country. These data allow us to identify the collaboration processes that are developed from the study of the Creative Arts Industries (Spinak, 1996). The registered affiliations do not have a pre-established limit, being possible to observe one or more affiliations by author, such is the case of the present study, where six authors with two affiliations have been identified, one author with three affiliations and one author with four affiliations.

Regarding the affiliation by country which the authors belong to, the location ranking developed and shown in Table 2.4 highlights the United Kingdom with 47 authors, 48 authorships and 30 research centres as the leader in the study of the subject, followed by Australia with 26 authors, 28 authorships and 14 centres.

Table 2.4 Number of centres, authorship and authors by their country of affiliation

Country	Authors	Authorsip	No. centres
United Kingdom	47	48	30
Australia	26	28	14
Netherlands	13	13	6
China	12	12	7
Taiwan	10	10	6
United States	10	10	8
Spain	9	9	7
France	8	8	7
Lithuania	7	9	3
Portugal	7	7	5
Austria	6	6	8
Brazil	6	7	5
Canada	6	6	3
Germany	6	6	6
Ireland	3	3	3
Italy	3	3	2
Chile	2	2	2
India	2	2	2
Indonesia	2	2	1
New Zealand	2	2	2
Sweden	2	3	2
Denmark	1	1	2
El Salvador	1	1	1
Japan	1	1	1
Poland	1	1	1
South Africa	1	1	2
Totals	194	210	136

Source: Authors

If we compare the ranking of the most productive authors with the country affiliation one, in the first ranking it is observed that Australian and Lithuanian affiliation predominates, but within the second ranking these countries are in the second and ninth positions respectively.

In addition, a total of 136 research centres can be seen (this value includes all the affiliations that have been registered by the authors), which have been classified according to their typology into five groups. The existence of a wider coverage of centres is recorded, which is closely related to the types of institutions that are related to the subject of study. Table 2.5 shows the productivity by institutions. The first position is held by *Queensland University of Technology* with seven affiliations and followed by *Griffith University* with five affiliations, which are both Australian universities and located in the top 20 of the rankings QS World University Ranking and Times Higher Education (THE) (Delgado, 2017). Based on the above considerations, universities lead the affiliations of the authors with 82%, followed by

Table 2.5 More productive institutions

Institution	Authors	Country
Queensland University of Technology	7	Australia
Griffith University	5	Australia
Inholland University	4	Netherlands
Polytechnic Institute of Beja	4	Portugal
University of London	4	United Kingdom
University of St Andrews	4	United Kingdom
Arizona State University	4	United States
University of Western Sydney	3	Australia
University of Toronto	3	Canada
Beijing Union University	3	China
Xingtai University	3	China
Vilnius Gediminas Technical University	3	Lithuania
Vilnius University	3	Lithuania
Erasmus University Rotterdam	3	Netherlands
University of Groningen	3	Netherlands
Robert Gordon University	3	United Kingdom
University of Edinburgh	3	United Kingdom
University of Surrey	3	United Kingdom

Source: Authors

Research Institutes (9%), private companies (4%), Foundations (3%) and State Dependencies (2%).

In relation to the existing networks among the authors, they are developed from a geographical or institutional approach. These relationships are analysed within the documents that have two or more signatures, that is to say, 58 of the 110 identified items, thus discarding 52 documents with single signatures. The geographical collaboration shows that 71% (41) of the articles are done with the participation of authors from the same country, and the remaining 29% (17) records the participation of between two to three different countries.

2.4.4 *Journals*

It is identified that the 110 articles have been published in 81 different journals. At the same time, 78% (63) of journals have published a single article, 15% are journals with two articles, 4% of journals with three articles and another 4% of journals with four or more articles. The journals with the highest number of publications are *International Journal of Cultural Policy*, ranked in quartile one within the area of *Social Sciences* and an SRJ index of 0.38 and *International Journal of Education Through Art* in quartile three within the area of *Arts and Humanities* with an SRJ of

Table 2.6 More productive journals

Source title	Authors	Authorsip	Articles	Country	SJR	Quartile
International journal of cultural policy	10	11	5	United Kingdom	0.38	Q1
International journal of education through art	9	9	5	United Kingdom	0.16	Q3
Creative industries journal	6	6	4	United Kingdom	0.23	Q1
Revista de la facultad de ingenieria	6	6	3	Colombia	0.15	Q3
Creativity and innovation management	6	6	3	United Kingdom	0.68	Q2
Tourism, culture and communication	7	7	3	United States	0.18	Q2

Source: Authors

0.16. Both journals have five publications respectively and their country of publication is United Kingdom (Table 2.6).

The Relative Quality Indices are used to establish a series of criteria that enable us to determine the quality and impact generated by each resource, for which the data of the SCImago Journal & Country Rank (portal that includes the journals and country scientific indicators developed from the information contained in the Scopus® database, Elsevier B.V.) are used in this study, where it can be seen that 48% of the publications on this subject are published in resources located in the Q1 quartile, while 4% of the journals do not have the quartile calculation or quality indices.

In addition, the Dispersion Index is applied, which shows that 1.36 articles/journal have been published. At this point, it is necessary to mention that according to the Law of Dispersion or Law of (Bradford (1934), within the scientific production, it is possible to see the presence of a phenomenon, which consists of concentrating a large number of articles referring to a particular topic in a reduced number of journals. Thus, by applying the Lorenz Curve, it is observed that 32% of the journals have published 50% of the articles, this behaviour envisages the beginning of a core of journals for the concentration of articles, generating with it the review or recurrence to these resources in particular, so the consultation of information regarding the subject is greater than other resources.

The journals also include the study of the areas and categories in which these resources are classified. In relation to the areas, *Social Sciences* with 40.9% and *Arts and Humanities* with 28.2% were positioned as leaders, data that is supported by the information of the most productive journals previously presented, while the categories show a similar trend, as they concentrate 17.3% within *Cultural Studies* and 12.7% in *Visual Arts and Performing Arts* (Tables 2.7 and 2.8).

Table 2.7 Number of journals and articles by area of knowledge

Area of knowledge	No. journals	No. articles	%
Social sciences	33	45	40.9
Arts and humanities	22	31	28.2
Business, management and accounting	11	15	13.6
Environmental science	5	6	5.5
Engineering	2	4	3.6
Economics, econometrics and finance	2	2	1.8
Computer science	1	1	0.9
Multidisciplinary	1	1	0.9
Pharmacology, toxicology and pharmaceutics	1	1	0.9
Without area	*3*	*4*	*3.6*
Totals	81	110	100%

Source: Authors

2.4.5 *Keywords*

The indexation processes within all types of research establish terms of reference, in which the main elements that the study addresses are shown, which are used for the development of advanced search and to locate articles of greater similarity to the research topic. In this study, it has been possible to see the existence of 13 journals that have 16 articles that do not show the use of keywords within their dissemination format or in the indexing metadata of Scopus.

For the rest of the articles (94), we proceeded to analyse the terms used to index the information they contain, determining the presence of 323 keywords, of which the most used are: creative industries (55), arts (13), culture industries (8), creative economy (5), creativity (5), entrepreneurship (4), music industries (4), cultural and creative industries (3), cultural policy (3), cultural work (3), employability (3), festival (3), innovation (3), popular music (3) and precarity (3).

2.4.6 *Research Lines*

Continuing with the analysis, a content analysis of the 110 articles is carried out (Maldonado-Erazo, Álvarez-García, and Del Rio-Rama, 2016), which allows us to determine the lines of research followed by the authors in the field of Creative Industries of the Art.

– Technological transition, which involves studies that detail technology integration processes in order to increase the accessibility that the consumer has to the arts. Music digitisation processes are highlighted (Hracs, 2012), as well as processes that combine digital and technological production techniques in music or

Table 2.8 Number of journals and articles by category of knowledge

Category of knowledge	No. journals	No. articles	%
Cultural studies	9	19	17.3
Visual arts and performing arts	10	14	12.7
Geography, planning and development	7	7	6.4
Arts and humanities (miscellaneous)	1	5	4.5
Business and international management	3	5	4.5
Communication	4	5	4.5
Environmental science (miscellaneous)	3	4	3.6
Philosophy	3	4	3.6
Social sciences (miscellaneous)	3	4	3.6
Business, management and accounting (miscellaneous)	3	3	2.7
Development	3	3	2.7
Education	3	3	2.7
Engineering (miscellaneous)	1	3	2.7
History	3	3	2.7
Literature and literary theory	3	3	2.7
Management of technology and innovation	1	3	2.7
Marketing	2	2	1.8
Sociology and political science	2	2	1.8
Strategy and management	2	2	1.8
Civil and structural engineering	1	1	0.9
Computer science (miscellaneous)	1	1	0.9
Economics and econometrics	1	1	0.9
Economics, econometrics and finance (miscellaneous)	1	1	0.9
Global and planetary change	1	1	0.9
Language and linguistics	1	1	0.9
Multidisciplinary	1	1	0.9
Music	1	1	0.9
Nature and landscape conservation	1	1	0.9
Pharmaceutical science	1	1	0.9
Public administration	1	1	0.9
Urban studies	1	1	0.9
Without category	*3*	*4*	*3.6*
Totals	22	33	100%

Source: Authors

sectors or images that open the door to future online business models (Lyubareva, Benghozi, & Fidele, 2014).

– Commercialisation, where opportunities for the exploitation and commercialisation of creative goods or services of the arts are examined through marketing techniques which achieve their positioning as differentiating elements of certain destinations (Thimm, 2014). In addition, business models that allow for the increase and maintenance of the commercialisation of arts services through

spaces such as museums (Coblence, Normandin, & Poisson-De Haro, 2014) can also be seen.

- Management of the arts, which includes studies focused on strengthening the arts through actions that allow for their proper management to ensure cultural and creative development on a large scale (Zhou, 2017). Other studies that are identified are the recognition of ethnic minorities or repressed groups, who use creative forms of expression to correct the social conditions in which they live (Idriss, 2016).
- Creative policy, which is a cross-cutting subject in many of the identified work, although there are some who take this as the main line of their research, among which the construction of a copyright law is highlighted, that leads to constant construction of an internationally aligned intellectual property regime (Montgomery & Fitzgerald, 2006); or the establishment of a policy that includes the trans-regionalisation dimension that certain cultural practices have (Rossiter, 2006); and even studies where the concept of art is not identified as part of the industry or economy are seen, which has led to the presence of cultural policies where the arts maintain a hierarchy of cultural and sacred art, without including the development of the market or the expansion of creative industries (Černevičiute & Žilinskaite, 2009).
- Conceptualisation, which is located in the top three of the research lines with more development, which provides theoretical foundations that contribute to reducing issues and problems related to the coherence of definitions, in addition to several criteria in relation to size, scope and the importance of sectors and development (Bendassolli, Wood, Kirschbaum, & Pina e Cunha, 2009; Flew & Cunningham, 2010; Kačerauskas, 2014).
- Business management, which addresses issues such as creative production systems that show a high concentration of creative industries in urban systems (Lazzeretti, Boix, & Capone, 2008), which lead to the identification of cluster value networks of creative industries (Ge & Gao, 2016). It also shows a mapping of the industries from which factors that promote creativity are revealed and show their distribution within delimited spaces (Černevičiute, 2011), in addition to studies based on the existing distribution within the industries that can establish the importance of geographic proximity between them, especially in the case of the creative music industry (Makkonen, 2017). Finally, in this line we observe the development of strategies that allow for the restructuring of spaces with a much more productive orientation and with a view to the economic development of the area (Aquino, Phillips, & Sung, 2012).
- Finally, as a line of research with greater presence, the study highlights the Employment line within creative industries. It studies the working conditions of young people joining creative industries in depth (McGuigan, 2010); in the same way that it addresses the weaknesses of higher education in the training of professionals for the field of creative industries such as dance, fashion or music (Barton & Ryan, 2014).

Table 2.9 lists the authors that make up each of the lines identified.

Table 2.9 Research approaches

Line research	Number	Authors	Description
Technological transition	9	Abbasi, Vassilopoulou and Stergioulas (2017); Wu (2017); Begum and Anjum (2016); Shih and Liu (2016); De Klerk (2015); Brooks (2014); Lyubareva, Benghozi, and Fidele (2014); Hracs (2012); Smith and Kochhar (2002)	Technological processes through which the arts are strengthened and these are brought closer to the markets that consume them
Commercialisation	10	Johnson and Cester (2015); Coblence, Normandin, and Poisson-De Haro (2014); Thimm (2014); Huang (2013); Lombard (2013); Beck (2012); Levickaite (2011); Frew and Ali-Knight (2010); Goulding and Saren (2010); Lange and Bürkner (2010)	Marketing studies, marketing processes and research on the marketing chains of creative goods and services
Management of the arts	11	Ali (2017); Zhou (2017); Idriss (2016); Milestone (2016); Singh (2016); Parode and Bentz (2015); RéGimbeau (2014); Lee, Chang, Lin, Lee, and Wu (2010); More, Carroll, and Foss (2009); Solms (2009); Wilson and Stokes (2005)	Outstanding characteristics of repressed cultures that contribute to the increase of tolerance are highlighted, as well as works that present processes for the adequate management of the arts in various spaces
Creative policy	11	Nijzink, Van den Hoogen, and Gielen (2017); Krienzer-Radojević (2015); Behr and Brennan (2014); Daniel (2014); Kakiuchi (2014); Homan, Cloonan, and Cattermole (2013); Černevičiute and Žilinskaite (2009); Hwang (2009); Lee (2007); Montgomery and Fitzgerald (2006); Rossiter (2006)	State and development of the policies or legislations that address the creative industries, as well as the need for their development for the protection of this sector

(continued)

Table 2.9 (continued)

Line research	Number	Authors	Description
Conceptualisation	16	Daniel (2017); McRobbie (2016); Graham (2016); Tratnik (2015); Pečiulis (2015); Kačerauskas (2014); Majumder (2014); MacDonald (2013); O'Grady and Kill (2013); Beech, Gilmore, Cochrane, and Greig (2012); Baker (2011); Hornidge (2011); Flew and Cunningham (2010); Bendassolli, Wood, Kirschbaum, and Pina e Cunha (2009); Mayerhofer and Mokre (2007); Lena (2004)	It concentrates studies related to the theoretical foundation, conceptualisation and definition of the creative industries, as well as other related terms
Business strategies	25	Grodach, Foster, and Murdoch (2018); Jurene and Jureniene (2017); Li, Li, and Wei (2017); Makkonen (2017); Rodríguez Gómez, Real Rodríguez, and Rosique Cedillo (2017); Verón-Lassa, Zugasti-Azagra, and Sabés-Turmo (2017); Ge and Gao (2016); Cruz and Teixeira (2015); Frenzel and Beverungen (2015); Hozairi and Ahmad (2015); Namyślak (2015); Yin, Liu, Dunford, and Liu (2015); Moyon and Lecocq (2014); Yun (2014); Van Tuijl, Carvalho, and Van Haaren (2013); Aquino, Phillips, and Sung (2012); Ren and Sun (2012); Černevičiute (2011); Florida, Mellander, and Stolarick (2010); Jureniene (2010); Mitchell and Fisher (2010); Rodó (2010); Lazzeretti, Boix, and Capone (2008); Dempster (2006); Tschmuck (2003)	It groups the analysis and study of processes for the promotion of the creative industry, determination of clusters, geographical distribution and proximity of creative companies, growth processes and revitalisation of spaces, all from the insertion of the creative industries

(continued)

Table 2.9 (continued)

Line research	Number	Authors	Description
Employment	28	Hermes, Koch, Bakhuisen, and Borghuis (2017); Hennekam and Bennett (2016); Otondo (2016); O'Brien, Laurison, Miles, and Friedman (2016); Barton and Ryan (2014); De Peuter (2014); Hracs and Leslie (2014); Morgan and Wood (2014); Armstrong (2013); Bala and Albacan (2013); Baldacchino (2013); Bendassolli and Borges-Andrade (2013); Kearney and Harris (2013); Passarinho, De Sousa, Nunes, and Silva (2013); Turrini and Chicchi (2013); Coulson (2012);; Taylor (2012); Williamson, Cloonan, and Frith (2011); McGuigan (2010); Oughton (2010); McGregor and Gibson (2009); Gibson (2008); Papouschek and Schiffbänker (2008); Stam, De Jong, and Marlet (2008); Brown (2007); Eikhof and Haunschild (2006); Nixon (2006); Kavanagh, O'Brien, and Linnane (2002)	It covers issues of working conditions, work modalities, gender participation in the labour field, at the same time that studies are developed that address the deficit of artistic education or strengthening processes in the preparation of professionals for these industries

Source: Authors

2.5 Conclusions

This analysis reveals the growing interest that the study of the Creative Arts Industries arouses, as well as of the Creative Industries in general. During the last two decades of scientific production that has been identified on this subject, the evolution that it shows is undeniable, which is why after all the analysis carried out, the following conclusions are drawn:

- The analysis shows that 2014 is the year of greatest productivity, in addition to showing the development of seven approaches within the investigations developed.
- Regarding the authors, 96% of the authors do not continue with research on the subject because they only contribute with one article during the whole period analysed, a figure which makes the Law of Lokta place them as small producers, although this data may be conditioned to the use of a single base for research development, and there may be other publications by these authors indexed in

other bases. At the same time, the presence of large producers within this subject is not recorded.

- As for the most prolific authors, they represent a small group of seven authors who are classified as medium producers: (1) Federal University Do Rio Grande Do Norte and Fundação Getulio Vargas, Brazil (Bendassolli, PF), (2) Vilnius Gediminas Technical University, Lithuania (Černevičiute, J), (3) James Cook University, Australia (Daniel, R), (4) University of Glasgow, United Kingdom (Cloonan, M), (5) Uppsala University, Sweden (Hracs, BJ), (6) Vilnius University, Lithuania (Jureniene, V) and (7) University of Wollongong (Gibson, C). The affiliations that these authors register are located among the highest productivity centres.
- Within the authorship analysis, it can be seen that within the publications, participation levels per year show there maximum level in 2008 with a mode of three authors per article, although for subsequent years, despite increasing the number of publications per year, it is observed that participations decrease at a mode of one signature per article. Contrary to that expressed, within the joint analysis of documents, there is a predominance of articles with several participations of 53%, while 47% have a single authorship.
- In relation to the productivity per country, the leaders are the United Kingdom with 47 authors, 48 authorships and 30 research centres, followed by Australia with 26 authors, 28 authorships and 14 centres, with two of the seven most prolific authors being concentrated in the second most productive country.
- Within this line, no consolidated work networks can be seen, but only small networks of more endogamous behaviour which leads to a minimum production, and which are isolated from each other.
- The journals in which these studies are published, show a Dispersion Index of 1.36 articles/journal. In addition, it is observed that 55 of the articles have been published in 26 of the identified journals, a fact that shows the beginning of a concentration core of information.
- The Relative Quality Index that Scopus has available is The SCImago Journal & Country Rank which places the *International Journal of Urban and Regional Research* as the best positioned journal with an SJR of 2.78 in the first quartile, but with only one publication, whereas the most productive journal with five publications, *International Journal of Cultural Policy* is located in the first quartile with an SJR of 0.38, far from its predecessor.
- There is a tendency to choose journals located within the area of knowledge of *Social Sciences* followed by *Arts and Humanities*, a situation that shows a similar behaviour within the categories identified.
- Finally, the study approach of "employment" in the Creative Arts Industries is the line of research that has aroused the greatest interest in the authors, since they have managed to determine precarious conditions for the activity of these industries, in addition to their low gender equality.

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Chapter 3
Creative Potential and Social Change: Independent Visual Arts Spaces in Tijuana

Norma Iglesias Prieto

Abstract In recent decades Tijuana has undergone a radical change in terms of its artistic and cultural production. Today the city is considered an important artistic hotspot. Capacities for change have been linked to the city's own sociopolitical characteristics, its artists and other creative communities. This chapter discusses the relationship between the different ways in which the border is experienced and creative potential. This relationship is analyzed specifically with regard to art spaces in Tijuana (particularly visual arts), and focuses on the last 10 years (from 2008 to 2018). The chapter also examines the role cultural and artistic projects and spaces have played in promoting change in citizens' practices and in rebuilding the social fabric.

Keywords Art · Artist · Artistic practice · Borderisms · Civil society · Creative faculty · Creative potential · Independent art space · Professionalization · Social change · Social fabric · Visual arts

3.1 General Characteristics of Tijuana

In order to understand the practice and creation of independent spaces for the promotion of visual arts, firstly it is necessary to discuss the distinct characteristics of Tijuana and how they influence the development of its population's creative capacity. The discussion should also consider the different ways in which subjects experience the border and how their experiences are associated with creative capacity, as well as the way in which art spaces/projects affect society.

In recent decades, Tijuana has undergone radical change in terms of its cultural and artistic production, and the general perception of the city. In just a few decades, Tijuana has gone from being viewed as a "cultural desert" to an "artistic hotspot" or

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an “art and design capital”. This change was possible thanks to the city’s own distinctive characteristics, among other factors. This study is based on the idea that this city has certain specific conditions that make it unique and even more complex than other border cities in northern Mexico. A key part of Tijuana’s identity, manufacturing activities, life dynamics, culture, adaptive capacities and future possibilities is linked to the neighboring city of San Diego, one of the wealthiest and most prosperous cities in California. Although the relationship between Mexico and the United States is, generally speaking, marked by huge economic and power asymmetry, sharing a border with Calexico (California), Nogales (Arizona), or even El Paso (Texas) is simply not the same as bordering San Diego due to the degree of contrast involved in living, doing business, exploiting, and enduring this metropolis. To understand the distinctiveness of Tijuana, it is important to discuss its ESPATEMCOVEL (Space, time, condition, and speed[1]) (Iglesias Prieto, 2014)—in other words, its characteristics associated with or derived from its geographical or spatial location (ESPA), its history and current situation (TEM), the diverse individual and social conditions of those who experience the border (CO), and lastly, the speed with which it operates and changes (VEL).

3.1.1 Tijuana’s Strategic Location in the World (ESPA)

Spatially, Tijuana is located in what Teddy Cruz (n.d.-a, n.d.-b) calls the Political Equator. If we draw an imaginary horizontal line on a world atlas at the same latitude as the Tijuana-San Diego border (between the 28th and 38th parallels north), it would include some of the most contrasting and conflictive borders in the world, such as Ceuta/Melilla, Israel/Palestine, India/Kashmir, Hong Kong/Shenzhen, and South Korea/North Korea. These same latitudes have also seen, since 2014, massive migration in the Mediterranean Sea and Aegean Sea as a result of armed conflict in the Middle East (particularly Syria).

Border cities along the Political Equator are indicators of the greatest problems, pressures, and concerns in the world. These cities witness the greatest flows of capital, people, weapons, and drugs. The Political Equator experiences the sharpest contrasts in the world, in terms of economic models, the use of natural resources, and wealth concentration. This is where throw-away societies and precarity become most graphic and explicit. This Political Equator sees a huge northbound flow of people seeking job opportunities in the most powerful economies, but also the greatest flow of people seeking refuge from war (Syrians trying to get to Europe), fleeing an economic crisis and natural disasters (Haitians arriving in Tijuana with the aim of entering the United States), or fleeing the violence of organized crime or authoritarian regimes (Central and South Americans trying to enter the United States). In the opposite direction, investments and multinational corporations cross this Political Equator to relocate in the search for cheap labor in the South. North-South

[1] TN: The abbreviation comes from the words in Spanish: *Espacio, Tiempo, Condición, Velocidad*.

traffic also includes deportees from the United States, who between 2008 and 2016 numbered 341,000 a year, 89.9% of whom were Mexican; around 40% (about 123,000) were deported via Tijuana (U.S. Immigration and Customs Enforcement (ICE), 2017). Weapons and drugs also cross these borders, along with money to be laundered and the network of violence and organized structures that go with it.

For all these reasons, the cities or border crossings of the Political Equator are also the most tightly controlled and guarded. This is where control strategies, technologies and narratives are implemented and displayed. It is no coincidence that President Trump commissioned the prototypes of the new wall on the border between Tijuana and San Diego. Similarly, the dynamics in these cities in the Political Equator are used as topics for debates or as a positive or negative example in political processes, in election campaigns, or to define national or international public policy. They are used at times to justify building walls or establishing control or removal policies, and at other times, to illustrate the inhumane, irrational, illogical, and unsustainable nature of current models of development.

Consequently, cities like Tijuana are regarded as a kind of laboratory for globalization, postmodernity, and a “glocal” approach, not just because they encapsulate global conflicts and contradictions, but because they foretell the most significant trends of current models of development. Thus, Tijuana acts like a magnifying glass that enlarges socioeconomic and environmental conflicts and trends, but also cultural resistance practices and creative potential.

3.1.2 The Paradoxes of the Moment in Time (TEM)

Aside from its location, Tijuana is important due to the current historic context and the way it is coping. To analyze this, two levels have been distinguished: global trends, and the current local-binational context.

In global terms, and according to Saskia Sassen (2014, 2017), capitalism has undergone radical changes since 1985. Initially, the main axis for the capitalist system was massive, economical production for massive, economical consumption. Today, wealth is generated by “expelling” a large number of people from the economic and social order.

In traditional capitalism, the major world economies were built on an inclusion/exclusion system, in which countries in the North boosted their economy by generalizing consumption among a large, growing middle class. This practice was supported by massive, low-cost production using cheap labor from excluded sectors within their own countries (minorities and migrants), or in broad sectors of poorer nations in the South. This inclusion/exclusion system functioned both with geographic criteria (north vs. south, urban vs. rural) and social criteria (social class, ethnicity, race, sex, age). This system generated and normalized the major inequalities in the world. Inclusion mechanisms made it necessary to establish and expand a huge middle class. All of this was set in motion by high salaries, strong labor unions, numerous affordable credit systems, a huge increase in residential areas in

city peripheries (suburbs), and the massive production of goods at extremely low prices. This system could only function by excluding a large sector of the world's population, particularly communities living in high levels of poverty, who had no choice but to work for very low wages and few benefits.

The last two decades have not just seen a continuation of this rationale, but rather, in the current advanced stage of capitalism, multinational corporations have increased their wealth exponentially by "expelling" a huge range and number of people. The most visible "expulsion" processes include unemployment, the flexibilization and surplus of labor, migration and massive deportation of workers, and mechanisms like prisons for warehousing people, migrant detention centers, addiction rehabilitation centers, and refugee camps, among others, which function like businesses and are managed by private companies. Then there are the foreclosures; overwhelming student debt that has emerged as a new form of slavery; and a whole range of financial speculations that have deprived much of the middle class of their savings and any chances of recovering them. There are also the wars; increasing human trafficking and sex slavery, which has brought with it a general, complex process by which the human body has been objectified as expendable (organ trafficking, femicide, and the use of civilian bodies to send messages between different drug cartels); and the exponential growth and "professionalization" of organized crime and accompanying violence (kidnappings, executions, and massacres). This has generated a fear that has paralyzed society, changing social dynamics and the way public spaces are used. As part of this expulsion system, massive desertification processes in vast swathes of the world have forced whole communities to relocate, as have land-grabbing practices by financial and multinational groups from old and new economic powers. This advanced stage of capitalism has led to an incredible and appalling concentration of wealth. By 2015 the United States was the world's most unequal country (Sherman, 2015) and in 2017, the world's eight richest men owned as much as the poorest half of the world's population (7.5 billion people) (Reuters, 2017).

In this context, the communities of Tijuana are simultaneously exposed to and share in the two major systems of wealth accumulation and production, and also experience (sometimes within the same family or in a single individual) the three positions: included, excluded, and expelled. This situation reveals the high complexity of border issues, but also the capacity for experimentation, flexibilization, and a creative response from border communities.

3.1.3 The Binational Context (TEM)

At a binational level, Mexico-U.S. relations are currently experiencing one of their most strained periods since the war between the two countries (1846–1848). This is another paradox since the two countries have never been more socioeconomically integrated and interdependent in the face of such negative and anti-Mexican rhetoric by a U.S. president.

Figures confirming the high degree of integration and interdependence between the two countries include, for example, the level of commercial exchange, valued at a million dollars a minute in 2016, with almost five million U.S. workers depending on the commercial relationship with Mexico (Kollmeyer, 2017). Furthermore, integration between the two countries is shown by the size of Mexican communities in the United States and their positive impact on the U.S. economy, society, and culture. In 2016, there were 35.7 million Mexicans or persons of Mexican origin in the United States, of which almost 15 million lived in California (Pew Research Center, Flores, 2017). Another indicator of this economic interdependence is the amount of Mexicans in the United States sent back to Mexico in remittances, almost 29 billion dollars in 2017 (Cervantes & Ng, 2018). These remittances have increased in 2018.

At a local level, “San Diego-Tijuana is a $230 billion economic engine with over 5 million residents and nearly 2 million employees. We are 40 percent of the entire United States and Mexico border population and the busiest land border crossing in the Western Hemisphere” (Williams, Bersin, Larroque, & de la Fuente, 2017), with more than a quarter of a million crossings per day, and it is estimated that between 50% and 70% of these are regular crossings by commuter workers and commuter students (people who live in Tijuana and cross on a daily basis to work or study in San Diego) (Seiguer & Iglesias Prieto, 2016). Historically, the cities on Mexico’s northern border have been merged into life in the neighboring U.S. city. In Tijuana, the economy has always been dollarized. A Tijuana without San Diego is inconceivable. Many of Tijuana’s inhabitants were born in San Diego and hold dual citizenship. The substantial flow of people across the border throughout history has resulted in cross-border families in which members of the same family may hold different (or both) nationalities and have different places of residence, workplaces, and support networks on one or both sides of the border, along with full proficiency in two languages and cultures (Ojeda, 2009).

However, the political rhetoric and discourse from the most recent administration in the United States has not simply ignored the history of cross-border integration, but has made a point of promoting the idea that Mexico, and the Mexican side of the border, is its enemy. Political discourse by President Trump has defined Mexicans as “bad *hombres*,” “rapists,” “gang members,” “criminals,” and even “animals.” He has also blamed Mexico for the loss of jobs in the United States. On the basis of these claims, throughout his campaign and so far during his administration, he has fought to renegotiate or end the North American Free Trade Agreement, impose a trade war, build a huge wall along the border to stop these enemies from coming into the country (and paid for by Mexicans), and deport all undocumented immigrants, especially Mexicans, even at the expense of separating families and at a high social and psychological cost for U.S. and Mexican children.

In this context, the border dynamics must be realigned on a daily basis with policies and actions mandated by Washington, DC. Measures such as the new control policies and mechanisms at border crossings, which disrupt wait times and the desire or ability to cross the border; changes in migration and security policy that impact visa and work permit access routes; and the new border infrastructure and construction of the new wall. Furthermore, border residents on the Mexican side of

the border are affected in their day-to-day life by the volatile exchange rate (peso/dollar), which can be affected by a single tweet by the U.S. president. This has a major impact, particularly in dollarized economies. Here, the political rhetoric by the U.S. president affects directly and indirectly the activities, wallet, and image of those on the border.

3.1.4 The Different Conditions on the Border, or Borderisms (CO)

Tijuana's general condition, as a result of its asymmetrical and power relationship with San Diego, is that of a city/society with a capacity to constantly adapt to the new conditions agreed or brought about by the powerful North: a city/society that has developed the ability to understand, diagnose, and foresee changes north of the border as a mechanism for survival and opportunity. This ability varies from person to person, depending on the way one experiences the border. The borderland of Tijuana and San Diego harbors a complex universe of social and individual experiences. These are termed "borderisms" and serve not just to guide individual practices, but to justify and make sense of them (Iglesias Prieto, 2014). That is why it is said that borderisms are not just practices but also profound conditions of meaning that impact social identities and the way people understand the world. Borderisms operate on three levels: firstly as a sociocultural practice, secondly as social identities, and thirdly as a conceptual parameter or approach (Iglesias Prieto, 2014). In order to characterize this diversity of experiences and conditions, a typology was established for the four main borderisms on the U.S.-Mexico border. These range from the simplest and most exclusionary, which are supported by a justification and normalization of the border as a demarcation, to the most complex, inclusive, and integrated, which see the border as a third space (Soja, 1996) or third condition (Iglesias Prieto, 2014). Within each of these borderisms there are different stances regarding "the other" supported by the different levels and frequencies of interaction; the intensity, directionality and scale of the activity carried out within that space; the type of material and symbolic exchange; the cultural and social sense of the interaction; and the level of understanding, commitment, and critical sense regarding "the other side" of the border. It should be noted that the term "the other side" refers to the categories of space, society, and culture.

3.1.4.1 The Non-border Borderism

The first type of practices, social identity, and conceptual approach on this border is distinguished not just by the fact it stresses the differences between the countries, but above all, by the fact that it ignores the geopolitical reality and its importance. This stance is much more common on the U.S. side of the border due to their

position of power in the asymmetrical relationship and the lack of a link to the Mexican side, which allows them to believe and live their life in a way that is totally disconnected from the "other side." This approach strives to ignore or deny the geopolitical condition of the border, or downplay its importance, and underlines the differences between the two countries and the need to separate and control flows.

3.1.4.2 The Border Borderism

The second conceptual approach, practice, and social identity is characterized by the fact that it recognizes that the immediate, day-to-day reality is inevitably influenced by the geopolitics of an international border. This border condition—irrespective of whether a person crosses to "the other side" or not—constructs the city's identity and urban and social nature. It is recognized that throughout history business activities have been inextricably linked to the geopolitical border and the advantages and disadvantages that this brings. The neighboring city is a crucial part of reality.

3.1.4.3 The Binational Borderism

The binational stance and experience consists in recognizing not just the geopolitical reality but also the problems and opportunities resulting from this demarcation. It upholds the premise that there is a difference, and even—especially on the U.S. side—a need for control, but promotes movement, cooperation, and joint work. This type of approach, practice, or identity is underpinned by two principles. First, the border represents a great opportunity for commercial exchange, so long as crossings remain regulated and responsibilities are differentiated on each side. Second, there are shared problems and challenges on the border, and the only way to solve them is by working together. This approach also recognizes the advantages and possibility of participating in some of the sociocultural activities of the "other side," but without calling into question the identities or asymmetrical relationship between the two countries and cities. By perceiving the border as an opportunity or shared challenge, individuals usually incorporate "the other side" into their lifestyles, businesses, or collaborative strategies, and a sense of joint responsibility is developed.

3.1.4.4 The Transborder Borderism

The fourth borderism is that which experiences the border (both sides) as an integrated whole, meaning a transborder urban ecosystem (Herzog, 1990, 1999). However, in this integral vision, individuals are not unaware of the tension and conflicts in the dynamics on this international border. This perspective has developed as a result of the growth of cross-border sociocultural and economic processes,

and practices by individuals who are active members of both sides of the border (Iglesias Prieto, 2014). These are bilingual and bi/multicultural individuals who experience the border as a third space or third condition. They are proficient in the cultural codes that enable them to move around and gain a feeling of control on both sides of the border. They also tend to have strong emotional relationships with people on both sides. They have an extensive knowledge and mastery of urban spaces, along with a greater critical capacity in relation to border practices and notions. Individuals' practices, processes, and border perspectives transcend and transgress traditional notions of the national border as a geopolitical boundary. They transgress and call into question the binary mindset of "them/us," "here/there," by sharing in and being a part of both sides and numerous communities at the same time. Their practices and narratives underscore their status as a third option. Despite experiencing the area as an integrated whole, they recognize the different communities and cultures that make up this third space and the tension that exists between them. They are extremely flexible and incorporate cultural elements from various communities, but not without conflicts. Transborderism entails more complex processes and subjects due to the fact that they participate simultaneously in numerous geographic, social, cultural, and political spaces (Iglesias Prieto, 2014).

3.1.5 The Speed of Change in Tijuana (VEL)

In addition to the great diversity in experiences surrounding this border, Tijuana also faces the challenge of constant changes of great magnitude. These changes seem to outpace the ability to understand, consider, and solve them. Just over the last few years (from 2008), the city simultaneously experienced a peak in violence linked to organized crime, a dramatic increase in kidnappings, an exodus of families from Tijuana to San Diego, the direct and immediate impact of recession in the United States, the tourism crisis and collapse of several businesses, and the deportation of thousands of Mexicans into the city each year. The city and its civil society had not yet solved several of these problems, or found a way to integrate the thousands of deportees into a socioeconomic life, when in 2016 a new, unprecedented humanitarian crisis arose with the arrival of around 22,000 Haitians seeking refugee status in the United States. In the same year (2016), political campaigns in the United States focused most of their attention on the need to build a wall and anti-immigration, anti-Mexican and border control policies, with Tijuana at the heart of the debate. The level and speed of change require a creative, flexible, innovative civil society able to implement creative potential to adapt to or counter this change. The speed of this change and the city and its people's capacity for adaptation and reinvention are part of the general nature and condition of Tijuana and its inhabitants. This is particularly valuable in creative industries and communities.

3.2 Creative Faculty and Creative Potential in Tijuana

All human beings have a creative faculty, which is the capacity to solve problems and act in the face of unforeseen circumstances and scarcity. This is the capacity expressed when an individual manages to overcome—with an intelligent attitude and practice—the barriers of fear and the environment (Gordillo, 1977; Iglesias Prieto, 2008). José Gordillo asserts that creativity or creative faculty is not a formula but the highest faculty of human thinking (and doing). As a result, creativity dignifies human beings because, by implementing it along with work (as a source of livelihood), it transforms the environment and the social condition, providing the individual with the vital satisfaction of feeling like and being a designer integrated into the environment (Gordillo, 1977). But living conditions and the challenges they entail are not the same for everyone. That is why it is argued that borderisms impact the way this faculty is inhibited or enhanced. The development and promotion of creative potential in Tijuana has been linked to its sociocultural dynamics, its numerous conflicts and inequalities, the high levels of necessity and uncertainty, and the speed of change, which all require high levels of ingenuity to address. Tijuana has what Appadurai (2004) calls the capacity to aspire, which is a future-oriented cultural capacity. A highly diverse, open community, which retains these very attributes, has developed in Tijuana as a cornerstone of its identity. Many inhabitants live from day to day, but are always future-oriented and share an aspiration for something better.

The city of Tijuana has been forged, for the most part, by Mexican and foreign migrants (COPLADE, 2016), people who decided not to accept the conditions of their places of origin and moved there seeking social improvement. They are diverse, constantly changing communities that live together in a chaotic environment, but are united by a shared aspiration for change and a better future. These are communities with great working capability, and which are open to differences and live together under the premise that their diversity—and the constant arrival of new people and groups—is one of the greatest strengths. Tijuana may at times forget the harsh reality that it is a mechanism that helps people pull through, but never surrenders or plays the victim. Out of necessity, it reinvents itself on a daily basis, with a great capacity for adaptation and spontaneous innovation, collective work, support networks, and different, highly flexible forms of organization and management (Iglesias Prieto, 2008, 2014). All this boosts its creative capacity and entrepreneurial spirit. Here, artists are challenged, inspired, and provoked. Artistic practice, like any creative or inventive activity, encourages and implements free thinking (Gordillo, 1977), provides hope, and offers a departure from, and the chance to question and challenge, norms established by economic, political, and social powers and rationales. To enact change, one must first think of the possibility of change, imagine and visualize it—and this is the role many artists and cultural venues are currently fulfilling. Artistic practices in Tijuana "play a key role; firstly, in the chance to imagine a different society; secondly, by redefining the city and its dynamics with artistic work and cultural venues; and thirdly, by opening up real potential

for change, both for the city as a whole and for the individuals who inhabit it" (Iglesias Prieto, 2008: 12). In this sense, and despite the fact that artistic activity emerges in a seemingly disjointed fashion, artists and artistic practice itself have become—by accident or by design—major agents of social change.

3.3 Artistic Practice as a Form of Action by Citizens (from 2008)

As mentioned above, in 2008 Tijuana experienced a breakdown and crisis. Figures on the increase in violence, murders, and kidnappings skyrocketed. In the week from September 29th to October 5th 2008 alone, 53 people were murdered (which is equivalent to 7.53 murders a day on average) (Iglesias Prieto, 2008). This is in addition to the growing number of kidnappings, which affected the middle class and well-off sectors in Tijuana. This unbalanced the city, and in the months and years that followed, numerous families left Tijuana to settle on the other side of the border or in other cities in Mexico. Yet at the same time, many other families were forced to move to Tijuana from the United States after losing their homes due to the mortgage crisis in California. Other families settled in Tijuana with the aim of reuniting family members, some of whom had been deported from the United States. The use of public space changed in the city; people were afraid and no longer left their homes. The violence also scared tourists away, so some parts of the city became ghost spaces. The thousands of Mexican deportees sent to Mexico via Tijuana were forced to live on the streets, particularly in areas near the San Ysidro border crossing. The area known as "El Bordo" has become a universe of individuals abandoned by both countries, who personify the economy of expulsion. Organized crime expanded its business and networks. The economic recession of 2008 played its part, making many workers redundant and further normalizing precarity. Drug consumption increased locally and small-scale drug dealing became widespread and changed neighborhood dynamics and control. All of this contributed to a clear breakdown in the social fabric.

Culturally, 2008 and 2009 also represented a paradigm. Until 2009, the Tijuana Cultural Center (Cecut), the main cultural institution in the city, had functioned as the institution that structured artists' career paths (mainly mid-career or established artists), exhibitions, professionalization, and support for art production. In September 2008, Cecut opened the new "El Cubo" area, which became the most important space for art exhibition in the city, and a symbol of art from Tijuana entering the "major leagues" with world-class museum facilities. This space opened with a fitting exhibition entitled "Proyecto Cívico" (Civic Project), curated by Lucía Sanromán and Ruth Estévez with works by 18 internationally renowned artists. This exhibition was intended as a reflection on the political, social, and civic crisis at the time. It was focused on citizens, and all those who, due to political and social conditions, had their freedoms curtailed and were unable to exercise their rights as

inhabitants of the city. The exhibition opened up a public debate on the relationship between art, cultural institutions, and civic responsibilities. However, these new facilities could not really be exploited by the now vast community of visual artists in the city. In 2009, Cecut changed management. The new director, Virgilio Muñoz, who was appointed by the National Council for Culture and Arts (Conaculta) in Mexico City without any consultation with local communities, caused a great deal of tension and conflict among a very large sector of the cultural and artistic community. His scant background in culture and arts, lack of sensitivity to art and culture, questionable reputation and disregard for local artistic communities—which he called “a small world”—triggered one of the greatest breakdowns in the institution, with over 270 artists, cultural promoters, scholars, and professionals involved. At first, this led to a protest and mobilization of the artistic community around the motto “We’re all a small world”. Secondly, the breakdown served to unite the artistic community and open up a wide-ranging discussion on alternative forms of management, production, professionalization, and art exhibition in independent spaces. The third phase was the creation of these new independent, alternative spaces that changed the artistic landscape of the city.

3.3.1 Cultural Revivification: New Ways of “Making a City-Community”

Within this universe of crisis, despair, and institutional breakdown, artistic communities had two choices: remain paralyzed by fear, or act and respond as an active civil society. They chose the second option, and below are some of the most prominent artistic and cultural actions and projects by civil society.

3.3.1.1 Reacciona Tijuana

One of the organic resistance initiatives to the insecurity crisis was Reacciona Tijuana, which was founded in January 2010 and is a good example of “emerging community-based cultural revivification” (Díaz, 2012). This initiative, led by Gabriela Posada and Garzón Masabó, was backed by artists, cultural promoters, professionals, small business owners, and students. The initiative stemmed from a desire to recover and dignify the city, and the first project consisted in devising powerful phrases to encourage citizen participation. This engaged many people and groups who identified with the phrases: “I’ll make Tijuana the city of my dreams,” “Tijuana is the corner where the dreams of a country in need of peace bounce back,” “Despite everything, Tijuana keeps moving,” and “The cure for Tijuana is in all of us.” Very soon, the group Reacciona Tijuana realized that their ability to transform the city depended on joining efforts and working with as many civil organizations, public bodies, educational institutions, and small businesses as possible. In July

2010, along with students from the School of Arts in the Autonomous University of Baja California (UABC), they painted murals with these phrases, which by then were a hit. In early 2011 they carried out, with support from an arts organization called Entijuanarte, the community project “The collective mind paints the city” [*La mente colectiva pinta la ciudad*], which consisted in producing a mural as a community process based on colors chosen by 592 citizens who voted online. In December 2010 and January 2011, Reacciona Tijuana acted on a larger scale, and along with the Tijuana environmental group and the Secretariat of Social Development (SEDESOL), carried out the community project “Building the community I want” [*Construyendo la comunidad que quiero*] in one of the poorest and most neglected neighborhoods in the city: El Altiplano (Posada and Masabó, 2016). Over 250 people worked together to create six murals, three school and community gardens, school cafeterias, a park, and sports fields, and offer the community a concert by the Baja California Orchestra. In May 2012, they conducted an even more sophisticated project, “Building the ideal city” [*Construyendo la ciudad ideal*], in which the artists James Rojas and Giacomo Castagnola, along with the Camino Verde community, used recreational activities to construct a model of the ideal neighborhood. Since its creation, Reacciona Tijuana has carried out many public and collective art projects and offered professionalization and leadership development workshops, community life conferences, art workshops in migrant shelters, etc. It has worked alongside most civil society organizations in Tijuana. It has engaged in processes to renovate, expand, and create community cultural centers, such as the Casa de las Ideas [Idea House] in Camino Verde.

3.3.1.2 Experiences in Art Education and Citizenship

Under the same premise that culture and art are factors that empower individuals and civil society, and that teaching art helps to form better and more engaged citizens, in recent years Tijuana has seen the creation and growth of major independent art education projects, especially for children and young people. These include the aforementioned Casa de las Ideas, developed by various civil organizations in December 2012 in Camino Verde and then taken over and managed by the organization Tijuana Innovadora. The Casa de las Ideas seeks to reduce rates of violence and improve citizen coexistence through creative activities. It has been the venue for more than 81 art workshops, which are particularly directed at children and youth at risk and have been conducted by a number of local artists (La Casa de las Ideas, n.d.).

Other art education projects (spanning different artistic disciplines and varied in nature, origin, level of formality, and development) include (in music) the Núcleos Musicales program, the Tijuana Opera, the string orchestra in the Casa de la Cultura “El Pipila,” and the youth symphony orchestra; (in audiovisual arts) Loops Urbanos, Polen Audiovisual, and Reactivo 510; (in multidisciplinary art) Cultura en todas partes, Frontera México, and plastic arts workshops; (in applied arts) a lutherie workshop; and (in the performing arts) the Palaviccino drama workshop. Five of

these 13 projects took place in Colectivo Camino Verde. The reasons for developing these projects revolve around two main principles: the first, which was also the case with older projects and initiatives, is that the city's image is rebuilt through these projects, and local identity, pride, and a sense of belonging to the city are reasserted. The second, which has developed since 2008, is that artistic learning strengthens critical capacity, boosts citizen engagement, encourages the adoption and revival of public spaces, and revitalizes civil society, in addition to decentralizing cultural actions and practices (Vicencio, Jacobo, & Iglesias Prieto, 2013).

3.4 The Creation of New Visual Arts Spaces as a Way of Life

Independent art projects and spaces in the city began to grow significantly from 2008 to 2009. These were formed in two ways and under two premises. The first stemmed from mid-career (and some established) artists' need to create alternative spaces to counter the rupture with Cecut, revive the city and its spaces, and address the civic crisis in the city through art. These spaces allowed them to reinvent themselves by producing, professionalizing, and exhibiting their own and their colleagues' artwork. Despite holding a bachelor's degree, many artists were self-trained in art given the lack of art schools in the city, and had forged their career and become art professionals in or with support from Cecut. On the other hand, there were recent graduates from the School of Arts in the UABC, who represented a new generation of emerging, university-trained artists who had not been so closely tied to cultural institutions (besides the university itself) and who viewed independent spaces as the natural, organic way of working and coexisting. This new generation knew that it depended on the creation of independent spaces to boost their careers, exhibit experimental work, and project themselves and associate with artistic communities from elsewhere (Muñoz & Roberts, 2018).

For the first group (artists who were reinventing themselves), independent art spaces were formed with objectives, strategies, and structures that were similar to those of the institutions they had worked with previously. Their programs followed the structured professionalization approach as a means to sustain and consolidate artistic output. But as they evolved, they began to adapt to address deeper—and even philosophical and existential—needs and discussions. As a result, projects and spaces were proposed not only to create art but as living spaces. In other words, these were projects/spaces that made it possible to experience and redefine the meaning of life, in such a way that the project was constructed around "being happy," holding up and existing. And these projects, by their very nature and dynamics, also began to contribute—directly or indirectly—to rebuilding the sense of "community-based social cohesion" (Díaz, 2012).

Several of these artists had experience living and producing art abroad, or in other cities in Mexico, and already had careers in art and a national and international network of contacts in the art world. They applied some of this experience to their work and new spaces. Marcos Ramírez "Erre," for example, had already founded, in

2003, Estación Tijuana (2003–2010), an alternative, nonprofit space strategically located beside the San Ysidro border crossing, to develop, produce, and hold exhibitions and events. This cross-border space "sought to trigger and bring together artists and art" (Ramírez, 2006) and was always associated with important projects, artists, and institutions (mainly museums and galleries) on both sides of the border. The site was the venue for major art exhibitions, workshops, lectures, and projects. Estación Tijuana shut down in 2010, mainly due to the financial difficulty of sustaining the project.

In 2016, the young developers and architects Miguel Marshall, Rodolfo Argote, and Gio Aldrete purchased the premises and developed Estación Federal as a "comprehensive [binational] space that brings together the border communities of Tijuana and San Diego through housing, office space, and coexistence between professionals, as well as a gallery and space for artist residencies" (Estación Federal, n.d.). One important aspect of this architectural and urban development program—which is unusual among developers—is that, in early 2017, they transferred the administration and management of the gallery space free of charge to the art project Relaciones Inesperadas, which will be discussed further on.

Another independent art project is La Caja Galería, which was started up in 2005 by Arturo Rodríguez. This mix between a gallery and cultural center arose out of a desire not just to create new art audiences, but also "to educate and help shape a generation of artists and designers" (Miranda, 2015a) and foster an appreciation for art in both children and adults (Miranda, 2015a). Since 2011, this space has offered a certification program in Visual Arts Appreciation, certified by the National Institute for the Fine Arts (INBA) with the aim of educating new collectors in the region. This space has also exhibited the work of many local and international artists, and hosted innovative events that stimulate attendees' five senses by combining in one experience plastic and visual arts, music, performing arts, and gastronomy (local food and drink).

In 2012 and from a global and transborder perspective, visual artists Daniel Ruanova and Mely Barragán opened an independent art space in Tijuana called TJ in China Project Room (2012–2016), which exhibited work by the city's emerging artists. The space sought to promote and boost artistic production and dialogue between creative minds. It served as an exhibition hall and an area for debates, workshops, and residencies for international artists interested in working from Tijuana. This independent space was supported essentially with public funds, and was the result and continuation of their stay in Beijing and the space the two artists opened there during their residency (from 2010 to 2012). The original space in China was located in Caochangdi, a major arts district on the outskirts of Beijing, which is home to the studios and galleries of many renowned Chinese artists (including Ai Weiwei). TJ in China Project Room (n.d.) in Beijing had served—for 2 years—to develop networks of contacts, exchanges between artists, and expose artists from Tijuana to new realities and audiences. Indeed, several artists from Tijuana exhibited their work in this space in Beijing. The TJ in China Project Room in Tijuana was located on Avenida Revolución, the most iconic street in Tijuana, which had been reduced to a ghost street as a result of the economic crisis and violence,

and was therefore available. The choice of location was due to a strategy they learned in China, namely that an art space's impact hinged on its central location, a concentration of art spaces in the same area, and pedestrian access. Before the crisis, Avenida Revolución had been off-limits for local artists due to the high cost of rent. Indeed, in the early 2000s, at the height of the tourist trade, TJ in China's 1000-square-foot space might have been let in the vicinity of $5000 a month. Barragán and Ruanova, who operate their gallery as a not-for-profit funded primarily through grants, pay just $500 a month (Miranda, 2015a, 2015b, 2015c).

The main closing event of this project was an exhibition entitled Revisión Glocal Review Beijing-Tijuana 2012–2015 (2015), curated by the couple (Ruanova and Barragán) and exhibited at El Cubo (Cecut), along with work by 40 artists from different disciplines and countries who participated in the exhibitions and residencies in both TJ in China locations (Beijing and Tijuana). It is thanks to this exhibition that some artists in Tijuana have renewed ties with Cecut after the 2009 rupture.

Avenida Revolución and surrounding areas had already been reclaimed, since 2010, by various artists and small cultural entrepreneurs who found new ways to use this space. The spaces abandoned by U.S. tourists, in particular Pasaje Gómez, Pasaje Rodríguez, Pasaje Revolución, and Calle Sexta (Sixth Street), were redeveloped with galleries, workshops, cafés, craft beer bars, restaurants, and boutiques created by and for local youth. Very soon, the areas became the backbone of the young local cultural and art scene. The ability of Tijuana's youth and cultural entrepreneurs to reinvent themselves and take ownership of the city and "reimagine the role of the street and its relationship to the city" (Díaz, 2012) revealed once more this community's creative and flexible capacity. The spaces did not just serve to revive the city and its economy, but also helped to strengthen and expand networks between the city's artists, promoters, intellectuals, and cultural entrepreneurs.

It is within these centrally located spaces that El Grafógrafo—a mix between a café, bookstore, and shop designed to offer access to new and used books—opened, along with many other new places. El Grafógrafo hosted binational literature evenings, along with poetry and novel workshops. Another new spot was Local 29, a collective silkscreen and graffiti workshop especially for street artists. The workshop doubled as a stage for certain performances and experiments with other artistic techniques (Díaz, 2012).

In this process of urban and artistic mobilization, the 206 Arte Contemporáneo space, which has been running since July 2012, has been key. It was created and is operated by the architects/artists Melisa and Mónica Arreola in collaboration with the museographer Luis Dueñas. It is a "dynamic space for dialogue and the dissemination of art. A site that is open to new proposals and artistic gatherings" (206 Arte Contemporáneo, n.d.). Collective and individual exhibitions, mostly by emerging local artists and based on global themes, are held there every 2 months. They have worked with several students holding scholarships from the School of Arts in the UABC, who have gained in professionalism as a result of the work process. They also organize workshops, discussions with artists, and independent book presentations. As a way of keeping a record of their activities, they issue a publication every 3 years describing the exhibitions and activities carried out. This space is, essentially,

self-funded. Its audience is binational and highly diverse, and it maintains ties with art and educational institutions on both sides of the border. One high-impact activity for the art community has been its work with the Seminario Permanente de Teoría Contemporánea [Permanent Contemporary Theory Seminar] in Tijuana (composed of Alfredo González Reynoso, Christian Conrado Pardoy, and Karla Villapudua), which holds seminars in the gallery to discuss contemporary authors who have not necessarily reached universities or research centers (Arreola, 2018; Méndez Garcilazo, 2017). As a major component of current art centers in Tijuana, 206 Arte Contemporáneo also maintains a close link with the Periférica organization/platform, founded in 2014 in Tijuana and which is.

> devoted to generating, distributing, and preserving visual arts-related content in northern Mexico with the aim of boosting professionalization structures in art and culture, as a node connecting cultural and educational institutions, autonomous initiatives, and the private sector (Periférica, n.d.)

Also located on the iconic Avenida Revolución, in what used to be a storehouse for trinkets and souvenirs, is the Cine Tonalá, which opened in 2016 at the initiative of artists and cultural promoters Adriana Trujillo and José Inerzia. Cine Tonalá is a multidisciplinary space/project specializing in cinema, the performing arts, and gastronomy, and managed as a cultural enterprise by a group of partners. The founders recognized a clear need to open up a permanent space to screen alternative cinema. Adriana Trujillo had spent 10 years organizing Bordocs Foro Documental and had become aware of the difficulties of dealing with promoters from different administrations within the state and at a federal level. The general concept of Cine Tonalá was born in 2013 in Mexico City. Later a venue was opened in Bogotá (Colombia), and then finally in Tijuana. It boasts extraordinary facilities, including for example a screening room with a seating capacity of 80 people, where concerts, performances, and visual arts interventions take place in addition to film screenings. It also has a mezzanine with space for 25 people, where external projects are displayed; a lounge area offering coffee and other drinks (mainly regional craft beers); and a terrace for open-air screenings. This area also includes a kitchen and space for 85 diners, and offers one of the best views over the city, in addition to an excellent menu featuring local cuisine. It screens art cinema, Mexican cinema, and documentaries. Cine Tonalá helps to strengthen regional independent filmmakers and its Territorio Norte section, for example, endeavors to further visual arts education and teach children and youth, their future audience, about art.

In 2012, the couple Ingrid Hernández and Abraham Ávila, influenced by the crisis in Tijuana and inspired by their residencies (in New York for the former, Mexico City for the latter), decided to launch the project Relaciones Inesperadas [Unexpected Relations] in facilities next door to their home in the Burócrata Ruiz Cortines neighborhood. This is a space for theoretical, social, philosophical, and political reflection, and the professionalization of the region's artistic community. The project has given them the chance to "be happy, thinking, sharing, and producing our artwork. […] A project that has allowed us to live more fully and reduced fragmentation, which gives us a feeling of – although it may sound kind of utopic –

emancipation" (Avila, 2018). The space offers workshops with and for young artists, lectures, and since early 2017, they have also organized exhibitions with the gallery in Estación Federal, which, as mentioned above, was commissioned to them free of charge. Their work and agenda are structured to give local artists greater resources to navigate the professional art world from the Contemporary Art Production Program, Film-making Program (both lasting 11 months), the Permanent Production Program, and the Contemporary Art Appreciation Program, which is carried out in collaboration with the Franco & Moragrega Gallery in San Diego (Relaciones Inesperadas, n.d.).

More recently, in 2017, the Deslave gallery was founded, which is strategically located in downtown Tijuana. This project is representative of the working dynamics and rationales of art spaces founded by new generations of artists. The space was founded and is managed by two very young artists—Mauricio Muñoz and Andrew Roberts—who recently graduated from the School of Arts in the UABC and as students worked with TJ in China Project Room. They founded the space to provide an experimental platform to boost their own art careers and those of emerging artists they support. They sought to create a space more closely aligned with new art discourse and alternative exhibition methods. They are also interested in multidisciplinary art projects that follow a nontraditional format and discourse. Their program is made up of art exhibitions, curatorial projects, workshops, and public dialogues. Their activities include "Videohouse," a half-yearly open call for video art; and "Junta de mejoras," a study group around art theory (Deslave, n.d.). This space seeks to develop a closer link with communities in other cities, and consequently they work alongside similar experimental art spaces such as Bikini Wax in Mexico City and Human Resources in Los Angeles, California. They aim not just to build bridges but also foster sentimental and collaborative relationships with these spaces and those who create and promote them. They are also keen to record their activities and exhibitions on an active platform on their web page, and disseminate these records/reports in art magazines and platforms. Deslave also arose as a criticism of traditional art practices and the solemn, ritualized manner in which art is produced and shared. As a result, it seeks to adopt a "serious" approach, while remaining sentimental and avoiding institutionalization as far as possible. Deslave has run on its own funds and, more recently, under grants.

3.5 Conclusions

The art communities of Tijuana have already laid the foundation and fired up a chain and network of independent, supportive art spaces. This study shows how the creation of these art projects and spaces have directly impacted the city's various cultural communities and changed the relationship between artists, and between artists and cultural institutions. They have brought to light the political, economic, and sociocultural power of art in the city and its revival or revivification process. However, an analysis of the information generated in this study reveals that several

of these spaces will likely have to leave the city center due to ongoing gentrification processes. Despite this, everything suggests that they will once again readjust to the changing conditions in the city. Their practices, goals, and objectives will surely adapt. They have learned and they will continue needing to forge links with all the initiatives and people that surround them and have grown in capacity and knowledge alongside them.

The information generated in this study also shows that they will remain keen to establish ties between projects and people based on emotional and supportive relationships that go beyond artwork to become a way of life and personal experimentation. This interest and belief in multidisciplinarity will grow as a result of the diversity in career paths, production methods, and exhibition platforms. Their willingness to change and capacity to constantly adapt constitute one of their greatest strengths, but also seem to suggest vulnerability given that several of these new art spaces soon had to close due to financial difficulties.

The study also seems to suggest that, as is the case with younger artists, they will continue to break with the traditional canons of art disciplines and production. The artists in this study have pointed out that the trend toward being multifunctional and having several jobs will grow not just as a result of the levels of precarity in Tijuana, but also as a strategy to produce art from any place and standpoint. There are signs that artists will continue to test the limits of what is and isn't art and artistic practice, and that the paradox whereby artists are ever more qualified and professional yet seek "deprofessionalization" in traditional artistic practices will be increasingly prominent.

Regarding the way artists are defined and the role they say they have in society, the study suggests that artists will continue to seek to go beyond the traditional roles of "artist" (as a professional in art) to become "experimenters of life." Many will continue to feel that legitimation by traditional institutions is unnecessary. Furthermore, everything suggests that their glocal mindset will continue to grow, meaning spatial, geographic, and physical proximity will be as important as virtual proximity to those with whom they share interests, traits, and an understanding of life. The study suggests that artists will continue to seek new ways to live, create, and learn through art, and will continue to create humanizing spaces/projects to share knowledge, techniques, and life experiences, and which—as a result—contribute to a strong sense of citizenship. They will continue to work in support networks, and their artistic practice will continue to be a reflection of life, and represent and dignify individuals and communities.

Lastly, the speed of change in the city's economic and sociocultural dynamics and the short-lived nature of some of the cultural projects/spaces studied suggest a need for a longitudinal study that not only focuses on art spaces/projects (which may last only a short time) but on the career paths of key artists in the city, as this would shed light on the medium and long-term importance of art practices in processes to revive and strengthen civil society and art as an agent of social change.

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Chapter 4
A Model of Innovative, Social and Sustainable Entrepreneurship Under the Roof of the World

Mariella C. Remund, An Hong, and Marta Peris-Ortiz

Abstract The objective of the case is to illustrate how the private initiative of an entrepreneur in the Chinese provinces of Yunnan and Tibet can become a model of cultural, social, sustainable entrepreneurship, which creates value for the organization and its environment, and how such a model can be replicated and reproduced in different environments. Cultural, social and sustainable entrepreneurship is the object of numerous publications, and the focus of an increasing global interest from academic settings and society. A secondary research effort shows that the current literature does not report examples or cases of this comprehensive entrepreneurship applied in the Tibetan region, under extreme climatic challenges. The findings of the case are based on literature search, personal interviews in Lhasa, Tibet and direct observation by the authors. The study-visit in Lhasa was followed by an in-depth questionnaire with the objective of identifying to what extent the model could be reproduced in different cultural environments and countries. The case identifies empirical approaches and universal building blocks for social and sustainable entrepreneurship. It provides a road map for creating a sustainable business ecosystem useful for entrepreneurs. This case gives a broad view of a successful and innovative approach to social entrepreneurship; it shows that an entrepreneur new to the hospitality market segment, by applying fresh approaches and thinking to a mature, established market, can create added value for the organization and the community. The case contributes to the literature on the application of innovative entrepreneurship from an industry outsider and under extreme climatic conditions.

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Keywords Sustainable entrepreneurship · Tibetan communities · Ecosystem · Luxury lodges · Innovative entrepreneurship

4.1 Introduction

As global hotel chains struggle to capture the interest and the market of millennial customers (Carrington, 2016), facing increasingly fierce competition from alternative offerings such as Airbnb (which business model seems to understand the millennials' behaviour and needs), a private chain of luxury boutique lodges in Tibet and in the Tibetan area in northwestern Yunnan province in China, is illustrating that an entrepreneurship initiative born out of a passion for quality and beauty, respect for the environment, involvement and development of local communities, can be successful and become not only a benchmark for culture-themed hotels but also a paradigm of social innovation in the mature, very competitive and crowded market of luxury hotels.

This chapter has five components: the first section describes the geographical and cultural background of Mr. Baima, the entrepreneur who forms the subject matter of this case. His background and strategy is compared and contrasted to the strategies of the luxury hotel industry, which he has chosen to enter as an outsider, with a concept that goes against the mainstream industry's strategic approaches. The second section describes the objective and methodology of the chapter. The third section describes in detail the building blocks of the Songtsam Group, from the vision of the founder to the execution of detailed processes and *modus operandi*. The fourth section presents the outcomes of the lodges and lists the recognitions received by the hospitality industry, while the last section indicates the paper's conclusions, its limitations and offers suggestions for further research.

4.2 Context and Background

On a cold November night in 1964 Baima Duoji was born in Shangri-La, in the northwestern Yunnan province of the People's Republic of China. Shangri-La is the seat of the Diqing Tibetan Autonomous Prefecture. Situated at an altitude of over 3000 m, Shangri-La turned out to be a decisive force in Mr. Baima's destiny and lived up to its promise of being "Paradise on Earth" as described by James Hilton in his book, *Lost Horizon* (Hilton, 1933). All this was achieved thanks to Mr. Baima's vision, ambitious goals, determination and passion for perfection.

The province of Yunnan (meaning "South of the Clouds", in Chinese) is located in the South West of China and borders the Chinese provinces of Guangxi, Guizhou, Sichuan, the Tibet Autonomous Region, and the countries of Vietnam, Laos and Myanmar. Yunnan is situated in a mountainous area, with high elevation in the northwest, where the Songtsam lodges are located, and the altitude can vary from the mountain peaks to river valleys by as much as 3000 m (Wikipedia, 2018).

After completing high school, Mr. Baima studied animal husbandry in Kunming, capital of Yunnan Province. After graduating, he returned to Shangri-La and practiced as a veterinarian for 2 years. He eventually learned about TV production and began working for the local TV station. Thanks to his internship with Yunnan TV, he found an opportunity to study at the Beijing Film Academy. After living for a while in Beijing, he realized that few people from outside the Tibetan communities knew much about Tibetan culture, and some even misunderstood it. "Many people assumed that Tibetans were rugged and unrefined," he explains. "However, I think most are reserved and even introverted." (Chen, 2017). In 1992, China Central Television (CCTV) recruited Mr. Baima, who nurtured the hope that television could serve as a bridge to connect the Tibetan culture to other people from beyond the Tibetan inhabited regions. "I wanted to help more people to understand the Tibetan culture because we are one big family."

After joining CCTV, Mr. Baima started to produce documentaries about Tibet, which earned him great acclaim from critics. In 1998, his TV documentary "Portraits of Mountains", was awarded the Excellence Prize by MipTV, at an event which takes place annually in Cannes, France, home to the famous Cannes Film Festival. (MipTV, 2018).

Mr. Baima further deepened his understanding of culture and life during his tenure at CCTV. "Every culture has wonderful things to offer" he avers. "Learning about them makes your heart and soul stronger. When you establish good control over your mind, you can develop your own ideas about many things, and through the process, you will obtain wisdom."

In 1994, Mr. Baima was on his way back to Shangri-La, planning to shoot a documentary of his childhood home. It had been many years since he had last set foot in his native region and fond memories came pouring back. He remembered the excitement of climbing local mountains as a young boy, the intimate solitude of his town's Buddhist temples, and the people who helped define him as a person. Finally, Mr. Baima was home. The rush of emotions made him wonder: how could he give back? He thought about the region's rich culture and how he could create a way for travellers to come and experience a new way of life; a place that was more than the usual hotel and gift shop, a place where guests could immerse themselves in living history.

However, Mr. Baima did not commit the common mistake that many entrepreneurs make: to let his initiative and investment be driven exclusively by his dream and passion (Northwestern Polytechnical University, 2015a); he realized that, beyond his vision to make the Tibetan culture known outside Tibet, there was a market need because he had heard frequent complaints from his television colleagues about the less-than-ideal accommodations in Deqen, after they returned from business trips in Yunnan, despite the region's picturesque scenery. Mr. Baima remembered seeing many boutique hotels in Paris, and had once stayed in one of them near the Arc de Triomphe while on his way to attend the MipTV award in Cannes. That hotel in France inspired the idea of converting his home in Kena Village into a boutique hotel. A boutique hotel is defined as a hotel unique in style, design-centric, either independent or affiliated with a smaller brand system, with 40 to a maximum of 300 rooms (Hotel News Now, 2018).

His family home featured two courtyards used as a guesthouse, and additional buildings inhabited by his parents and sister's family that covered more than 1000 m^2.

In 2001, Mr. Baima razed the two old buildings of this family guesthouse, and built the Songtsam Shangri-La Lodge with 22 guest rooms, using the 60,000 RMB (US$ 8693) he had raised. The same year, his home county of Zhongdian was renamed Shangri-La County (Chen, 2017).

Songtsam in Tibetan means "pure land of the soul". The meaning is reflected in the hotel's logo: a lotus flower with eight leaves, integrated in an auspicious knot. The lotus flower reminds one of the mandala: the ability to rise pure from the mud. It refers to the fact that the essence of life is not tarnished, the auspicious knot represents the idea that the universe and all creatures are eternally on the move in circles, without beginning and without end.

Mr. Baima's family guesthouse was the first lodge opened in 2001, and from 2006, this was followed by seven other Tibetan-style hotels, six of them located in the Diqing Tibetan Autonomous Prefecture of the Yunnan Province, one in Lijiang in Yunnan and one in Lhasa, Tibet. One of the eight hotels is under joint management with the French multinational hotel group Accor S.A., as a culture resort and the remaining seven belong to the Diqing Songtsam Lvgu Hotel Co. Ltd. (hereafter called Songtsam Group), all of them located along the Yunnan–Tibet route: from Lijiang to Lhasa. The Yunnan–Tibet route is known as the Ancient Tea Horse Road, which was a trade route mainly through Yunnan, Sichuan and Tibet (Yunnan, Wikipedia). From the sixth century to the twentieth century, traders from the Yunnan province travelled by foot and horseback with pack horses to exchange tea for horses with the people in Tibet, and thus the pathway was called the Tea Horse Road. The Ancient Tea Horse Road rivaled the Silk Road trade routes in importance, and is known to be the longest ancient trade road in the world. It was certainly the toughest road to travel, as few people in ancient times could finish the whole journey (China Highlights, 2018).

The concept of luxury lodges and travelling between lodges at the beginning echoed the concept of the resorts and journey between five lodges in five valleys to experience the landscapes of Bhutan offered by Amankora in Bhutan (Amankora, 2018). However Mr. Baima has maintained a steady pace in building and opening new hotels along the Lijiang–Lhasa route, pushing his vision and ambitious goals across his organization. Building the resorts in such remote areas is "far from a simple business" in Mr. Baima own words (行李, 2015), with most of the places located at altitudes exceeding 3000 m; but the locations are not selected from a practical point of view of easy accessibility and availability of an existing, mature infrastructure. Each location is selected for its natural beauty and unique natural environment, combined with a deep historical and cultural legacy.

This case confirms the theory and model of innovation (Christensen & Raynor, 2003) that disruptive innovation in a given industry is delivered most of the time by industry outsiders and not by mainstream players in the industry, not even by industry leaders. While the luxury hotel industry in China (Jing Daily, 2012) and worldwide has been facing fierce competition putting pressure on prices, and

offering an experience is gaining traction over mere product offering (D'Arpizio, 2016), the vision of a Tibetan entrepreneur to provide a feeling of belonging to a living historical environment, through the vehicle of luxury lodges in secluded locations along the Ancient Tea Horse Road between Yunnan and Tibet, is proving to be a winning proposition.

The luxury hotel industry faces an increasingly challenging competitive environment globally, where key players are confronted on one side by the paradox offering from Airbnb, which has become the largest provider of accommodation without owning any hotels or resorts (Innovation Tactics, 2017), and on the other side by the generational changing needs and wants of the millennials, who represent 50% of the hotel bookings (Carrington, 2013). This has led to a market consolidation (Kostuch, 2016), with the top ten players holding the majority of the global market share (The global luxury hotels market, Report Linker, 2016). Deloitte is reporting that throughout 2018, the hotel industry will continue to turn out a strong performance, and is projected to sustain a 5–6% growth (Deloitte, 2018). However some analysts are concerned, as this industry is known to be cyclic; throughout the year, hoteliers will be looking for additional opportunities in strategic places, including a re-visit of the midscale experience, traveller-facing technology, health and wellness and loyalty.

Geopolitical tensions are affecting the hospitality industry in mature markets: after the presidential election, mood in the United States resulted in insecurity, fears of terrorist attacks spread in Europe, and uncertainties have increased after Brexit. Chinese socio-demographics such as a growing middle class, increased individualism, affluent luxury consumers moving together with the increasing aging population, are expected to fuel a growing consumption for luxury items in China, including hospitality (D'Arpizio, 2016).

By entering the luxury hotels industry, Mr. Baima has confirmed that a double discontinuity in a given market always offers a business opportunity to be seized (Northwestern Polytechnical University, Remund, 2015b). With a strategy of focus and differentiation (Porter, 1998) when the disruptive market leader, Airbnb, and its main competitor, HomeAway, have no assets (Reporter Linker, 2016), and the main players wish they had less assets as the fixed costs as a percentage of revenue is generally higher than 60% for most hospitality-based operations (Hoare, 2015), Mr. Baima has invested around 400 million RMB (US$ 63.2 million) in the construction of eight high-end lodges which offer a total of 247 guest rooms along the Ancient Tea Horse Road in the Tibetan area of Northwestern Yunnan province in China and Tibet.

The initiative of building luxury lodges in remote areas above altitudes of 2000 m fulfills the dream of Mr. Baima to make these locations known to the guests who come from crowded metropolis, and have forgotten how it feels to be integrated with nature, culture and history. Additionally, it reflects Mr. Baima's desire to give back to the Tibetan villagers and communities in the Yunnan and Tibetan provinces of China, making them partners in development by lifting them up from poverty, and to conserve the handicraft skills and centuries-old knowhow of carpenters, weavers, stone masons and other artisans who would have been otherwise doomed to disappear due to lack of patronage.

4.3 Objective and Methodology

This chapter analyses the case of an entrepreneur born in the Tibetan region of Northwestern Yunnan province in China. The entrepreneur, Mr. Baima, is the founder and CEO of the Songtsam Group of luxury lodges. The case illustrates how entrepreneurs, newcomers to a mature, saturated industry, can create value for customers and society, and deliver sustainable growth for the company and for the communities where they are located, by designing the offerings of their company with the vision of creating and delivering an experience that is forgotten in the increasingly urbanized environment in China. Building the lodges in secluded areas has contributed to the economic development of the villages, provided a sustainable living to the villagers, and is contributing to conserve and develop the knowledge of arts and crafts of the region. The case has many levels of interest and uniqueness: the locations of the lodges, all of them at an altitude between 2000 and 4200 m in the Chinese provinces of Yunnan and Tibet; the cinematographic architecture of the buildings, design of the rooms, gardens, decorations and experience, and the near-paradox that, in spite of the considerable investment in securing the land and building the lodges, the "product" features which are communicated are intangible and purely emotional.

The methodology employed in the case study includes gathering background knowledge of the entrepreneur, his team, the locations, the lodges, the competitors and the mainstream luxury hospitality industry; conducting semi-structured interviews with the entrepreneur, his personal assistant, his head architect, the staff of the lodges and evaluation of the guests' written feedback in the international hotels' portals.

4.4 The Case of the Songtsam Group of Lodges

This section is composed of six segments:

- Macro-economic data concerning urbanization rate in China and GDP data of the Yunnan and Tibet provinces in China.
- Key performance indicators (KPI) of the luxury hotel industry globally and in China.
- Songtsam Group start up days: vision, business model, capital requirement and product definition.
- Human Relations challenges to staff a management team aligned to the vision.
- Giving back to the Tibetan communities.
- Extended supply chain and the creation of the Songtsam Group ecosystem.

4.4.1 Macroeconomic Data

The fast economic development in China for the last 25 years has resulted in an urbanization rate of 56% in 2016 (The World Bank, 2016), and it is expected to reach 60% in 2018 (Reuters, 2018). Mr. Baima's underlying vision and the core values of Songtsam Group are related to this pace of urbanization and its consequences: "I have long hoped that Songtsam could bring people a feeling of a distant home, a home far away from home." There is a social consideration to be made; among the 31 provinces in China, the provinces of Yunnan and Tibet ranked number 30 and number 28, respectively, in GDP per capita in 2017, with 34,546 RMB (US$ 5117) and 39,258 RMB (US 5814) per capita respectively, versus a GDP per head in Beijing, ranked number 1, and Shanghai (ranked number 2) of 128,927 RMB (US$ 19,095) and 124,571 RMB (US$ 18,450) respectively (China GDP per capita, Wikipedia, 2018).

In the last 30 years, China has taken giant steps to lift its population out of poverty, and more initiatives are currently underway to lift all Chinese out of poverty by 2020, including relocation of 2.8 million people out of inhospitable areas (Lim, 2018).

4.4.2 KPI of Luxury Hotel Industry Globally and in China

A study conducted by Bain & Company and published in Altagamma shows that the global luxury hospitality market grew by 4% in 2016 over 2015, and is expected to grow at a CAGR of 3.5% between 2016 and 2021, reaching the size of US$ 194.63 billion by 2021 (Globe News Wire, 2017). According to the Bain & Company's global analysis, two of the main takeaways are that in the luxury market, the out-of-home high end experience is gaining traction, benefiting from the growth of luxury travellers and increasing self-indulgence, and that consumers, tired of more of the same approach, are rewarding innovation across luxury categories and segments (D'Arpizio, 2016).

China's hotel industry has experienced meteoric growth, resulting in a business of US$ 44 billion, with 2.5 million hotel rooms. Some analysts suggest that the market is reaching its saturation point, but when compared with hotel penetration rates in mature markets, like the United Kingdom, (10 hotel rooms per 1000 capita) and the United States (20 per thousand), China, with just 4 rooms per 1000 capita, appears to have an attractive growth potential. A study conducted by A. T. Karney concludes that there is still considerable room for growth, and predicts that by 2020, hospitality in China will become a US$ 100 billion industry with 6.3 million rooms, to reach 8 rooms per 1000 capita, with one major trend being that consumers will become more sophisticated and demanding, and the recommendation that players need to adapt their concepts, offerings, and economics, to be successful in the Chinese market (Gan, Goh, & Kim, 2013).

4.4.3 Songtsam Group Start-Up Days: Vision, Business Model, Capital Requirement and Product Definition

Mr. Baima's vision was to create a platform to make the Tibetan culture widely known: "I wanted to share the Tibetan culture with as many people as possible, and inspire people from different ethnic groups to better understand each other. We are all essentially a family living under the same roof, so we should work to live more harmoniously together." (China India Dialogue, 2017).

This vision, in combination with the increasing urbanization rate in China, resulted in Mr. Baima conceptualizing that in many people's minds, home is a warm place, full of deep affection; however, when living in the city, the idea of hometown is increasingly blurred, and it does not remain as clear as it used to be. "The concept of hometown is not as full of fantasy and closeness as it used to be, with only a warm memory left, and even just a yearning for warm memories. If I want to build a home for the people living in the distant cities, I hope to add some elements of dreams." (行李, 2015). Mr. Baima believes that offering an experience of being at home, as people in the city remember in their dreams, will touch the hearts of everyone, so "I always try as much as possible to select sites in such distant places." The idea of building a sustainable offering starts with the selection of the locations: Mr. Baima has selected places not easily overwhelmed by tourists and traffic, remote places capable of self-sustaining themselves from the nearby environment, in Mr. Baima own words: "I like places that can remain aloof from the world for a long time." However, from the very beginning, Mr. Baima's vision was not to offer hospitality as the final product; his vision was to make his guests travel from lodge to lodge along the Ancient Tea Horse Road, and make his guests experience the rich Tibetan culture and history through the adventure of the travel, and the closeness with nature and the Tibetan people in the villages.

Even if Mr. Baima, during the interviews, does not address another key aspect of his vision directly, his building lodges in isolated areas have been a way to lift many people and villages from poverty. The Songtsam Group has given sustained employment to the local villagers during the construction, the production of handcrafted objects and decorations for the lodges; and once the lodges are operational, they employ a considerable number of local people at all levels. There is a palpable pride among all employees, workers, staff of the lodges to be part of this dream, and contribute to the realization of Mr. Baima's vision and dream.

The pace of constructing and making eight luxury lodges operational in seventeen years under very challenging natural and climatic conditions, may seem very fast from a foreign point of view; but in the Chinese context of economic growth and development, this pace of growth is considered gradual and measured.

The Songtsam Group could have grown much faster, had they selected the business model of franchising as two of their competitors have. The Seclusion Group, established in 2011, lists six hotels and plans to reach over thirty-eight locations by 2020 by franchising their concept (Seclusion Group, 2018), and the Blossom Hill Inn, established in 2009, currently counts nineteen hotels (Blossom Hill Inn, 2018).

However, franchising was never in discussion nor an option for Mr. Baima, because of his concern about quality and his search for a common understanding of the Songtsam Group's core values in each partner of the Songtsam ecosystem.

The plan of building the lodges along the Ancient Tea Horse Road to make guests travel along the Ancient Road and its execution are ambitious and capital intensive: in addition to the existing six hotels, in 2017, one hotel each was opened in Lhasa in June and in Lijiang in August, one hotel is currently under construction, the land is secured for four more hotels, and four more hotels are at the planning stage (Fig. 4.1), with the ultimate goal of having a total of 30 hotels by 2022.

At this stage of the Songtsam Group's development, the question arises of how the Group plans to balance further investments in construction and the increasing expenses on marketing and promotion needed to make the lodges known. Recently, Mr Baima has opened the door to small investors, aiming to attract people who share his vision of Songtsam, and can contribute with capital and additional strategic resources such as marketing experience in China and abroad, their insight of the tourism market, financial advice on future corporate financing. In the early days, after the success of the Shangri-La lodge became known, many investors tried to buy into it, but Mr. Baima refused, because he did not feel that the business was strong enough to absorb extra capital. In his eyes, every move should be made in a prudent, reasonable manner, especially in terms of non-renewable resources. Deqen boasts unparalleled tourist resources, and if properly utilized, everyone can benefit from them for a long time.

After the first lodge was built in Mr. Baima's hometown, the first major capital investment came in 2006 from an investor in Singapore, and supported the growth momentum to construct such high quality and exclusive lodges, especially the construction of Songtsam Shangri-La Linka, and the collaboration with the Accor Group.

In 2017, the Songtsam Group sought funding from Kaistart, an internet crowdfunding platform in China, and raised over 50 million RMB (US$ 7.9 million) for

Fig. 4.1 List of current Songtsam lodges locations and future plans

two projects. The number of investors from crowd funding is currently over 260, with each investor contributing between 60,000 and 550,000 RMB (US$ 9'500 and US$ 86,700). The concept of inclusiveness, so important to Mr. Baima and his team when offering a delightful experience to the hotels' guests, has been extended to the investors. This initiative not only provided the Songtsam Group with cash infusion, but also with a community of faithful investor-followers, who are now regularly informed of the status of their investment. Nevertheless, in the spirit of conserving resources, the Songtsam Group has no plans to start another round of crowd funding in 2018, but they will keep evaluating the performance of all the current projects in terms of ROI, market influence, and market penetration to plan their growth at the right pace.

It is interesting to note how the Songtsam Group defines "the product", vis-a-vis its competitors. From an empirical research of the top high-end hotels' communication and promotion, it can be concluded that the advertising message of four of the leading five global 5-star hotels is mainly focused on presenting the tangible aspects of their product features: luxurious rooms, rich breakfast, spa and swimming pool facilities. Only one hotel chain is focusing their communication on intangibles, emotional features: the feeling of being welcomed, being protected and taken care of (Sheraton Hotel, 2017).

The Songtsam Group defines the product not by concentrating primarily on the exquisite buildings, the antique decorations, the wooden, copper, marble, stone, textiles handicrafts of museum quality and exclusivity; but the product is defined as Songtsam Tours, making the Songtsam Group more of a travel agency than a hospitality provider, as they offer the classic Songtsam Shangri-La circuit, along the Ancient Tea Horse Road.

Even before the model of the revised Minimum Viable Product for product development was described for the first time in the literature in 2017, as shown in Fig. 4.2 (Remund et al. 2017), Mr. Baima and his team developed the entire offering by keeping in mind the "delight" segment of the product development. The portion dedicated to "delight" is built into the product concept and development from the beginning of the lodge construction, and the processes are designed to reinforce the guests' delight.

The vision of Mr. Baima to create a place of solitude that no longer exists in modern cities, to fulfill the longing to belong to a community or a family that

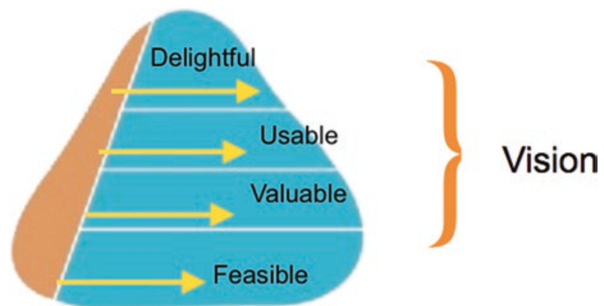

Fig. 4.2 Minimum viable product, entrepreneurial view for innovation and sustainable competitiveness. ©2016 Remund

urbanization has taken away from everyday life, is realized in the design of the processes. For example, when the guests arrive, they are usually picked up by the lodges' car, whether they arrive for the first time from the airport or they drive back to the lodges after a few hours of excursion. At the door of the lodge, three employees will wait for the guests and welcome them, as a family would do with other family members. The welcoming smiles are genuine, and the disciplined approach of welcoming the guests at the hotel door is intrinsic to a consistent training and a wholehearted buy-in by the lodges' employees at all levels. Every small detail in the construction and decoration of the lodges, the gardens, and the surroundings has been thought through and planned; the cinematographical background of Mr. Baima can be seen from every angle of the resorts. The copper basins in the bathrooms are made in the shape and decorated in the style of the Tibetan singing bowls used by Tibetan monks for healing, teaching, and meditation (Gray, 1986), and when touched with a hard object, they emit a clang similar to the one of a singing bowl.

As more lodges are added to the existing eight, the product development increases from left to right as illustrated in Fig. 4.2, at equal pace for all the MPV elements, and it is bound to reach the ultimate vision of Mr. Baima: to offer a unique immersive cultural experience in Tibetan culture.

4.4.4 Human Relations Challenges to Staff a Management Team Aligned to the Vision

The beginnings of the first lodge were not easy from an operational point of view: Mr. Baima recruited the first manager of Songtsam Shangri-La lodge from Kunming, the capital of Yunnan province, where he was running a four star hotel. Their different operational ideas resulted in conflicts between the manager and Mr. Baima, who wanted a quiet hotel rich in Tibetan cultural atmosphere, rather than a bustling commercial resort. As the lodge suffered heavy losses in its early years, Mr. Baima consecutively hired a German, an Austrian and a Xi'an native to manage his first lodge, but none of them could turn things around. At the opening in 2001, the hotel charged 80 RMB (US$ 10) per night and 11 RMB (US$ 1.30) per person for a lunch. Finally in 2003, Mr. Baima began to manage the lodge himself; he lived there to train his employees as much as possible, and urged them to slow down the promotional effort to match the development pace of the lodge. Eventually, Mr. Baima hired the lodge's current manager, Mr. Zhang Min. Thanks to their joint efforts, the first lodge finally found a path to sound, sustainable development. They hired locals to introduce the Tibetan religion, culture and history to the guests. "I wanted every guest to feel the intimacy of the Tibetan culture and enjoy a natural stay," said Mr. Baima (Chen, 2017).

As time went on, Songtsam Shangri-La lodge welcomed an increasingly heavy flow of guests, even as the rates went up. After spending one night in the lodge, many backpackers canceled other reservations to stay there for a full week.

Gradually, the lodge became famous. Since the day Songtsam Shangri-La lodge was established, Mr. Baima has been clear about his goal of operating the lodge sustainably. To this end, he invested a decade of research and planning and he never rushed the hotels to market or to a faster expansion.

Currently, with eight resorts to operate, the composition of the Songtsam Group management team is diverse: some are local villagers, a few are foreign executives and others are seasoned hospitality professionals. Among all employees, local Tibetans account for 98%, which enriches the hotels' Tibetan flavour. The staffing strategy for the lodges is conceived for the benefit and care of the guests. Songtsam plans 1.6 employees per room, so that a lodge with 30 rooms would have at least 48 employees looking after the guests. Contrary to the mainstream luxury hotels' operating strategies, Mr. Baima believes that hiring and training local villagers is beneficial in the long term, because the lodges' staff serves the guests according to their own beliefs and genuine care for others. Mr. Baima believes that such relationships can touch the soul of the guests.

Regardless of their background, all employees see Mr. Baima as much as a teacher, as a boss. "Mr. Baima taught us that giving is the simplest way to find happiness," explained the manager of Songtsam Shangri-La lodge. "We treat our guests with kind, generous hearts. Mr. Baima is always considerate to others and cares about every guest and employee, and even his employees' families."

4.4.5 Giving Back to the Tibetan Communities

Inclusiveness has been one of the driving forces in the Chinese approach to economic growth and education (Tandon & Zhuang, 2007). Mr. Baima, inspired by the rich Tibetan culture, worked with local artisans and members of the community to help build and run his first Songtsam lodge and all the subsequent hotels he opened. Since the 1990s, Mr. Baima is a passionate collector of old Tibetan treasures that are increasingly hard to find nowadays. He is currently showing his collection in every lodge, especially in Songtsam Shangri-La lodge and Songtsam Linka Retreat, transforming these hotels into small museums of Tibetan culture (Songtsam, 2018). Mr. Baima followed traditional construction methods for his lodges, to preserve the original look of the villages and the natural environment as much as possible. The lodges are a showcase of woodwork from the local artisans, every piece of furniture is designed by Mr. Baima and his team following a concept of beauty and harmony. The carpets and tapestry are woven locally with the material and natural colours found in nature; every small detail has been thought through, conceived by Mr. Baima himself and his inner circle of associates, and supervised by him. He hired seasoned local artisans to carry out carpentry, bricklaying and copper carving. "When building Songtsam Linka Retreat, I was lucky to find an experienced coppersmith, who had been forced to take up stone carving because of lack of demand for a coppersmith in the village and in the region. I told him he could do copper

work for my hotels as long as he wanted. Now, Songtsam Group has five coppersmiths on its staff, who produce wares such as door knobs, knockers, pots and basins" (China India Dialogue, 2017).

Mr. Baima is profoundly aware of the importance of education. Since 2005, he has provided financial support to students in his home village. Wherever one of his hotels opens, he introduces grants for local students of 500 RMB (US$ 80) for each middle school student, 1000 RMB (US$ 160) for each high-school student and 2000 RMB (US$ 320) for each college student. Mr. Baima believes that doing good things makes life more meaningful. Currently, a few of the supported students work for the Songtsam Group after graduation; providing scholarships for the students is not a self-serving activity for Mr. Baima, but these are actions deeply rooted in his belief that we need to give back what goodness we receive in life.

4.4.6 Extended Supply Chain and the Creation of the Songtsam Group Ecosystem

It seems that the concern Mr. Baima showed from the beginning of his initiative, of how to continue to sustain and develop the local communities, led to the construction of further lodges. In Mr. Baima's own words: "Through Songtsam Shangri-La Linka Retreat, the first large scale resort, I trained a lot of craftsmen, including stone masons and carpenters, who are from Nantong, Sichuan, Heqing, and all of them came to work in Diqing. By 2007, had I not started the hotels along the Ancient Tea Horse Road, I would have not been able to keep all these people. It would have been difficult to call them back and employ them at a later time. Sure enough, it becomes indeed hard to find so many skilled craftsmen, because many of them had to change their profession, giving up such hard work."

In order to provide continuous work to the local community of craftsmen, and also to support future development, the Songtsam Group produces and sells its textiles, bedroom and bathroom decorations to Muji, a known Japanese brand of clothing and home decoration known for the high quality of their products, natural materials and their zen-like design (Muji 2018). An online shop selling Songtsam style products will be opened by Muji in late in 2018.

Mr. Baima and his team have turned their suppliers into partners, collaborators and, when necessary, even hired them as full time employees, exactly as described in the book *Marketing 3.0: From Products to Customers to the Human Spirit.* Kotler postulates that channel partner selections should be done with the mirroring process: mirroring of Purpose, Identity and Values (Kotler, Kartajaya, & Setiawan, 2010).

However, this case illustrates that the suppliers and channel selection are only one element of the ecosystem built by Songtsam Group around their lodges. A graphic representation of such ecosystem inspired by the figure above is shown in Fig. 4.3 (Remund, 2017), whereby the key principles of Purpose, Identity and

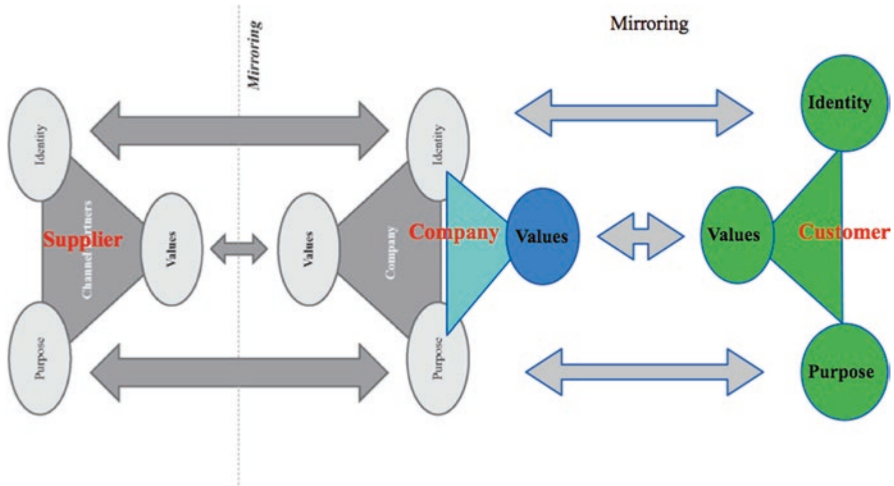

Fig. 4.3 Alignment of vision, purpose and values along the supply chain and the ecosystem. ©2016 Remund adapted and extended from Kotler et al. (2010)

Values are aligned all along the value chain and the stakeholders, including customers and investors.

By building a large ecosystem around the Songtsam Group offering, Mr. Baima has unlocked the power of adjacent spaces, which goes beyond the selection of suppliers; it starts with the selection of the lodges' location. During an interview conducted for this case, a Songtsam Group executive reported that the location of the latest lodge opened in August 2017 in Lijiang, was suggested to Mr. Baima by a Buddhist monk who lives in a village, 5 km from the old city of Lijiang. Mr. Baima was at first skeptical, Lijiang city being more of a tourist and commercial centre. Eventually, the monk convinced him to visit the village, and today the Songtsam Lijiang lodge is situated on the ground adjacent to the Buddhist monk. A bridge connects the lodge to the monk's home and temple and the lodge guests can cross the bridge and visit him at home. This example illustrates how the lodges are integrated in the community and, in some cases, there is a seamless continuation from the lodge to the neighbours.

Songtsam lodges also cooperate with nearby craft workshops by encouraging their guests to visit those shops to promote the development of local crafts. The development of such interconnected ecosystem is complex, time consuming and requires a deep knowledge of the entire supply chain, from the raw material suppliers, to the craftsmen, to the community, to the investors. This ecosystem has become a real competitive advantage for the Songtsam Group, because it can be applied to other industries, it is difficult and time consuming to copy and it provides a real benefit to the guests and the community (Prahalad & Hamel, 1990). The graphic illustration of the Songtsam ecosystem can be seen in Fig. 4.4.

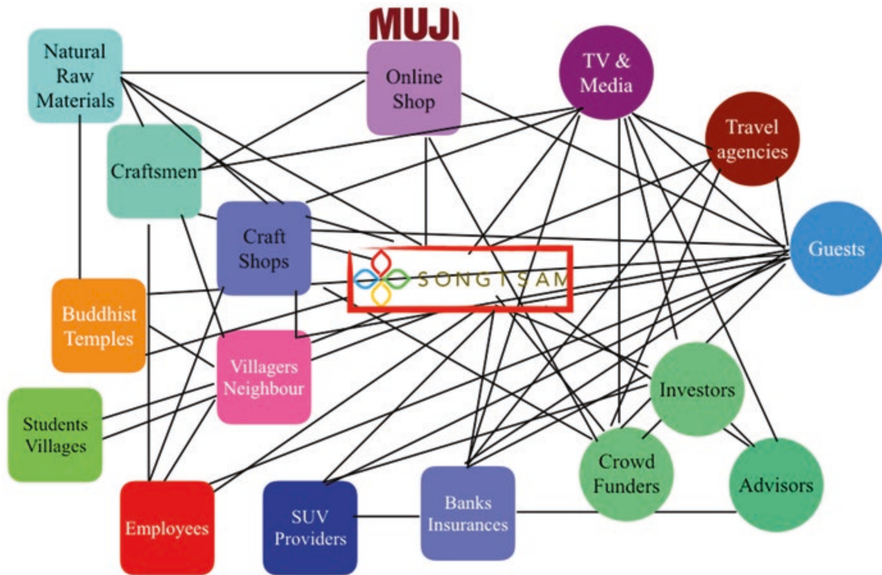

Fig. 4.4 Ecosystem structure of Songtsam Group. ©2018 Remund, An Hong

4.5 Outcome

The Songtsam Group defines success primarily in terms of the delight of the guests, but it also measures up to the standard Key Performance Indicators typical of the hospitality industry. The Group management is keeping track of the guests' nationality, and realized a shift: from 2001 to 2008, the visitors' nationality was 80% foreigners and 20% Chinese guests; however, after 2008 till today, 80% of the guests are Chinese guests and only 20% foreigners. The occupancy rate is 50%, lower than the average rate in the industry, which is around 72% in Asia (Statista, 2018) but this rate does not worry Mr. Baima or his management team, because the lower rate is due to the locations of the secluded lodges, and many lodges being new and just operational. In 2017, the Group recorded over 18,000 guests, and it projects 30,000 guests for 2018. The guests who took tours along the Ancient Tea Horse Road were over 3600 in 2017 and their number is projected to reach around 6000 in 2018.

The recognition by industry opinion leaders and peers is important, and a sign of consistently exceptional quality and guests' delight. Since 2009, the Songtsam Group lodges have received awards such as China Best Concept Hotel Award and China Best Hotel Design Award (Songtsam Shangri-La Linka Retreat). Since 2011, several lodges have received every year the TripAdvisor Travelers' Choice Award for top 25 and top 10 best hotels in China. In addition, in 2012, Tatler Travel Guide listed Songtsam Meili Lodge among the 101 Best Hotels in the World. The travel publication Conde Nast Traveler has awarded the top prize to several Songtsam lodges in the categories of Best View Hotel, Best Hotel for Family in 2012, 2015, 2016. In 2017 and 2018, Conde Nast Traveler conferred on Songtsam Tacheng Lodge the award of Best Social Responsibility Hotel.

4.6 Conclusions

The introduction raised the issue of whether and how an entrepreneur, a late comer and an industry outsider, could be successful by not compromising his vision for harmony, quality and esthetics, but by sustaining and developing the local Tibetan communities in China, and by creating value for his company's customers, suppliers and investors. The case of the Songtsam Group illustrates in real life many theories and models of disruptive innovation, of Multiple Viable Product development, of the shift from product to customers to the human spirit.

This case suggests that there are still challenges ahead for the Songtsam Group, the main one being the alignment of the entire organization to Mr. Baima's vision, especially since the company has substantial future growth plans through 2022. On the other side, Mr. Baima and his management team are particular about slowing down the pace of growth of the existing lodges, in order not to compromise the quality by achieving a higher occupancy rate in the short term.

The case also shows that success for the Songtsam Group has many facets: success is not only the ROI of the considerable capital investment to build luxury lodges in very secluded places between 2000 and 4200 m of altitude, success is not only the ability to penetrate the market in China, but success is mainly defined by the Group's ability to capture the hearts of the guests by presenting the beauty of the rich Tibetan culture, and to develop a sustainable ecosystem around the lodges and the Tibetan villages. Principles over material benefits seem to be the guiding principle for the entire Songtsam organization.

The case inspires the conduct of further research to follow up the Songtsam Group development and growth over time, and whether Mr. Baima vision, obsession for beauty and the comprehensive ecosystem are maintained even when there is a generational change at top management.

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Chapter 5
Creative Tourism as a New Challenge to the Development of Destinations: The Portuguese Case Study

Paula Remoaldo and José Cadima-Ribeiro

Abstract It is still hard to reach a consensus on the concept of creative tourism even if it emerged in 2000, with Richards and Raymond, as a new segment of tourism that can offer tourists the opportunity of co-creating and developing their creative potential. One of its characteristics is that it is quite open and flexible regarding its adaptation to local context. It can be seen as an evolution and as a new approach to cultural tourism which has reached a stage of massification in several world destinations, being Venice, Barcelona or London perfect examples of this. Authentic experiences and active involvement with the culture and contact with real people is a new challenge for the present decade and it is developing rapidly, mainly in Southern Europe. Until now there was little research on the networks and platforms/institutions dealing with creative tourism, and that is why we have developed an investigation, from 2017 to 2018, concerned with the identification and analysis of the existing practices at an international level. We intended also to evaluate the contribution of Portugal in what regards networks and platforms. This investigation was conducted within the scope of the CREATOUR project: Creative Tourism Destination Development in Small Cities and Rural Areas, funded under the joint activities of the "Portugal 2020 Programme" by COMPETE2020, PORLisboa, PORAlgarve and the Portuguese Foundation for Science, Research and Technology (FCT). This Project is going to be developed until 2020. For that we used qualitative methods focusing on content analysis. There was some research done on Google (web), a database with 20 items was created, as well as an analysis on the initiatives in creative tourism that are being developed worldwide. A deeper analysis was done after analysing the initiatives organised by each institution using interviews to the people in charge of the platforms/institutions. The main results tell us that the

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majority of the creative initiatives occur in Southern Europe. In Portugal's case, the initiatives are "creative experiences" and have, in fact, to do with co-creation. This is not the case of other initiatives developed in other countries, where it has come to our knowledge that some of the institutions have more learning experiences than creative ones.

Keywords Creative tourism · Platforms · Institutions · Creative initiatives · Case study · Portugal · Destinations

5.1 Introduction

What shall we say about creativity? First of all, it is a central element in contemporary post-industrial capitalism (Gibson, 2010) and the daily life of individuals in the last decades. This concept has emerged with Charles Landry (2000) and Richard Florida (2002), and stresses out the contributions of applied knowledge and the middle class to the economic development of large metropolises. At the 2010 United Nations Conference on Trade and Development Report (UNCTAD), it was concluded that, despite the deep crisis which was affecting the world economy, creativity and knowledge, grounded in technology, were leading job creation and technological and social innovation. Economies progress, through both creative and destructive forces, was also highlighted in the 2016 UNCTAD Report (United Nations, 2016).

On the other hand, creativity has become one of the essential elements for the transformation of traditional cultural tourism into creative tourism, i.e., creativity became the basis of what was called creative tourism (Tan, Kung, & Luh, 2013). This kind of tourism has proven to be able to play a special role in the growth and development of a few territories. It allows transitioning from tangible heritage to a more intangible culture, allowing tourists to get a deeper involvement in the everyday life of the visited destinations (Richards, 2011; Smith, 2016). It can also be seen as a sign of evolution of cultural tourism or of tourism activities which keep a close relationship with the cultural experience (Lee, Lee, Shin, & Wall, 2016; Richards, 2011) and a strategic answer for the problems faced by several territories which were forced to be reborn after the massification of touristic activity. A characteristic of creative tourism is that it allows for quite open and flexible solutions vis-à-vis local contexts.

Nevertheless, it is still hard to reach a consensus on the concept of creative tourism (Richards, 2011) or on a single model or strategic perspective based on it (Richards & Marques, 2012), even if it emerged in 2000, with Richards and Raymond, as a new segment of tourism which can provide tourists with the opportunity of co-creating and developing their creative potential. Even if the term "creative tourism" was referred for the first time by Pearce and Butler (1993) as a potential type of tourism, they did not attribute it a precise meaning (Richards, 2011) and we had to wait seven years to, finally, get a definition.

The present chapter is a partial result of a research performed between March 2017 and April 2018 within the scope of the CREATOUR Project (Creative Tourism Destination Development in Small Cities and Rural Areas), which is

being developed by several Portuguese research centres. This Project is funded by the European Structural and Investment Funds (ESIF), among other financial sources, and will be implemented until the beginning of 2020. The main objectives of this chapter are: (1) to assess the supply of creative activities by Portuguese institutions in the context of the international general offer certified by the Creative Tourism Network; and (2) to suggest new practices within creative tourism to be developed in the next few years.

To be more precise, the research tries to answer the following questions: What are the main practices and activities of creative tourism developed in Portugal and certified by the Creative Tourism Network? What are the differences between the Portuguese creative initiatives and the ones performed in other countries? What kind of practices and activities can be developed in the near future to diversify the Portuguese supply?

In order to answer these questions and to accomplish all the objectives, we used three qualitative methods. Firstly, we made some research on Google (web) between March 2017 and August 2017. This made it possible to create a database of 20 general items for the 24 institutions diagnosed at international level that perform creative tourism and which are certified by the Creative Tourism Network. From those 24, two are Portuguese. Later, between September 2017 and December 2017, a research on each of the 24 websites was made to understand their offers in what regards creative activities, comparing the Portuguese activities with the ones of other countries. Finally, in the same year, some data obtained previously were confirmed through interviews conducted by Skype to the people in charge of each institution.

A content analysis on the data collected was undertaken and an assessment of the different activities supply of the institutions was made. This was the first time that this kind of analysis was made regarding these 24 institutions and therefore this research can be considered somewhat innovative.

In order to highlight the social pertinence of the research performed for the Portuguese case, we believe it is worth mentioning that the tourism industry in Portugal has experienced a fast growth in the last years. If we look to statistical data (INE, 2017), tourism demand has grown 5.8% from 2015 to 2016, and, in 2016, tourism income reached 7.1% of GDP, while the rate of tourism industry represented 9.1% of total employment. We also got our fair amount of international awards, including the one of 2017 Best World Destination. Even if these results allow us to conclude that the country is performing well, this does not mean that are not a few problems still to be solved or even the risk of having to deal with some of them in a near future, like the congestion of certain urban centres, namely Lisbon and Oporto. At the same time, numerous territories fail to position themselves in the industry, in spite of their tourism potential. If we are looking to increase the portfolio of activities supplied by the main tourist centres and make the emerging ones more attractive, we believe creative tourism strategies can play a role. That is also a way of making tourism supply at those urban centres facing the risk of congestion more sustainable.

This paper is organised in four sections. We begin by defining the creative tourism concept and by highlighting the characteristics that the authors of the present

chapter consider relevant to define it, trying to make the concept clearer. In Sect. 5.2, the methods used are described. Section 5.3 is concerned with the main results achieved and their discussion. In the last section, final remarks on the issue are made and we leave a few suggestions about future research on the development of creative tourism in Portugal.

5.2 What Is Creative Tourism and Creative Activities and How They Can Contribute to the Development of Territories

In the last decades, and within the scope of the social and technological revolution experienced, creativity has become the main driving force in the growth and development of cities, but also of regions and nations, fuelling innovation and investment in urban territories (Florida, 2005). Even so, the consensus on the definition of creativity only appeared in the 1990s, when it was perceived as the creation of something new and innovative (Boden, 1994; Csikszentmihalyi, 1990; Sternberg & Lubart, 1999).

But it is not only places that can be creative. As stated by some authors (e.g., Florida, 2005, 2006; Peck, 2005; Robinson, 2011), not every human is (can be) creative. So, creativity can be easily linked to diversity, besides being able to promote economic growth.

Creativity and the spots on creative industries were also some of the factors that contributed to the emergence of what has been called "creative tourism" worldwide. Creative tourism is linked to culture of places and has rapidly increased due to the emphasis put on the creative industries by some more dynamic cities/territories (Smith, 2016).

Richards and Wilson (2007) have approached the issue of creativity in its relationship with the cultural and human elements of a particular place, claiming that the basis for providing a differentiated experience should rely on the cultural environment of that specific place. This close association to cultural and heritage tourism sees creativity not only as a process but also as a product intrinsically linked to the innovative production of cultural and heritage products.

Lee et al. (2016) and Tan, Luh, and Kung (2014) refer to the close relationship between creative tourism and creative economy experiences, locating it, like Richards and Wilson (2007), in the proximity of cultural tourism (as an extension or as a reaction to it). Considering the fields of creative economics and multifaceted innovation based on tradition and the differentiating culture of places, we reach a new perspective on creative tourism: the possibility of creating experiences through the co-creation of innovative products, through a heritage and creative artistic conjugation.

Although creative tourism appeared in the late 1990s it was only in the early 2000s that it became a "fancy word" (Smith, 2016). The emergence of creative tourism followed the creative change in different social and academic fields (e.g., economy, urban development, architecture, literature, education) (Remoaldo et al., 2018; Richards, 2011; Tan et al., 2014).

As previously mentioned, this tourism segment was inspired by culture and creativity concepts. Culture started to be seen as a relevant instrument of development of territories (Florida, 2005; Richards, 2011) and, at the same time, as a constraining force in case the required knowledge and human creative capabilities could not be mobilised to promote development (Florida, 2005). Tourism industry saw this as an opportunity to develop and to increase the different possibilities of being more flexible and innovative (Richards, 2011). This appears to meet the post-materialist society standards, where particular identities and lifestyles emerged and the wish for standing out could be noticed in consumption practices (Álvarez-Garcia, Maldonado-Érazo, Río-Rama, & Sánchez-Fernández, 2018; Richards, 2011).

Many cultural spaces had to deal with the overdevelopment of cultural tourism and to recreate themselves by resorting to creative tourism approaches. This new paradigm allowed more flexible and innovative forms of tourism experiences, namely a decrease in copy or imitation (Richards, 2011) that occurred in the last decades worldwide, mainly among cities that were trying to compete for international tourists under the same general tourism concept. In a few cases, creativity was called to play a leading role in tourism development, giving rise to new/innovative experiences (creative tourism) made available to tourists (Álvarez-Garcia et al., 2018).

Tourists demand which evolved from a passive form of consumption to a more active one (Tan et al., 2014) also contributed to the development of creative tourism. Tourists became aware that creativity could be used as a way of self-expression, and, for many, perhaps an opportunity to be actually creative, something that nowadays common work experiences cannot provide. This more active approach to tourism encompasses both a traditional dimension (interaction with a place and its people) and a more contemporary dimension, which might include the use of technological advanced industries and, of course, the opportunity to actively interact with the destination in its differentiated features) (Smith, 2016). Educational, emotional, social and participative interaction with the place and people from that place is part of the more active role tourists often hope to play. They want to feel like citizens and feel part of the place (Álvarez-Garcia et al., 2018; Landry, 2010; Smith, 2016) and get in contact with real people (Richards & Wilson, 2008).

As creative tourism is linked to culture, it is expected that cultural expressions are unique and that tourists are provided with authentic engagement in the real cultural life of the place. This is also our point of view regardless of the absence of a consensus on the issue.

Meanwhile, one could ask if there is a chance for small cities and rural territories to benefit from this new approach. Can they adopt the creativity model that was developed in the 1990s in big cities? Or must they develop another model, still based on the concept of creative activities, to be implemented in their own reality? In fact, cities and, mostly, larger ones have been at the head of competition for attracting international tourists (Remoaldo, Ribeiro, Vareiro, & Santos, 2014; Yankholmes & Akyeampong, 2010). In this regard, Donaldson, Spocter, Du Plessis, and Van Niekerk (2012), cited by Álvarez-Garcia et al. (2018), claim that this segment of tourism can contribute to the regeneration of fragile territories, due to its

ability to promote regional integration and, of course, to integrate local people and heritage in the process of developing and supplying this tourism product.

In the last 30 years, cities were the main places where creative initiatives developed, and they were used as the main examples for this kind of initiatives (Brouder, 2012; Richards, 2011, 2014; Smith, 2016). This was a "creative" way of distinguishing one from the other. The problem was how fast they began imitating each other. This way, one could question if there is a real chance for other types of territories to invest also in creative tourism initiatives, relying on their own attributes, just like cities, either large or small.

Architecture, art, crafts, design, fashion, film, music, performing arts, advertising, publishing, software, toys and games, TV and radio and video games are the main creative industries (Richards, 2014). Some of them (e.g., film, music fashion or design) can be used in rather enjoyable ways by creative tourism (Gibson, 2010; Smith, 2016). Painting, photography, sculpture, traditional crafts and handicrafts, gastronomy and cooking courses, and porcelain painting are some of the currently implemented creative activities (Hung, Lee, & Huang, 2016).

As mentioned before, creative tourism became a new challenge for many territories/destinations and it has been rapidly growing, mainly in Southern Europe. This might be so because there are many destinations whose development for decades was based on a cultural tourism massification model (e.g., Barcelona, Venice, Rome). They are now trying to overcome the congestion and banalisation that tourism experiences brought with them, hence the need for evolving to another model (creative tourism).

Referring to his own experience in New Zealand, Raymond (2007) claims that "creative activities" could give rise to a more sustainable form of tourism (Remoaldo et al., 2018). That way, tourists could actually experience the authenticity of the local culture by attending workshops, within small groups, that enable them to explore their creativity. "Creative Tourism New Zealand" (New Zealand), "DIY Santa Fe" (Mexico), "Creative Tourism Australia" (Australia), "Creative Paris" (France), "Creative Life" (Taiwan) are the slogans we can find when looking for the best examples of countries where creative tourism has been implemented (Ali, Ryu, & Hussain, 2016; Tan et al., 2013, 2014).

Cooking traditional dishes in Catalonia or attending perfume manufacturing workshops in France are some of the examples highlighted in the 2000s by Richards and Wilson (2007). Those experiences try to promote tourist engagement and allow, even, the development of their skills. Doing so, we get the switch from "seeing" to "being", using other senses rather than smell and taste (Remoaldo et al., 2018), as claimed by an increasing amount of tourists, nowadays.

In any case, research on creative tourism has also identified negative impacts coming from it. Mitchell (2013), for instance, has claimed that there is the risk of, similarly to what has happened with more common cultural products, following a mercantile approach. That can occur, mainly, if the community dynamics becomes fragile as a consequence of enhancing the importance of the activity and of the eventual emergence of conflicting economic interests within it.

In short, creative tourism has to do with creativity, local culture, co-creation with local people, active consumption of places and active participation, authentic experiences, hence, the promotion of local and regional development is envisaged. This is only attainable if the "lecturers" in charge of conducting the creative activities are local people and are able to perform creative activities imbedded in the local/regional culture and heritage.

All things considered, what about Portugal? Is it feasible to develop creative activities that can accommodate the before-mentioned characteristics and can they contribute to the development of fragile territories, that is to say, small cities and, even, rural environments? Could these territories actually provide diverse, genuine and authentic tourism creative products, based on their cultural traditions and general heritage?

As previously mentioned, Portugal has lately been experiencing a fast increase in the amount of international tourists and has also got international recognition on the quality of the products it is supplying, including the 2017 Best World Destination, after also having been elected recently the Best European Destination, among multiple other sectorial awards. The success attained is contributing a lot to enhancing GDP and employment rates (INE, 2017), but this also includes a few risks, namely the congestion of certain urban centres which will have to be dealt with in the near future, even if, at the same time, there are other territories endowed of a rich culture and heritage which are becoming more and more economically and socially fragile. Knowing this, one could wonder if there could be, that is, in the new tourism industry and the new approaches to it, an opportunity for them to position themselves in the industry. The same way, regarding the main tourist centres, could they become more attractive and diverse, as well as more sustainable, by providing creative tourism experiences?

5.3 Methods

In the present research, we used qualitative methods to address the three questions and the two objectives underlined in the Introduction to this chapter. Between March 2017 and December 2017, special emphasis was given to institutions which organise creative initiatives and which are certified by the Creative Tourism Network.

Firstly, a research on Google (web) was made (from March to August 2017) using the keywords "creative tourism initiatives", "creative cities", "best practices in creative tourism". Afterwards, we checked if the institutions were certified by the Creative Tourism Network. We found out 24 institutions which declared they were trying to develop creative initiatives. Most of the institutions were located in Southern Europe and were, in most of the cases (except for three), certified by the aforementioned network. Two were Portuguese: *Loulé Criativo* (one of the 19 certified Creative Friendly Destinations by Creative Tourism Network); and *Cerdeira Village Art & Craft* (one of the eight Creative Platforms considered by the same network).

A database of 20 items (e.g., institutions in charge of implementing the initiatives, year of implementation, site, developed activities, place of development, country of origin, type of partners chosen and local community involvement) was created for each institution.

We took a very close look on the information about the identified institutions by carefully consulting each one of their websites (task developed from September to December 2017) trying to confirm if the products provided fit in the concept underlined in the present chapter on creative activities. Also, we checked the language*s* used during the workshops, the public and the type of professionals that taught those same workshops.

This approach was complemented by semi-structured interviews to representatives of the institutions, conducted mainly via Skype from July 2017 to April 2018. The guidelines for the interviews included 17 questions. The socio-demographic characteristics of the respondents were: name, age, name of the institution, role and education of the interviewed person.

We obtained a quick response from the two Portuguese institutions (less than 15 days after the first sent e-mail), but it was hard to have a positive answer from the other 22 institutions. In fact, besides the answers from the Portuguese institutions, we obtained only 11 more answers, even after having sent the questionnaire 14 times, via e-mail, to the others (the first contact alternative to have been tried). We also tried to contact them by telephone at least three times (the second contact channel followed). Adding to this, we sent a total of 24 messages via messenger (Facebook) (the third option we tried), between July 2017 and March 2018. It should be pointed out that some of them do not even have a phone contact.

A final letter was sent, by the end of March, by post mail, with no success. We put an end to this effort, which lasted for nine months, in the early days of April 2018 and, as mentioned, we achieved 13 positive answers. In some cases (e.g., Aiserve—Japan Creative Development Network) it was impossible to speak by telephone with them because no one ever answered the phone number mentioned on the website and because the message recorded was in Japanese, language we do not speak.

As briefly mentioned, the main questions used in the interview were about the activities undertaken by each institution, the profile of creative tourists identified by them, the problems/needs felt at the destinations, and partnerships or networks of partnerships for the development of the project and its activities.

What should we say about the Creative Tourism Network? This is an international organisation founded in 2010, in Barcelona, with the aim of fostering creative tourism around the world. It certifies destinations, which have to pay from 800 Euros, in case it is a small destination, to 1400 Euros, if it is a region (http://www.creativetourismnetwork.org/presentation/, Retrieved January 12, 2018). As claimed, the network can promote a wide array of services, namely: (1) the promotion of destinations involved in creative tourism activities and which have potential to welcome creative destinations; (2) the identification of creative tourists and their specific demands; and (3) the academic and professional training of institutions/people interested in developing creative tourism initiatives. The organisation of

international conferences on creative tourism at the destinations of the network's members is another role performed by the Creative Tourism Network.

The analysis on the performed creative activities was based on ADDICT (Portuguese Agency for the Development of Creative Industries) categories (Augusto Mateus & Associados, 2016). Creative tourism initiatives were also categorised using creative sectors considered by the United Nations (Itaú Cultural, 2012), namely: crafts, audio-visual, design, media, performing arts, edition, visual arts and creative services, including publicity, architecture, engineering, audio-visual and other cultural services. That is to say, ADDICT and the United Nations (Itaú Cultural, 2012) offered some kind of guidance regarding the organisation of the obtained data.

Concerning the interviews made, a content analysis was performed on the two answers collected from the heads of *Loulé Criativo* (at the Algarve region) and of *Cerdeira Village Art & Craft* (at the Centro region of Portugal).

5.4 Creative Activities Developed in the Institutions Belonging to the Creative Tourism Network and the Portuguese Case

5.4.1 General Data

Regarding the 24 institutions identified, the first remark to make has to do with the fact that the majority (63%) of the institutions/platforms that organise creative activities act in European countries [Spain ($n = 4$); France ($n = 4$); Italy ($n = 3$); and Portugal ($n = 2$)], which might have us believe it can be related to the following: (1) the richness of the European culture (tangible and intangible dimensions), part of it related to its heritage, which fits well with the core of the creative tourism concept; and (2) the massification of cultural tourism which took place in many of the destinations for decades (the south of Europe has some of the most visited destinations worldwide for some time now), and the need derived from finding a new paradigm which could allow us to reverse the congestion installed in many cases and go on attracting visitors.

In the strategy adopted by those creative institutions, there is a clear tendency to develop daily activities and, occasionally, several days courses or workshops. The majority of the activities are conducted in English (a few, also in French or Italian) and their prices differ a lot (accordingly to the duration of the activity and the materials needed) (Remoaldo et al., 2018).

The structure of the websites is very diverse, as well as the activities which are being organised. In this regard, the main problems we have diagnosed are:

1. Incomplete or not updated websites (e.g., Airserve—Japan Creative Development Network, and Creative Tourism Guatemala; this last one is mainly focused on the Maya Textile Route).

2. Lack of information about the developed activities (e.g., Creative Tourism Thailand and Creative Tourism Tuscany).
3. Difficulty in obtaining the profile of the people in charge of implementing the activities (Are they certified? Which are their main professional and educational qualifications?) (e.g., Creative Tourism Guatemala).
4. Sometimes, from the information available, we are convinced that we are dealing with cultural tourism and not creative tourism, that is to say, co-creation.
5. Difficulty in obtaining information on the type of participants in the activities (are the activities organised for domestic/local visitors or for international ones?).

The activities are mainly done in English, but some of them are taught in French or Italian (Remoaldo et al., 2018). The prices of the activities vary, in most cases, proportionally to the duration of the activity and the materials needed to carry it out; an average price for these activities is between €25 and €50.

Similarly to what happened with the websites, it is common to find out that Facebook pages are not updated on a regular basis, and that some of them do not reply to telephone calls.

From the visit to the websites and Facebook pages, we found a total of 160 that claimed to be creative tourism activities, and which we have tried to categorise following the ADDICT and the United Nations criteria. Figure 5.1 shows the localisation of the ones in Europe and it is possible to see their concentration on the south of the "old continent", which contribute with 15 to the total of 24 institutions we could identify.

The other institutions are dispersed across other continents, such as: city of Santa Fe (USA); Airserve—Japan Creative Development Network (Japan); Madagascar Explorer (Madagascar); Salvador da Bahia and Porto Alegre Turismo Criativo (Brazil); Creative Tourism Thailand (Thailand); Guatemala Creative Tourism (Guatemala); Creative Workshop (USA); and Creative Tourism New Zealand (New Zealand). Every continent is covered by some kind of creative initiative but with lower expression than Europe (as listed, no more than two institutions/platforms were identified in each continent). In Europe, Spain, Portugal, France, Italy, Belgium, Austria and England are the countries that are supposed to be developing creative tourism activities more frequently.

It is worth mentioning that the first two creative tourism initiatives/platforms were born in the United States of America (Santa Fe—31 years ago) and at Madagascar (30 years ago), but most of the institutions began their activity in the last few years. In what concerns Portugal, *Loulé Criativo* (http://loulecriativo.pt/pt/home) and *Cerdeira Village Art & Craft* (https://www.cerdeiravillage.com/en/; https://www.facebook.com/cerdeiravillage), started their activity, following the present model, in 2015, in an attempt to contribute to the implementation of a more sustainable kind of tourism in different parts of Continental Portugal.

Diverse profiles were observed (in the 24 institutions) in what concerns the category of destinations (rural or urban ones), the place where creative activities occur and the number of destinations they include (several destinations in the same country or only one). *Loulé Criativo* and *Cerdeira Village Art & Craft in Portugal*

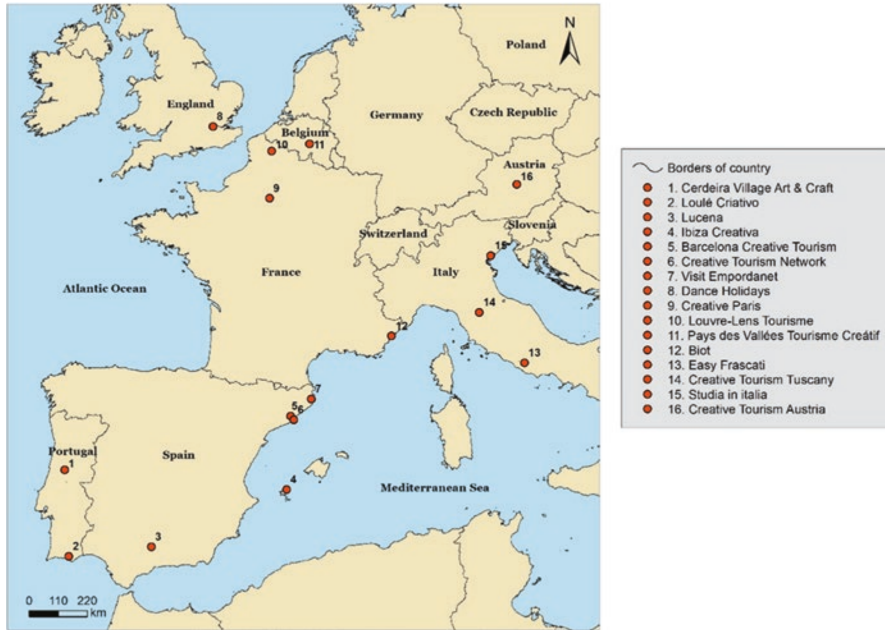

Fig. 5.1 Localisation of the institutions which developed creative tourism initiatives in Europe, in 2017. *Source:* Authors' own elaboration

(which are the main object of our investigation in this book chapter) used to conduct several initiatives in only one destination. In other cases, the activities took place at different destinations, namely through organised tours, as it is the case of Japan Creative Development Network (Kyoto or Tokyo) and of Creative Tourism Austria, which included 26 different destinations (24 along the year).

5.4.2 The Portuguese Examples

5.4.2.1 Main Results

As mentioned before, in the present chapter we shall highlight some issues regarding the two Portuguese institutions which are members of the Creative Tourism Network and organise creative tourism activities (*Cerdeira Village Art & Craft* and *Loulé Criativo*). They started out in this creative tourism business not that long ago (2015) if compared with a few of the existing international organisations which belong to the referred network.

Cerdeira Village Art & Craft is located at the Cerdeira village, in the municipality of Lousã, which is one the municipalities of the Coimbra sub-region. Lousã is characterised by being, mainly, a mountainous territory and endowed with a rich

natural landscape. In what regards the demographic evolution, it is noticeable that it has increased its population (around 10%) between 2001 and 2011, according to the results of the 2011 census, attaining a total of 17,604 inhabitants. The tourism industry has been contributing a lot to the socio-economic recent performance of this territory, mainly due to the attractiveness of the Lousã Mountain and the Shale Villages, which are part of a general rich and diversified built and environmental heritage (http://www.cm-lousa.pt/home/, Retrieved May 11, 2018).

Cerdeira Village Art & Craft supplies a diversified package of activities, making use of the Portuguese and English languages. Apart from the workshops related to the production of national handicraft (e.g., tiling and ceramics), they also organise activities connected to writing and drawing in journalism, namely bookbinding and creative travel writing (Table 5.1).

Visitors are also invited to explore the surrounding areas, which offer various activities for families and lovers of nature, culture and gastronomy, by following eight itineraries. This kind of activities are complemented by the festival "*Elementos à Solta* – Art meets Nature", which is held annually (in July). This event allows tourists to join contemporary artists from different areas and transforms the village in an open-air art gallery. It is not common to find this kind of festival in other platforms worldwide.

In what concerns the type of partners and population involvement, lecturers which teach the several workshops, the Schist Villages Network and the promotional entity *Tourism of Portugal* are the main ones.

Table 5.1 Activities performed by the two Portuguese creative tourism platforms

	Type of destination where the activities are organised	Type of activities	Dates of organisation	Languages used
Cerdeira Village Art & Craft	Cerdeira village	1. Activities related to nature, culture and gastronomy, following eight itineraries	1. All year long	Portuguese and English
		2. Tiling, writing and drawing in journalism, bookbinding, woodcarving, ceramics and creative travel writing workshops	2. In April, May, July, August and October	
		3. Organisation of the "*Elementos à Solta* – Art meets Nature" festival	3. The festival takes place every July	
Loulé Criativo	In a small city or in a rural parish of the same municipality (Loulé)	46 activities related, mainly, to gastronomy and wines ($n = 21$), crafts and traditional crafts ($n = 13$), and visual arts, including drawing and painting ($n = 5$)	All year long	Portuguese and English

Source: Authors' own elaboration

Loulé Criativo is a creative tourism organisation located in the municipality of Loulé, in the Algarve region, which is quite close to the city of Faro and its international airport. The city of Loulé is a quite small one, with around 20,000 inhabitants. Besides Loulé, the municipality includes the city of Quarteira, and a few well-known tourist resorts, like *Vilamoura, Quarteira*, *Quinta do Lago* and *Vale do Lobo*. *Vilamoura* is endowed with a marina, several golf greens, a casino, tennis and swimming clubs, dozens of four and five star hotels and several other tourism facilities. In the past, main local economic activities used to be agriculture and fishing (http://www.cm-loule.pt/pt/default.aspx, Retrieved May 11, 2018). In 2011, and according to a population census, there were 70,602 people living in the municipality, 11,462 more than around the year 2000, showing a recent (that is, since the early 1990s) and rapid increase of its population. A major imbalance exists between the coastal areas of the municipality and the ones which are far from the sea in what regards general economic and population dynamics (http://www.cm-loule.pt/pt/default.aspx, Retrieved May 11, 2018).

Loulé Criativo offers 46 creative activities (Table 5.1), which makes it the platform with the most diversified portfolio in the whole world, if we are to believe the data we were able to gather during our search through the Creative Tourism Network. This performance is the result of the strong commitment of Loulé's local authorities with the institution and the role it plays in its territory. Most part of the activities take place in the city of Loulé.

Even if the main activities are related to traditional gastronomy and wines, local and regional traditional elements are always present. The same occurs with the other organised activities, where tourists can co-create and be involved in activities closely connected to local cultural heritage.

Looking at the similarities and differences found between the kind of activities performed by the international institutions and the Portuguese ones we have been referring to, the more distinguishing elements seem to be the following (Table 5.2).

The comparison between the international institutions and the Portuguese ones can make a difference when looking to the narratives and general data obtained from the conducted interviews. This way, considering the 13 interviews made between July 2017 and March 2018, we could conclude that the institutions involved were either private, public or online agencies, and their staff were between 33 and 56 year old. The main goal of each institution was, as expected, to promote and disseminate local and regional culture through their activities and to create innovative and authentic tourism products. Most of the interviewees ($n = 7$) did not receive any type of equipment or funding to develop their project activities. To combat seasonality and increase the number of tourists throughout the year was the main envisaged achievement. Still according to partnerships were still difficult to achieve.

These perceptions and claims were also mentioned by one of the respondents of *Loulé Criativo* (staff member) that highlighted one of the problems of the Portuguese tourism demand, that is, seasonality. This has long been recognised as an inherently Portuguese problem. In the words of the *Loulé Criativo* representative: "The big challenge is to combat seasonality. This is one of our goals. It is a great objective of Loulé but also at a regional level" (*Loulé Criativo*). This was also highlighted by the head of *Cerdeira Village Art & Craft.*

Table 5.2 Similarities and differences between the International and the Portuguese creative tourism platforms

Platforms/ institutions	Similarities to the other platforms	Differences from other platforms
Cerdeira Village Art & Craft	1. Co-creation activities	1. Localisation of the institution in a small village
	2. Type of activities performed	2. The close connection between the activities performed and the local and regional heritage
Loulé Criativo	1. Co-creation activities	1. The clear identification and characterisation of the organisers/lecturers of the activities
	2. Type of activities performed	2. The close connection between the activities performed and the local and regional heritage

Source: Authors' own elaboration

The respondents of the Portuguese institutions/platforms have also underlined that combining traditions and innovation was their main achievement and that the partnerships established were both local and international. Nevertheless, they did not mention whether they used or got any equipment and funding to support the institution/platform and the creative initiatives from other institutions or local authorities. The following narratives refer to these issues:

1. "Our partners are the City Council of Lousã, Agistur, which promotes the Schist Villages, and the Agency for the development of the Schist Villages (...). We have national and international partnerships both in urban and rural areas. Reseti, which is an international platform of artistic residencies, the Creative Tourism Network (...). Regarding the contribution of partners to the activities to be developed, we have received some kind of help but it is still being worked on" (*Cerdeira Village Art & Craft).*
2. "We have individual entrepreneurs, we have people who work and are partners of *Loulé Creative* and give an effective contribution to different areas of the project, but we also welcome whoever is talented, has got training in other areas and wants to contribute. We also have tour operators that work with us" (*Loulé Criativo*).

In what concerns the contribution of the creative tourism initiatives that promote the sustainability of their institutions, we got the following answer from *Loulé Criativo* representative:

> On one hand, our activity has contributed to the increase of the number of entrepreneurs and some companies were even created after the developing of creative tourism activities and as tourist animation companies. (…) At an international level, and in order to get visibility, we joined the international network of creative tourism (Creative Tourism Network). We have presented the project in London and Madrid and this has already paid off. (…). All those television stations that came to film us (…). We have a lot of promotion online through our website, Facebook and Instagram. We have to feed social networks as much as possible to reach a wider audience (*Loulé Criativo*).

Regarding the same issue, we got the following from the representative of *Cerdeira Village Art & Craft*:

> We are financially sustainable at the accommodation level but not yet in what concerns the creative activities supplied. People choose to do their holidays here due to our differentiated cultural features compared to other destinations (*Cerdeira Village Art & Craft*).

We got comments, as well, on the general understanding of the concept of creative tourism, and on the concern that the concept could be "seized":

1. "Creative tourism has never existed in Portugal. I am really afraid that the concept could be seized, and everything ends out being presented as creative tourism. I think we should be able to guarantee the quality of what is offered to people. Creative tourism should not be about entertaining people on their vacation. That is to say, entertainment cannot be the sole aim of tourism. People should connect with creative tourism to acquire more knowledge" (*Cerdeira Village Art & Craft*).
2. "(…) in fact, over the years, there has been more clarification on the issue and people know better what creative tourism is. Some time ago, when talking about this type of tourism, people did not know what it was. There were people who were doing creative tourism without knowing it. The tendency will be to try to preserve the local culture and do activities that portray the territory" (*Loulé Criativo*).

Regarding the profile of creative tourists, we could find different characteristics which seem to connect with the singular profile of the institutions/platform themselves. As previously mentioned, one of them (*Loulé Criativo*) is located at the sea coast of the country in a region nowadays quite committed to the tourism industry, while the other (*Cerdeira Village Art & Craft*) operates at a rural and inland territory, and has, even, some limitations in what regards its accessibilities. The following narratives refer to these different features:

1. "There are, often, families who try to offer their children something different [experience], or people from the area of all ages and, also, tourists, people with some maturity who have time to learn and to know new things. (…) As far as the region is concerned, the biggest difficulty is the concentration of tourists on the weekends. People who come here for a week and want to go to local restaurants/shops during the week cannot do it. The restaurants are closed" (*Cerdeira Village Art & Craft*).
2. "The creative tourist is a person with high academic education, who likes nature. It is a tourist who mostly chooses local accommodation instead of luxury hotels. At the same time, there is a tendency for this type of tourist to stay, also, in luxury hotels. This is no longer linear. These are middle-aged people. That is why we do not envisage attracting families. There are people between 30 and 60 years old who like to participate in these kinds of activities" (*Loulé Criativo*).

The answers we got from the Portuguese institutions regarding the profile of the participants in creative tourism activities fit the ones we got from the other institutions/platforms we have inquired, even if a part of them did not answer directly to this question. This partial absence of an answer on the issue raised

might have to do either with their difficulty to trace a profile, still, or because they did not, indeed, want to answer the question. Nevertheless, from what we got, we can assume that creative tourists tend to be over 30, up to their late 1950s, even if in a few cases they can be younger.

5.5 Conclusions and a Few Lines Regarding Future Research

Creative tourism has quickly developed worldwide, but it is still difficult to define its boundaries. Portugal has followed, in the last years, this tendency, of what we could classify as good examples. As a matter of fact, the institutions related to it have shown a commitment on implementing co-creation and have done that by promoting a great involvement of local communities. *Loulé Criativo* (South of Portugal—in the touristic region of Algarve) and *Cerdeira Village Art & Craft* (Centre of Continental Portugal) are two examples of organisations acting in this area, which are, besides, certified by the Creative Tourism Network.

This world network is seen as an opening door to diffuse and certificate the products provided for the tourism market and the institutions themselves. Surprisingly, when looking to get a better picture from the institutions belonging to/certified by the Creative Tourism Network, we were confronted with difficulties on collecting information on some of them. In fact, we did have difficulties in accessing some of the information on the institutions, on the products they provide and, even, to establish contact (by e-mail or by telephone) with many of them. Since they are certified institutions, it was quite unexpected. Therefore, we believe, there is the need for those institutions/platforms to be able to present more complete and updated websites and indication on the products provided, besides information on the certification of the lecturers/trainers in charge of conducting the creative tourism experiences. Only that way they will be able to keep a structured relationship with the market (the tourists) and get its (their) confidence.

Apart from the Portuguese examples, not all tourism initiatives undertaken are, actually, “creative experiences”. Based on our empirical research, we got convinced that, in fact, some of them have nothing to do with co-creation, which is the central dimension of the concept of creative tourism, as underlined in the review of literature produced. Some of the institutions seem to provide learning experiences rather than creative ones.

Along our research, we have addressed the issue of tourist profiling motivated by the participation in cultural creative tourism experiences. We got a preliminary approach on that but we do believe more information is needed to better establish their profile, the flow of tourists throughout the year, potential destinations and operators, to better design the activities and, of course, elaborate adequate advertising strategies to capture those potential visitors.

Promotion strategies are ultimately a way of attracting domestic tourists or foreigners. If we expect tourists to get involved in marketing strategies and activities these have to be made clear from the start, as well as the language that is going to be used. Both cultural backgrounds and travelling motivation of the visitors matter in this regard. When questioned about that our respondents have shown too defensive.

Apart from additional information on the profile of the tourists, we also need to study the channels of diffusion to use on workshops/visits organised by the involved institutions. Addressing a segment of the market and providing a new tourism product certainly requires the use of appropriate communication channels, addressed to particular potential customers.

Considering its potential in terms of addressing new destinations and tourism sustainability, creative tourism must go ahead and enter in a new phase, thus avoiding banalisation. To attain that, a strong commitment on certification of the institutions operating in the sector and their agents (lecturers/trainers) is needed, together with the development of local and/or regional clusters, where partnerships among the institutions are surely essential. This is especially true when dealing with emergent destinations, either urban or rural, but mostly in the case of these last ones, due to their usual fragile structure based on local actors and business entrepreneurship. Of course, making good use of networks established at international and national levels can help a lot in the design of the products (keeping a connection with the culture of the territories where they are delivered and promoting products and operating institutions).

To conclude, a question we should ask is if there will be a chance, in the near future, for the institutions acting in the creative tourism market to explore new types of activities, capable of challenging tourists. Obviously, those activities would have to be based on local culture and practices.

As already mentioned, the research undertaken on the issue is only preliminary. Once again, we were not able to get a clear picture of all the institutions members of the Creative Tourism Network due to several reasons, and mainly to their unavailability to answer the questionnaire we have addressed to them, or to the impossibility of getting in touch with them. This has some expression in terms of the results we wished to attain but, even so, it limits our ability to get a more conclusive picture of the tourism segment we are referring to. Aiming to make an empirical path on the issue of the creative institutions and services/products they provide, a first step was given. Future empirical researchers may use this as a starting point.

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Chapter 6
Education and Innovation in Gastronomy: A Case Study of Culinary Art School in Tijuana, Mexico

Jorge Francisco Sánchez-Jofras and Ingrid Kuri-Alonso

Abstract The purpose of this study is to explore the content of innovative culinary competence, through the educational model of Culinary Art School, which is based on learning-by-doing practices. A qualitative research strategy was implemented, including in-depth interviews with school directors and faculty. This chapter examines how the school has provided a space for the development of innovative culinary competence, demanding high standards from students, building a close relationship with industry professionals, and providing learning opportunities in real work scenarios. Taking into account the relationship between creativity and innovation, this gastronomy school takes advantage of its location in a very dynamic region in the border state of Baja California, Mexico. The educational model analyzed is based on hands-on experience, and at the same time culinary competence is acquired in real work scenarios. Considering the creative aspect of this industry, there is always an element of knowledge grounded in the social and cultural environment. The study was conducted in one particular school and was based on the curriculum and visions of directors and faculty. Based on an analysis of categories, the education model addresses key competencies in the culinary profession such as the development of culinary skills, creativity in culinary education, and the school as a space for the development of culinary innovation.

Keywords Border · Chef · Competence · Creative process · Creativity · Culinary arts · Educational model · gastronomy · Innovation · Learning-by-doing · Mexico · Networking · Professional practices · Region · Traditional techniques · Tendencies · Tijuana · Training · Vocational education · Workplace

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6.1 Learning-by-Doing: The Hands-on Method

Schools are undergoing radical changes. Teaching-learning models based on knowledge through traditional teaching are giving way to experiential learning, which should be relevant and practical, and not just theoretical and passive in its approach. According to Horng and Hu (2009), a discussion of education and innovation in schools involves two approaches. They argue that, at the most abstract level, it is possible to teach students through problem-solving or brainstorming, but at the most concrete level, a creative discipline or art requires constant practice. This is the case with gastronomy, in which future chefs practice on-site.

Theoretical knowledge is associated with intellectual skills, as opposed to practical skills. In this regard, Gustafsson (2004) notes that knowledge derived from action is known as pragmatism. John Dewey (1916) represents this philosophy, and coined the expression *learning-by-doing*.

In the mid-1990s, Schank (1995) claimed that practical learning was not the mainstream teaching method for training due to the possibility of mistakes, fear of failure, the lack of equipment to realistically implement practical activities in a classroom environment, and naturally, educators and psychologists had not really understood why learning-by-doing works. However, the same author states that learning-by-doing works because it teaches implicitly instead of explicitly. Things learned implicitly should only be experienced in the right way at the right time. To turn classrooms into practical learning experiences, students should be placed in situations relevant to their interests. In academic training in culinary arts, students require practical and cognitive skills, meaning that tacit and scientific knowledge should be integrated into practice.

In line with Bound and Lin (2013), competence development in the gastronomy industry requires continuous learning and is expressed in a dynamic process of improvement and refinement. Competence is not an independent attribute existing in isolation; rather, it is the product of collective learning within educational and working environments. A comprehensive vision of the reality of work considers the importance of situated knowledge, both practical and technological, and interaction between trainees and experts in professional activities. For these reasons, vocational education—as found in the gastronomy industry—requires direct contact with the workplace, or better still, a complementary relationship between the classroom and the kitchen.

It is known that apprentice chefs train in classrooms before going out into restaurants. However, competence is not the result of a mechanical process that adds together school and work activities, but rather an integration of knowledge, skills, and attitudes constructed in learning environments that enact situations from the workplace. In other words, the development of culinary competence requires enacting real-life work scenarios in their full social, economic, and cultural complexity. Through an enacted workplace pedagogy, it is possible to integrate theory into practice, both in an academic setting and in the workplace.

According to Chau and Cheung (2017), active learning in professions in the hospitality industry supports educational components associated with the pursuit of knowledge and enhancement of skills. At the same time, this approach fosters students' interest and participation in learning processes.

From a behavior perspective, the relationships between the cognitive and procedural facets of competence are complementary. Knowledge acquisition implies revising the level of achievement, considering what the student already knows, in accordance with the precepts established by Ausubel (1968) in educational psychology. At this level, Chau and Cheung (2017) suggest designing cognitive experiences or situations aimed at exploring and experiencing the real world. Together, they recommend enhancing learning processes with co-curricular experiences that develop skills, for example by designing menus or providing customer service. These activities integrate both components of education and at the same time create opportunities to assess learning outcomes.

6.2 The Creative Process and Education

Execution in the kitchen is regarded as the result of a creative process that begins in the professional's mind before creation and draws from prior knowledge, processes and subprocesses, as well as interaction between these thoughts and the sociocultural context. In this sense, the educational process in creativity stresses both theoretical and practical teaching, with a creative, open-minded teacher who implements practices and procedures that support students' creative expressions in the classroom, with students taking the intellectual risk of expressing their creativity (Horng & Hu, 2009).

Horng and Hu (2008) point out that in the French culinary tradition, creativity meant refining classic or traditional culinary arts. Today, continuous learning of culinary traditions and the desire to share and listen to new ideas offers an academic balance between tradition and new trends.

A creative culinary process involves working on ideas, incubating and developing them. In the words of Csíkszentmihályi, creativity is "any act, idea, or product that changes an existing domain, or that transforms an existing domain into a new one" (1997, p. 28). In this sense, Stierand, Dörfler, and MacBryde (2009) agree that creativity means the creation of a new idea, but this should be distinguished from Creativity (with a capital "C"), which deals with the realization of a new value, or in other words, the successful innovation of the idea.

For Ottenbacher and Harrington (2007), the creative process entails learning culinary practices that can benefit flexible thinking and creativity in general.

Various authors mention that the nature of the creative process, as a sequence of ideas that materialize as products, has been studied since the last century. One of the first proposals was put forward in 1926 by Wallas, who posited four phases in the creative process: preparation, incubation, illumination, and verification. By 1957, Rhodes had laid out the so-called 4 P's creativity model: Person, Process, Product,

and Press (the physical and social environment). Around the 1990s, Finke, Ward, and Smith present the Geneplore model, an amalgam of the words *generate* and *explore*, as an interactive model that alternates between two processes, known as generative and exploratory (Sainz de Vicuña, 2006; Horng & Hu, 2008, 2009).

6.3 Innovation in Culinary Arts

Innovation is an intellectual dimension that offers many benefits, the greatest of which is becoming more competitive (Ottenbacher & Gnoth, 2005). Indeed, there is ever-increasing competition in the hospitality and gastronomy industry. Chefs working in the industry must be able to remain innovative in their creations to attract new consumers and respond to the growing demand for culinary experiences. More than ever before, today diners demand a constantly changing market offering new culinary creations, which has resulted in a highly competitive environment in which chefs must be innovative and creative to achieve success both in the short and long terms. Such is the challenge of culinary education.

Culinary innovation is considered a multidimensional reality; in other words, its meaning approximates the complexity of fundamental actions and interactions that construct and explore the field of the gastronomy industry, meaning that it ties food in with intellectual discourse and broadens the act of cooking to include theoretical codes, categories, and practices (Stierand & Lynch, 2008).

Harrington and Ottenbacher (2013) add that innovation is a continuous process of creative destruction, and therefore is applicable to both new products and services. In this discussion, Stierand and Lynch (2008) revisit work by Rehn (2006), who adds to the debate on innovation of the manipulation of history, as when ways of thinking change, it is possible to create new forms of culinary innovation. In the same spirit, the authors include new technologies as an aspect that has an impact on innovation, as they affect both the learning and practice of culinary arts.

In line with Stierand, Dörfler, and MacBryde (2009), the innovation process can be expressed through two heuristic scenarios. On the one hand, there is the creative problem-solving process, in which students realign knowledge to find a solution and validate their idea with a network of experts as an intersubjective testing mechanism, and on the other hand, they pitch an idea that seeks to prove its worth among experts, who act as co-creators upon validating and promoting it.

Consequently, Stierand and Lynch (2008) propose five dimensions raised by the phenomenon of innovation: artistic aspiration; learning and networking; adoption and diffusion; continuous and discontinuous conditions; and lastly, perceived newness and change. Meanwhile, Ottenbacher and Harrington (2007) propose an innovation development process from the perspective of Michelin-starred chefs, following four phases: innovation formulation, innovation implementation, evaluation and control of the innovation, and innovation introduction.

This study draws from these dimensions to explore the academic proposal by Culinary Art School (CAS) based on the learning-by-doing method and determine

the educational model's impact on the development of culinary competence, creativity, and innovation. At the same time, learning processes were considered holistically, specifically through a pedagogy enacting the realities of the workplace as faithfully as possible.

6.4 Methodology

As an exploratory study, the research plan was to conduct interviews with directors and scholars at CAS in Tijuana, Baja California, Mexico, to better understand the underlying academic factors and dimensions that describe practices aimed at developing innovation and creativity processes in students of the bachelor's degree in culinary arts. We decided that the most appropriate methodology would be to collect qualitative data through semi-structured interviews with (a) the director of the school, chef Javier González; (b) the academic director, chef Ana Laura Martínez; and (c) teacher, chef Ofelia Núñez. In the interviews, we sought to explore the complexity of innovation and creativity development through the learning-by-doing method.

The qualitative method enables researchers to ask additional questions to gain a deeper insight into complex problems, thus generating new knowledge. Qualitative research is appropriate when the research problem is exploratory and intuitive, and focuses on social processes rather than social structures. As a result, in May 2018, semi-structured interviews were conducted in person with key informants. These interviews lasted between 30 and 120 min each.

To research teaching, this study took the phenomenological approach to in-depth learning, defined by scholars of the Scandinavian tradition like Säljö, Marton, and Booth, and summed up by Ortega (2007), as a readiness to recover the essence of learning situations through a clear and holistic delineation of the phenomenon, recording representations of the subject of the study while paying close attention to its details and characteristics. As a representation of the world of education, phenomenography is based on the reconstruction of sensory experience by recording words and images, with a special focus on education.

Phenomenography was used to analyze data and describe concepts used in practice by the educational model at CAS in Tijuana. The analysis categories were derived from the literature review described in the first part of this paper. Based on these categories, an analysis was performed by transcribing the interviews at length and the case was described qualitatively. To ensure credibility, participants offered additional information on the school and biographical sketches, which are important for triangulation.

The interviews were conducted on the CAS premises, located at Paseo del Río 7126, 3era. Etapa Zona Río, Tijuana, Baja California, Mexico. CAS is the first school specializing in culinary arts in northwestern Mexico. It began operations in 2003 in Tijuana, a city on the border with the United States of America and near the wine-growing region of Ensenada, where over 90% of Mexican wine is produced. Its teaching system is based on the modular specialized immersion system, which

supports the development of skills, abilities, habits, and organization in students through a high-performance teaching process based on the learning-by-doing educational model, with 70% practical content and 30% theory (Culinary Art School [CAS], 2016).

The analysis began during the interviews themselves and continued during the transcription and transcript analysis to code and identify emerging topics in the discourse. A dialogue was encouraged between actors of the education process and researchers, and the transcript made it possible to uncover the meaning of words and understand them in light of the literature review.

The semi-structured interview facilitated the reconstruction of the teaching-learning process throughout the bachelor's degree program in culinary arts. This technique enabled us to monitor the learning processes of future chefs and explore key points in time, particularly practical subjects and internships. Teachers' narratives enabled an understanding of the educational processes by which culinary competence is developed through the learning-by-doing method, and at the same time, made it possible to explore how the school supports innovation and creativity processes in students. On the basis of this information, the educational model used at CAS was analyzed.

6.5 Regional Context: Baja California

Professional cuisine in Baja California is rooted in the early experiences of casinos, restaurants, and bars set up on Mexico's northern border during the enforcement of the National Prohibition Act. Between 1920 and 1933, the production, sale, and transportation of alcohol was prohibited in the United States of America. This led to the creation of gambling establishments in cities like Tijuana, Mexico, and from that point the city became an entertainment destination for international tourists, who demanded quality experiences in line with the economic growth experienced by the neighboring state of California. In this regard, chef Javier González (2018) notes the influence of French cuisine in the lavish Casino de Agua Caliente, with regional ingredientes like lobsters and oysters.

During the years of the free zone, from 1933 to 1991—with the occasional hiatus—European imports of watches, jewelry, and fashion items continued to attract international tourists into Baja California. At the same time, cross-border workers, who enjoyed the economic advantages of being located on the border, raised awareness of the culinary traditions of the region, especially those of Mexican origin. Also noteworthy are the restaurants that sprang up in Tijuana at that time to offer international cuisine, such as Reno and Boccaccio's, in addition to nightclubs and bullrings. Chef Ana Laura Martínez (2018) remarks that other culinary traditions present in the region include Mediterranean and Asian cuisine, in particular Chinese.

This movement by chefs is recent but has been recorded in the culinary history of the state, which has taken advantage of the region's assets, the variety of fresh

seafood and produce like baby vegetables, which are exported. Most of the chefs who supported this movement were trained abroad, and others revived family traditions and the culinary profession. This occupation, along with related services, is a substantial source of employment in the state. Experts and specialists in food and drink production have come hand in hand with this development. The clearest example of this is the regional wine industry, in Valle de Guadalupe in the municipality of Ensenada, which is the largest in the country in terms of quality and production. These factors led to the birth of the Baja Med culinary project. As Millán (2017, p. 283) points out, "Understanding the ingredients produced in the region and how to work with them was what defined this movement and ensured all chefs involved benefitted from the brand that is Baja California cuisine."

6.6 Results and Discussion

This section presents some insights from key informants and their portrayal of culinary and educational facilities. Some comments have been quoted verbatim and others have been paraphrased to provide support to arguments about how, through the CAS educational model, they develop innovation and creativity processes, understood as complex sociocultural phenomena rather than processes with a flat, linear structure. The discussion is structured around categories: the CAS academic model; the development of culinary competence; creativity in culinary education; and the school as a space for the development of innovation in gastronomy.

6.6.1 The Culinary Art School Academic Model

The study program for the bachelor's degree in culinary arts at CAS runs for nine terms, meaning it is completed in a little over 3 years. Most classes focus on practical aspects and are structured based on the learning-by-doing model, which implies a willingness to learn via a hands-on approach in courses split into 30% theory and 70% practical classes, providing a more realistic setting.

The curriculum includes eight fields of knowledge, namely economic and administrative; service and enology; cuisine; pâtisserie; languages; applied sciences; humanities; and internships.

Early terms focus on developing culinary competence at a basic level with basic cooking and pâtisserie techniques, administration, hospitality, hygiene, communication, and professional demeanor. This prepares students for their fieldwork and first real experiences in a kitchen.

According to Tyson (2016), vocational education requires genuine training situations alongside a well-organized curriculum.

On that basis, chef Ofelia Núñez reports that:

> Theoretical subjects encompass several disciplines; the economic and administrative aspect is fundamental; the subjects are geared toward culinary mathematics, calculating quotes for events, banquets, expenses… finances are focused on projects for cooks, accounting is taught with a focus on restaurants, which puts it into a real-life scenario. All cases are practical and industry-focused (Núñez, 2018).

This explains how students experience their first hands-on practice during theoretical training in the bachelor's degree program.

The CAS study program is based on active learning in modules that alternate theory and practice. The learning-by-doing method is key for the development of culinary competence. To that end, the school has laboratory practice areas for different cooking and baking methods, and food preparation, table dressing, and service areas. At the same time, the school maintains ties with food producers and restaurants, with the aim of supporting learning in real situations right from the earliest modules and paving the way for students' professional internships.

The theoretical and practical focus of the CAS educational model is realized through classroom sessions and workshops that last for periods of 2, 3, or 5 weeks at most, and students alternate between the two. A third dimension is provided in that students must complete 9–12 weeks of internships: the first period in Mexico, the second at an international level, and the third is a professional internship strictly speaking, in Mexico or abroad, and varies depending on the student's interests and desired level of specialization. In all cases, internships are evaluated like any other subject and play a fundamental role in strengthening skills acquired in the school, which are put into practice in real-life settings. Of the 200–220 students enrolled at CAS, about 110 are currently in an internship (CAS, 2018a). In the interview Núñez (2018) stated that "from May to August most students are away".

Students have the opportunity to show their work to their peers and professional cooks both during their internships and in competitions and events organized by the school, which students participate in depending on their level of expertise. During the final semesters, the aim is for groups of students to serve a full menu to the school community and expert guests. This module has been shaded, along with the internships, in Table 6.1.

Lastly, it should be noted that the school also encourages activities supporting the less advantaged. As far as values are concerned, "Social responsibility means sharing my work with the community. For example, during the 15 sessions of the baking module, the product is tasted, reviewed, corrected, adapted, and the students take whatever is produced to communities in need, such as community breakfast halls, or wherever the students themselves suggest. This seeks to raise students' awareness and share their work" (Núñez, 2018).

6.6.2 Developing Culinary Competence

The development of culinary competence means integrating a range of knowledge, skills, and attitudes associated with culinary creation. The curriculum (Table 6.1) shows fields of knowledge and procedures associated with the culinary profession.

Table 6.1 Curriculum for the term-based bachelor's degree in culinary arts

Term/fields of knowledge	First	Second	Third	Fourth	Fifth
1.1. Economic and administrative	Administration in culinary arts	Accounting		Costs and budgeting	
	Culinary mathematics				
2. Service and enology	Hospitality			Banquets and events	Enology
3. Cuisine	ABCs of cuisine	Culinary techniques	Meats	Old World cuisine	Mediterranean cuisine
4. Pâtisserie		ABCs of pâtisserie		Baking	Confectionery, chocolate-making and dessert and pastry cooking
5. Languages		Culinary French			
1.6. Applied sciences	Food hygiene			Principles of nutrition	Healthy eating
	Risk prevention			Food chemistry	
7. Humanities	Communication	Research methodology			
8. Internships		Professional demeanor	National internship		
Term/fields of knowledge	**Sixth**	**Seventh**	**Eighth**	**Ninth**	
1.1.1. Economic and administrative		Procurement, marketing and sales		Business workshop	
		Human resources		Introduction to finances	
		Project diagnosis, design and assessment		Food administration	
2. Service and enology		Service management		Bartending and cocktail-making	
3. Cuisine	Fish and seafood	Culinary arts	American cuisines		
			Culinary trends		
4. Pâtisserie		Classic and contemporary cake-making		Plated desserts	
5. Languages					

(continued)

Table 6.1 (continued)

6. Applied sciences		Equipment and maintenance		Institutional production
7. Humanities			Education and training in culinary arts	Sustainable cuisine and social responsibility
8. Internships	International internship			Professional internship

Source: Culinary Art School

This section focuses on attitudinal aspects of culinary competence, which concern generic and specific skills. It is worth highlighting that in culinary education, apprentice chefs are socialized and trained in accordance with the demands of the professional workplace, both in academic settings and in specialized immersion experiences.

The enacted workplace pedagogy is facilitated by having teachers who also work in the field. For example:

"In subjects categorized as theoretical, such as service management, a specialist comes to teach the class and then goes back to his or her place of work. We don't have any permanent teachers (…) The class is evaluated using real-life scenarios, not just from a theoretical perspective, and students apply the topics they are studying" claimed Núñez (2018).

The teaching methods used at CAS to enact real-life situations include case studies, project-based learning, and problem-solving. Martínez (2018) reported that "students learn by doing, from the very first subjects, using problem-solving and developing projects."

By way of example, she mentioned that it was common to see restaurants with very small kitchens, so as to free up more space for the dining area. So "how do you cope? How much space is required to meet the demand of the restaurant? So you look at the burner capacity, the storage capacity, and sometimes you have to ask the owner for more space, even if it means sacrificing a couple of tables, because I might need a storage area, a new facility or piece of equipment, meaning that [by having these scenarios presented to you] you're stepping into the real world" (Martínez, 2018).

Another example is given in professional internships:

> There, they work in real kitchens, where they have to produce reports, identify areas for improvement and develop proposals (…) for example, I've noticed that sanitation could be improved here, so I draw up a sanitation program. In another place, there's a problem because patrons receive their food cold, so I suggest installing a heat lamp or bell. Sometimes they're simple things that people don't see due to workplace blindness, but when you bring in a new vision you can contribute a lot (Martínez, 2018).

Attitudes associated with hospitality and service are of the utmost importance in the bachelor's degree in culinary arts:

> [Attitudes] are entirely oriented toward providing table service. You're a cook but also a waiter. I'm trained to be a great cook, but also provide excellent table service. This service dignifies the profession, and is such a basic yet essential part of the dining experience… Students know that technical execution is just as important as hospitality and service (Núñez, 2018).

One of the most important skills that chefs must master is adapting to change. In the professional world, gastronomy is constantly changing, due to new trends but also changes in supplies, with seasonal produce for instance. Furthermore, it is necessary to adapt to diners' profiles, who demand new experiences and have specific needs. This means creating menus with different choices, including options for people with dietary restrictions. For example, "chocolate-making includes subspecialties, which might mean catering for those who are lactose-intolerant or preparing desserts for diabetics" (Martínez, 2018).

Generic skills include teamwork, given that gastronomy is a collective activity. Professional cuisine requires establishing relationships based on cooperation and respect. There are hierarchies in kitchens, and all the links of the service chain are constantly assessed by diners who demand quality service. In senior chef positions, leadership is key, since they must boost the team's strengths to achieve shared goals. This activity "cannot be envisaged from the perspective of one genius working alone; in gastronomy you need your coworkers, both in the kitchen and the dining area (service staff); it's teamwork" (Martínez, 2018).

6.6.3 Educate for Creativity in the Gastronomy Industry

Ottenbacher and Harrington (2007) pointed out that the creative process requires learning and practice in kitchens. CAS strives first to provide students with knowledge of basic techniques, both in international and in Mexican cuisine. At the beginning, students take subjects that teach the ABCs of cuisine, and in which students begin to familiarize themselves with, execute and practice techniques, on their own and in combinations, which do not necessarily lead to an organized menu but do provide future chefs with a basic grounding.

In this sense, CAS promotes the exploration and development of creativity in students through practice underpinned by previously acquired knowledge and skills. In this regard, Núñez (2018) states:

> We don't believe in giving imagination free rein when you don't have the building blocks to support it. In cuisine, cake-making and baking, we don't visualize the creative process from the beginning; we visualize it and put it into practice halfway through or towards the end of the course. In cuisine, it is our firm belief that you can't create anything if you don't know the basics, if you aren't able to execute perfectly the basic techniques that will be required of you anywhere in the world, no matter where you might complete your internships.

This is exemplified by teachers who systematize to guide students' creative process, which starts with a deductive approach and leads to the cooking process,

implemented through techniques, work on textures, specific ingredients and guided risks, breaking new ground, fostering capacity in a real-life setting by executing a menu through trial and error until students are able to serve a dinner taking into account culinary trends, putting into practice a theoretical basis at all times. At the end, the student's creative process receives objective criticism from professionals who experience the meal as diners but also act as judges to evaluate courses. Students experience a real-life setting, from creation right through to execution.

Another aspect that boosts creativity is identifying techniques from international cuisine. Students work from a general understanding of professional cooking techniques, but these are combined with regional knowledge. Chef Martínez remarks that rice can be cooked Mexican-style, with tomatoes and vegetables; as risotto, which is Italian; or in Spanish paella. In other words, "it's just one ingredient that grows differently and can be used in different ways depending on the place of origin" (Martínez, 2018), considering the varieties of the grain.

One virtue appreciated by hotels and restaurants that receive interns is that students arrive with a fresh set of eyes and are able to identify some of the bottlenecks and opportunity areas in these places. The inertia of professionals immersed in their daily routine and industry-established systems means they are liable to fall victim to workplace blindness as they stop calling into question their methods and processes. In gastronomy education, creativity plays a key role in problem-solving; chefs trained in an enacted workplace draw from their knowledge of industry standards and processes and their professional experience to identify and develop proposals for improvement.

Part of the canon of gastronomy education is learning the conceptual foundations and techniques of professional cuisine, in addition to becoming familiar with and masters of cooking ingredients. Education for innovation at CAS includes both traditional and state-of-the-art cooking techniques. This mindset can be seen both in the cooking techniques and in the fittings and appliances, such as the revival of the pre-Hispanic nixtamalization[1] technique to produce *masa* (corn dough), using volcanic rock for grinding, which offers many possibilities, both traditional uses and new combinations. This is also noticeable in the range of ovens in the workshops, which include charcoal ovens with air vents to control heat, and gas ovens with digital sensors and programming functions, for more precise cooking.

In the creative process under the Geneplore model (Finke, Ward, & Smith, 1992), new concepts are generated from preinventive structures recorded in prior knowledge, such as the cooking processes required for culinary competence, in addition to sociocultural and idiosyncratic knowledge. This functions in conjunction with the exploratory and interpretative structure to enable the manipulation and combination of elements.

As generative and exploratory structures, the directors of CAS stress the importance of knowledge and "mastery of cuisine per se" (Martínez, 2018). This cuisine

[1]According to Paredes, Guevara, and Bello (2009, p.63): "From the náhuatl *nixtli*, ashes, and *tamalli*, corn dough; the nixtamalization process has been passed on from generation to generation in Central America, and is still followed like in pre-Hispanic times".

is defined by specific characteristics linked to geography, biodiversity, and culture. Many of the culinary creations tested in the school make use of traditional techniques in Mexican culture, which includes huge regional diversity, and are also based on an anthropological appreciation that seeks to revive methods, documents, and instruments in gastronomy in the border region where the program is offered.

The exam in culinary trends, which is taken in the last year of the degree, offers a unique opportunity to prepare new culinary concepts. The goal of this exam is to "create an authentic menu for a group of diners made up of chefs, journalists, businessmen, and other important figures from Mexico and abroad" (CAS 2018c). The most recent exam, which took place at the school, included dishes made from regional ingredients like fish and seafood, seaweed, Mexican cheeses, raw vegetables, ripe fruit, and lamb. These ingredients were used to prepare a six-course banquet including desserts. The culinary creations, which were remarkable for their novelty, included vegetable aguachile,[2] *tostadas*[3] *raspadas*[4] made with toasted, degrained corn. The full menu can be found at CAS (2018c).

Students from the basic and intermediate stages of the degree also benefit from this opportunity as they are able to sign up to support the teams who will demonstrate their culinary competence by preparing new concepts: "they participate in events all throughout their degree" (Núñez, 2018). The chef remarked:

> In the fourth term each year there is a date set aside for the trends exam. I help them in the kitchen and sign up to experience what the others experience, take part in the service and see what awaits me. [For the students] it's a privilege to participate in events before getting to that final moment in the degree. [They] spread the word and a dynamic is created that begins by asking who will be invited – for example, renowned chefs who share their ideas and content. For the students it's [a chance to find out] what to expect (Núñez, 2018).

6.6.4 CAS: A Space for Educational Innovation

As a higher education institution, CAS seeks to transform society by training professionals committed to their profession and the community they work in, through a consolidated, nationally and internationally renowned study program that is investing in innovation. About 30% of students cross the border every day from San Diego, California, USA, to attend class (González, 2018).

As previously mentioned, innovation is a multidimensional reality in which fundamental actions and interactions in the gastronomy industry are constructed, intertwining intellectual discourse with the practices and theoretical codes that structure

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[2] According to the Dictionary of the Royal Spanish Academy (DRAE in Spanish), in Mexico *aguachile* is a watery broth with chili pepper, tomato, shrimp, and spices. The new twist in this menu was preparing it with vegetables instead of seafood.

[3] In Mexico, *tostadas* are corn tortillas that are toasted until they are hard, and serve as a base for other ingredientes mounted on top.

[4] According to the DRAE (2017), a *tostada* is toasted corn in Bolivia, Ecuador, and Nicaragua; and *raspada*, in México and Peru, means *scraped* or *scraping*.

the field. In this sense, CAS emerges as an innovative institution in aspects that range from the way its physical space is designed to teaching practices and assessment methods, as well as the experiences that shape students' professional training.

In this regard, Núñez (2018) remarks that:

> … the building, by its very nature, is the reflection of an innovative dynamic through its creative aspects and the way it was constructed – for example, the materials used. Spaces are shared, so the facilities themselves support integration activities. Kitchen workshops are not designed for large areas, and a maximum of 16 students work in the kitchen at a time. This makes it possible to work in teams of 4, and work on activities with the stove, induction griddles, with a 2-door refrigerator where whatever's in it today is there to be used today – in other words, fresh ingredients, produce that has just come in, which will be transformed and then come out. There is no cold store.

This enables CAS to forge in its students an optimal approach to work, lesson planning, and inventory turnover to avoid waste and be creative with what is available.

Moreover, keeping on top of current trends in gastronomy means working within continuities and discontinuities (Stierand & Lynch, 2008), adapting learning to current trends, and consequently major equipment at CAS offers students state-of-the-art technology. This includes Josper charcoal ovens, a high-quality combination between a grill and an oven; digital ovens that can be programmed depending on the technique use; and tools and utensils to revive traditional techniques (currently in vogue) or use chemistry in the kitchen, like food hydrogenation. Generally speaking, it is about breaking new ground, taking guided risks, and experimenting to continue acquiring new knowledge in a changing, unpredictable world.

All of this allows students to develop artistic inspiration (Stierand & Lynch, 2008), which is empirically displayed in a vast world of institutionalized gastronomy. As Núñez (2018) recounts:

> Students soak up information for themselves [trends, haute cuisine chefs, etc.], which begins to open their eyes to the big picture, and one thing leads to another: who do you follow? This tells you where I want to intern. Students leave and open doors for other students. For instance, right now we have one former student working with chef Gaggan Anand[5] in Thailand.

In keeping with the dimensions proposed by Stierand and Lynch (2008), CAS distinguishes itself by offering its students learning and networking. Learning ranges from traditional knowledge to the social environment that influences the process. This means it goes from the basics—becoming familiar with and executing techniques like making stocks, sauces, and identifying techniques for preparing hot food, such as roasting, stewing, sautéing, and combining techniques—to designing, executing, and serving an organized menu, including plated desserts and considering culinary trends.

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[5] Chef Gaggan Anand's restaurant in Bangkok has been considered the best restaurant in Asia for three consecutive years and was ranked seventh in The World's 50 Best Restaurants 2017a. EFE (2017) reported that the restaurant was also awarded two Michelin stars that year.

On the other hand, CAS is also committed to developing networking. Stierand and Lynch (2008) use the term "learning communities" to describe institutional networks that offer their members cohesion and benefits. At CAS there are institutional networks established through agreements with hotels, restaurants, and chains where students complete national, international, and professional internships. Núñez (2018) notes that:

> The most important prerequisites for any establishment before we consider entering into an agreement for internships include having a menu that exhibits different techniques, meaning that it shouldn't just offer soups or sandwiches, but should offer a menu that is substantial enough to put into practice several of the techniques learned […] It should have a perfectly structured team, a clearly defined human resources department that assigns the tasks the student is to carry out […] It should have a wine list, even though it may be short, so students gain access to wines, the way they are stored, and the people in charge; we look for places with table service so students may share in table-dressing, activities, tips, server organization, the relationship with the food and beverage manager, etc.

For all these reasons, each establishment is reviewed one by one by a committee made up of CAS management, teacher-chefs, and teachers in the hospitality, service, and wine fields, who make an assessment and determine whether it is viable or not to sign an agreement.

In turn, CAS offers students a network of providers who are a permanent part of all modules, and providers who offer demo classes or showcase their products so students may cook with them and identify opportunities and options in the market. In any event, the school promotes a relationship between students and providers from the beginning of the degree program. This allows students to compare prices, estimate costs, and above all gain awareness of providers' work. They also learn to value seasonal produce, which will then make it possible to plan menus based on the time of year (Núñez, 2018).

Regarding the adoption and diffusion dimension, Stierand and Lynch (2008) explain that it is a balancing act between sophistication and the popularity of a new idea. Voices have been raised resisting change, when they have found stability, as the social system is generally selective and rejects counter-culture innovation. In this sense, CAS students explore culinary trends that range from the basics of cooking, such as using charcoal, to reviving the nixtamalization process, which starts with choosing the corn and ends with making the tortillas that will be used in plating the food. Nuñez (2018) emphasizes the revival of Mexican techniques, bringing back traditional Mexican charring (*tatemado*), ember-roasting (*rescoldo*), and combined or steam cooking techniques. "Trendiness takes you back to basics […] Slow cooking, traditional processes are the trend. Leaders are following this trend, for example Molino "El Pujol", run by chef Enrique Olvera,[6] who should be followed" (Núñez, 2018).

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[6] The Pujol restaurant, run by Enrique Olvera, is considered the best restaurant in Mexico and ranked 20th in the world and fourth in Latin America according to The The World's 50 Best Restaurants 2017b. Moreover, his restaurant Cosme in New York has been ranked 96th in the world.

The perception of novelty and change mentioned by Stierand and Lynch (2008) is associated with the notion of adoption and diffusion, as these are relevant in considering an innovation as something new. This last dimension is based on the reasoning that any innovation should be perceived as such by the external social system. In this sense, and in line with Stierand, Dörfler, and MacBryde (2009), innovation passes through a creative process to solve problems, in which students readjust their knowledge to find a solution and validate their ideas with a network of experts as an intersubjective testing mechanism, and on the other hand, an idea is pitched that acquires value as an innovation. A good example of this dimension is provided by CAS student Leonardo E. Cañedo García, who, with his shrimp and portobello mushroom al pastor sope, won the Duelos de Sazón competition organized by the Fiesta Americana hotel chain to add a new dish to their hotel menu (CAS, 2018b).

6.7 Conclusions, Scope, and Recommendations

The study is exploratory in scope and was confined to researching how the academic model at CAS encourages innovation and creativity processes in its students while developing culinary competence. The study was mainly geared toward understanding these processes from the implementation of the curriculum, which envisages intensive training through the learning-by-doing model. The theoretical and methodological approach includes an interpretative and sociocultural analysis based on enacted workplace experiences. Thus, participants in the study offer their interpretation based on their position and role as teachers.

The study identifies some overlaps between the literature reviewed and the results obtained. Some parallels can be drawn, but the findings are contingent on the context and conditions of the school under analysis. Since this is a single case study based solely on the perspective of teachers, it is not possible to apply or generalize the results in other contexts and training programs. Nonetheless, it has been broadly shown that training for future chefs requires the development of culinary skills, which can be acquired through educational models geared toward learning by doing.

From this perspective, the development of culinary competence is grounded in practice, interaction between all actors involved in culinary practices and the culinary system (operations, service, and the supply chain), knowledge of food preparation techniques, and the exploration of new possibilities in fields that are independent of gastronomy.

This study also analyzes environmental factors in culinary education, including professional standards in school and real work scenarios. Creativity skills are also studied, establishing links to social and cultural environments that are conducive to new culinary concepts.

Social and cultural knowledge in gastronomy education are conducive to creativity and the development of new culinary concepts. Since knowledge is integrated into context, culture, and social relations, it constitutes a bank of socially shared

knowledge from which it is possible to create something new. At the same time, knowledge is mediated by relationships and contexts, which give culinary practices particular meanings. In this sense, competence is both an individual and collective attribute and is acquired by interacting with people involved in the profession and preparing food as socially and culturally shared productions.

The development of culinary competence includes a contextual component that relates to the world of work and the broader social context, in this case the world of cuisine on a global scale.

CAS is presented as an academic environment in which innovation and creativity are developed based on an educational program that supports practice and puts students in direct contact with the workplace. This dynamic allows future chefs to acquire knowledge and develop skills, meaning it offers tacit and scientific training integrated and immersed in the practice of culinary arts.

The creative process is encouraged during the course of students' education, but not from the outset as firstly they must acquire knowledge and learn cooking practices, as argued by Ottenbacher and Harrington (2007). Rhodes' 4 P's process is reflected in culinary trends assessments, where students draw from the culinary competencies they have acquired to prepare ideas that are then processed in the kitchen, and the final product—an organized menu—is presented and served in a physical, sociocultural environment where ultimately it is evaluated.

The proposal made by Horng and Hu (2008) regarding education and innovation in schools is reflected at CAS by the fact that students face real problems, which are first addressed in theory, and develop solutions through constant practice in real scenarios. These enacted scenarios turn classrooms into practical learning experiences where the innovation circle begins by transforming ideas into creations, which, once validated by specialists, become innovations.

In this respect, the dimensions analyzed in light of work by Stierand and Lynch (2008) tie in with the space, forms, meta-cognitive processes, practices, relationships, and guided risks that affect the continuities and breaks that interviewees agree are fundamental for the education of future chefs.

This study analyzed culinary education through a program that prioritizes the learning-by-doing model. The findings from this study have implications for scholars of culinary and hospitality arts and industry professionals. Knowledge in this field of education and the research agenda may both be furthered by studying the perspectives of teachers from different areas of the culinary and hospitality arts, in addition to those of students and graduates in the field, in order to improve recognition of the innovation and creativity processes in providing culinary products and services and managing the hospitality industry. This will allow new studies to crystallize knowledge of the processes identified.

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Chapter 7
Innovation and Creativity in the Mobile Applications Industry: A Case Study of Mobile Health Applications (e-Health Apps)

Pedro Palos-Sánchez, José R. Saura, and José Álvarez-García

Abstract The development of new technologies, especially the Internet, has resulted in the expansion and development of the global economy. This fact has led the communication and culture industries to play an increasingly more important role in a global economy. One of these industries is driven by the development of Mobile Health Applications that aim to diagnose, monitor and follow up illnesses through applications. The objective of this research is to determine the types of Mobile Health Applications found in this creative industry and determine the future of the industry in terms of innovation and development of new applications within the health sector. The results of the research identify the types of Mobile Health Applications and their uses, and determine the future development of the industry in terms of regulation and use by the ecosystem of institutions and health professionals, with special emphasis on the privacy and personal data of their patients and users.

Keywords Creative industry · Mobile health applications · eHealth apps · mHealth

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7.1 Introduction

The development of new technologies, especially the Internet, has resulted in the expansion and development of the global economy. This fact has led the communication and culture industries to play an increasingly more important role in a global economy (Deng, 2013).

The development of these new industries means that companies must adapt their internal structure and organization to the new business models and new technologies of the twenty-first century. With the development and momentum of the sectors mentioned previously, there has been a productive reorientation towards a service economy (Crilly et al., 2018). Consequently, an increase in productive development, competitiveness, social cohesion, the promotion of cultural diversity, the dissemination of information and knowledge through the Internet and the generation of new values has finished shaping the cultural and creative industry of the twenty-first century (Abelson, Symer, Peters, Charlson, & Yeo, 2017; Housman, 2017).

The main raw material in these industries is the ability to imagine, innovate and generate new products and services that convey not only meanings through creativity, but also generate a significant amount of assets linked to intellectual property, artistic and cultural heritage and traditions (Kao & Liebovitz, 2017; Palos-Sánchez, & Saura, 2018).

This chapter focuses on the analysis of a creative industry that has evolved exponentially thanks to the development of new technologies and human being skills to carry out consumption habits and daily tasks interacting with technology (Bloomfield et al., 2016).

The transmission of knowledge has become one of the assets of the economy as we know it today. Knowledge, creation, art, business and creativity are directly influenced by technology and innovation. Innovation and the strategic position of companies are increasingly important to obtain added value over the competitors in creative industries (Chang, Pang, Tarn, Liu, & Yen, 2015).

Innovation is understood as an action of change that is a novelty, in which creative integration processes are combined to create, modify or improve a product, a service or a system. Innovation in a creative industry influenced by new technologies and the use of new devices and digital media has generated new business models and new business opportunities that cover needs that did not exist until today (Abelson et al., 2017; Ashurst & Jones, 2017; Pierce et al., 2017).

It is interesting to highlight the continuous increase of companies related to creativity and new media and, above all, the role they play in a multidisciplinary society based on diversity. The market values of new products based on technological innovation are determined by their originality, uniqueness, performance and appearance (Kao & Liebovitz, 2017).

In addition, the development of this creative and global industry has caused the labour market to demand more and more creative workers with the ability to communicate and solve problems. Moreover, the development of new digital devices, which we have already referred to, allows companies to make better decisions regarding the location of their physical headquarters, the availability and customer service time or the labour flexibility offered to their workers (Atienza & Patrick, 2011).

These industries generate and create jobs, as well as attracting investors and stimulating the global economy. Their presence contributes to the attractiveness of cities and their future residents, workers, companies, entrepreneurs and business people in any sector of activity (Abelson et al., 2017).

The objective of this study is to determine the types of Mobile Health Applications that currently make up the market and to reveal the future of the industry in terms of their regulation and safe use of these applications by patients and users.

7.2 Creative Innovation Through Mobile Applications: E-Health Apps

As we have already indicated, the development of the Internet in the first decade of the twenty-first century made companies adapt their business strategies to new consumer habits and needs (Goetzel, Shechter, Ozminkowski, Marmet, & Tabrizi, 2007). In this sense, one of the industries that has grown the most in the last 10 years has been the mobile phone industry. This sector has increased exponentially around the world, driven by the development of emerging countries and the reduction in the production cost of this type of support (Ashurst & Jones, 2017; Klein, 2018). In the mobile phone sector, different variables and characteristics that define each type of terminal have appeared.

As shown in the research by Handel (2011), one of the phone supports that has changed the mobile phone industry as we knew it is the “smartphone”. A “smartphone” is an intelligent mobile phone that as a general rule must have access to the Internet (Ramtohul, 2015). This type of terminal combines elements from a tablet and a mobile terminal. “Smartphones” have computer capacity, as well as features that allow for the capacity to store data and process activities performed by a computer (Kao & Liebovitz, 2017; Palos-Sánchez, Saura, & Debasa, 2018).

These terminals are characterized by having touch screens and supporting software and applications that facilitate the basic management of a company or a business. These terminals also have Internet through 2G, 3G and 4G networks and have GPS or basic office software for administrative management (Bloomfield et al., 2016; Cho, 2016).

If we observe the market penetration of “smartphone” users, based on data from the Global Mobiles Market Report (Newzoo, 2017), we can say that there are countries where the penetration of smartphones exceeds 80% of the market. For example, in the Arab Emirates with a population of 9,380,000 inhabitants, 7,573,000 of them have access to and use the Internet every day through a “smartphone”. In economically consolidated countries such as the United States, Germany or the United Kingdom, the penetration of this technology fluctuates around 68–69% with respect to its total population. Even such disperse countries like Sweden or South Korea have a “smartphone” market penetration of approximately 71% of the total population (Cho, 2016; Pierce et al., 2017).

The software in mobile terminals mentioned previously is known as mobile applications (APPs). As indicated in Au & Zafar (2008), mobile applications are

small computerized management systems for a specific task that are installed in a "smartphone" and that solve specific problems for which they are designed (Mcmillan, Hickey, Patel, & Mitchell, 2016).

It is also interesting to note that the number of applications downloaded by users who use smartphones around the world has increased in the last 5 years. This means that the total time users spend in the digital world increased by 53% between 2015 and 2017, and in particular, the use of mobile applications has increased by 111% around the world (Kao & Liebovitz, 2017).

Following the results of Statista (2018), by the year 2021 a total of 352.9 billion applications are expected to be downloaded. In addition, users of mobile applications are allocating about 75 h per month to the use and benefit of these applications (Kao & Liebovitz, 2017).

If we observe the use of applications by category, we can see how applications related to e-mail management get a total of 45% of usage percentage, applications related to tourism and the creative industry get 28% with respect to the total of application categories downloaded in the world, applications for social communication get 47% and finally, categories such as shopping and messaging applications get 40% and 45% respectively (Autry, Grawe, Daugherty, & Richey, 2010; Saura, Palos-Sánchez, & Rios Martin, 2018). There is no doubt that the use of mobile applications has become a consumption habit for users who benefit from their content (Baldwin et al., 2017; Kao & Liebovitz, 2017).

At this point, it is interesting to highlight one of the industries that thanks to innovation and creativity has revolutionized the mobile applications sector and how the chronically ill, the elderly, the youth, people with physical or mental disabilities and even top athletes, monitor, coordinate, manage, check and consult the types of dementias and healthy habits they must pay attention to in order to monitor their illness or healthy habit (Bert, Giacometti, Gualano, & Siliquini, 2014; Bloomfield, Polo-Wood, Mandel, & Mandl, 2017; Bort-Roig et al., 2017). We are talking about E-Health mobile applications, also known as mHealth or Mobile Health Applications (Abelson et al., 2017; Ashurst & Jones, 2017; Housman, 2017; Pierce et al., 2017).

Innovation and creativity in the development of mobile applications has given rise to the fact that the telemedicine and E-Health sector has established itself as one of the sectors that has received more investment in recent times if we observe the mobile applications sector (Handel, 2011; Pierce et al., 2017).

7.3 Theoretical Framework and Literature Review

In the last decade, many researchers have shown interest in the study of how users use applications on their mobile phones. Therefore, the study of how users behave when they use a mobile application and their consumption habits have become key factors for research in this field (Kao & Liebovitz, 2017).

In this sense, Kim and Xie (2017) indicate that care and support for patients and the sick through the use of new technologies has become widespread in recent

years. The industry known as Telemedicine or e-Health has become a key factor for the improvement, analysis, study and development of medicine and care for patients and the sick. Thus, Electronic Health or e-Health is defined by Eysenbach (2001) as "health services and information delivered or enhanced through the Internet and related technologies".

Within the field of e-Health mobile applications, many supports have appeared that provide services to promote communication between patients and care staff, health education, recommendation portals, Wellness management to measure calories and follow a dietary process, Disease management to monitor diabetes and asthma, Self-diagnosis to identify symptoms and early diagnoses, Medication reminder to remind patients of the consumption of medicines and Physical medicine and rehabilitation to follow rehabilitation processes and therapies in different stages (Ashurst & Jones, 2017; Atienza & Patrick, 2011; Bloomfield et al., 2016; Cho, 2016).

As we pointed out before, in this research we focus the object of study on the Mobile Health Application. The term "Application" or "App" refers to a self-contained program or piece of software that is designed to fulfil a particular purpose and usually optimized to run on mobile devices, such as smartphones, tablet computers and some wearable devices like smart watches (Kao & Liebovitz, 2017).

In this sense, Mobile Health Applications are applications related to health and aim to improve patient care, disease diagnosis or diagnosis monitoring, as well as communication between care specialists and patients (Grundy, Wang, & Bero, 2016). Such is the use of Mobile Health Applications by users and the relevance of their study that the Food and Drug Administration (FDA) of the Federal Agency of the US took the initiative to regulate Mobile Health Applications within the so-called Digital Health Innovation Plan which initiated its activities in August 2017.

Mobile Health Applications have the potential to increase the quality of processes related to Health remotely and on a global scale, allowing us to monitor the risks, symptoms and protocols of consumers and patients of these applications (Hoque & Bao, 2015). It is interesting to note that the interest of consumers towards Mobile Health Applications has increased at the same time as the use of new technologies in the health and care sector (Abelson et al., 2017).

It is worth highlighting that the two categories related to Mobile Health Applications in app stores are those that are at the top of the rankings of applications by subjects, on the one hand, the categories of consumer-facing mHealth apps are wellness management such as fitness, lifestyle modification, and diet and nutrition and chronic disease management such as mental health, diabetes and cardiovascular diseases (Kao & Liebovitz, 2017).

Kao and Liebovitz (2017) study the influence of Mobile Health Applications and users' behaviour on these types of applications and analyze the current state of the sector and user barriers on users' behaviour. In addition, Baldwin et al. (2017) investigate access to information from applications that monitor diseases to detect disease symptoms through e-Health Apps. They focus on the benefits of access to information and the ease of tracking disease symptoms with the use of Mobile Health Applications (Jeon & Park, 2015).

Covolo et al. (2017) perform an analysis of the influence between e-Health Apps and their health improvement based on a healthy life. In their research, they evaluate the evidence of the use of Mobile Health Applications to increase the chances of users leading healthier lives thanks to the use of these applications.

To measure the impact of these types of applications, we have carried out a systematic literature review to compare the increase in the use of these applications with the interest they arouse in researchers (Kao and Liebovitz, 2017; Saura, Palos-Sánchez, & Suárez, 2017) (Table 7.1).

7.4 Types of Mobile Health Applications

7.4.1 Mobile Health Applications for Professionals

They are applications that aim to train professionals, as well as those aimed at the use by health professionals. Applications for consulting technical data, access to specialized databases on health or monitoring of patient diagnoses are included among those applications. These applications have become a support service for health professionals, since their management is quick and easy and can offer them considerable advantages over consultation in larger physical devices, such as the computer (Baldwin et al., 2017).

Professional health applications have become a tool for the development of consultations and diagnoses by health professionals, and even for the management of these patients and their data regarding each disease. In addition, international regulation helps health centres and hospitals increasingly support initiatives related to the use of these tools by health professionals, as long as they improve the processes of diagnosis, following-up and monitoring patient data safely (Kelly, Wills, & Sykes, 2017). In Table 7.2, a list of Mobile Health Applications used by health professionals is shown.

7.4.2 Mobile Health Applications for Patients

Health applications are aimed not only at professional use to improve diagnosis and patient follow-up, but are also developed with the aim of improving each of the patient's actions to cope with his/her illness (Limato, Ahmed, Magdalena, Nasir, & Kotvojs, 2018). There are health applications, whose aim is to enable the patient to diagnose symptoms before going to the health professional's appointment or simply to be a reminder of the medicine dose that must be taken to relieve the pain of a particular symptom. In addition, there are Mobile Health Applications for patients whose goal is to connect these patients with other patients with the same disease and thus help them exchange feedback on how to perform different actions related to their disease (Lin & Yang, 2009). There are also Mobile Health Applications for patients, whose objective is to inform about the price of medicines and their prescription, providing legal information on where they can buy the medicines or how they should request the prescription to obtain them (Baldwin et al., 2017).

Table 7.1 Systematic literature review

Authors	Research objective	Creative industry	Description
Housman (2017)	Objective, the study of social media health through the evaluation of Mobile Health Applications	Well-being assessment through Social Networks	It focuses on the increased use of social networks and the factors that affect the relationship and the use of Mobile Health Applications by users. It analyzes social acceptance by web-based communities on Mobile Health Applications
Handel (2011)	It studies the use of mobile applications focused on Health and Wellness	Monitoring of healthy habits through an application	It studies Mobile Health Applications for health, weight loss, following a healthy diet, preparing healthy food, glucose tests, monitoring diabetes, monitoring calories consumed, diagnosing diseases, meditation, yoga, the time you should sleep at night or the incentive to follow sports activities
Atienza and Patrick (2011)	Care for sustainability and mobile applications	Sustainability of ICTs through e-Health mobile applications	They focus their attention on the study of the sustainability and care of Mobile Health Applications and the indicators for their acceptance and use in the consumption of applications based on new technologies
Bloomfield et al. (2016)	Identification of SMART objectives through e-Health Applications	Decision-making through Apps	They focus their attention on the implementation of SMART objectives in the behaviour of Mobile Health Applications users
Cho (2016)	Acceptance of the technology that boosts Mobiles Health Applications	Measurement and acceptance of technology in Apps	It focuses its attention on the study of the impact of post-adoption beliefs on Mobile Health Applications, based on the micro-mechanism that determines the continuance intentions to use health apps, theoretically relying on the post-acceptance model (PAM) and the technology acceptance model (TAM)
Klein (2018)	Sedentary lifestyle of employees at work	Improving work efficiency with Mobile Health Applications	They investigate the improvement of employee sedentary lifestyle during working office hours, for which they study the user's behaviour and acceptance through the Mobile Health Application that they install in their mobile phones
Ashurst & Jones (2017)	Acceptance by people who have diabetes and their treatment with e-Health Applications	Improvement of chronic patients through e-Health Applications	They study the acceptance by people with diabetes and its measurement and monitoring with the use of two Mobile Health Applications to measure their acceptance and performance after using these applications
Abelson et al. (2017)	Measuring patient sacrifices to use Mobile Health Applications	Decision-making through Apps	They focus their research on determining the greatest sacrifices that patients are willing to make with the use of Mobile Health Applications
Pierce et al. (2017)	Acceptance of the use of Apps for health	Health and Mobile Applications	They analyze the Perspectives on the use of acceptance and commitment therapy related to mobile health applications

Source: Author's

Table 7.2 Mobile health applications for professionals

mHealth app	Description
Health 2.0	Guide to visualize content on Telemedicine among professionals. You can find related videos about health on applications, health education, medicine and consultations related to hospitals, institutions or administration
Idoctus	Application that develops a diagnosis on the treatment for patients. It is aimed at professional doctors and links diagnoses with scientific sources of updated clinical content
Vademecum	It allows us to look up drugs in different countries around the world, as well as therapeutic indications, warnings and precautions, contraindications, adverse reactions and side effects. In addition, alerts related to kidney failure, breastfeeding or pregnancy, among others can be set up
Epocrates	Through this application, you can consult prescriptions and safety information about medicines, as well as their brands and if they can be bought over-the counter. In addition, you can know the approximate sale price and adverse drug reactions
Bot Plus 2.0	It is an application aimed at pharmacists and professionals in the health sector that allows access to reference information, in this case in Spain, on the subject of medicines with the specialized database Bot Plus 2.0

Source: Author's

Table 7.3 Mobile health applications for patients

mHealth app	Description
Cardiograph	Application that aims to measure the patient's heart rate. For its use, the user must put his/her index finger on the device camera and it monitors his/her heart rate. It collects information about the patient and compares his/her medical record
i-Hear Free	Application that performs an audiometry test. In this case, the user must have headphones on and should mark when the noise begins and ends
Medcitas	It is a health platform that puts health professionals and patients in contact, enabling making appointments with health professionals
Doctoralia	Application that allows you to search for professionals and medical centres specialized in dementia or other specific disease symptoms
Medisafe	Application that reminds you about the medication and pill management. It reminds by taking into account the effects of each of the medicines taken by the patient

Source: Author's

In addition, the development of Mobile Health Applications for patients has led to the emergence of consultation platforms for professionals in specific health sectors, which offer their services instantaneously through telemedicine. Table 7.3 identifies a series of Mobile Health Applications for patients.

7.4.3 Mobile Health Applications for a Healthy Life

Another use of Mobile Health Applications is to improve the day to day of people suffering from some type of disease or dementia, and also to increase the sports activities they do. In this sense, the applications of Mobile Health Applications for a Healthy Life monitor the main physical activities done by users, as well as providing

Table 7.4 Mobile health applications for patients

mHealth app	Description
Endomondo	It is an application that allows us to monitor the main indicators when a user does sports such as geolocation, calories consumed or activity tracker according to the type of sport that has been done
Moves	Application that monitors daily activities to determine the number of calories consumed. It provides information about the distance travelled, the steps, the duration and the calories per activity
Fitbit	Application that designs plans to eat better and to follow a healthy diet. You can control your weight and sleep better. You can also monitor food according to the type of calories
Unobrain	Application that enables us to do brain training and mental agility exercises and that aims at being faster at processing information
Runkeeper	Application to do physical exercise. It allows you to consult statistics such as race pace, bicycle rides, training exercises and other sports activities through the phone GPS

Source: Author's

several tips for leading a healthy life (Baldwin et al., 2017). Eating well, healthy lifestyle habits such as sleeping more hours or counting the number of calories in a product are the characteristics of these applications. In recent years, their use has increased mainly due to the boom of applications to monitor sports activities and link data to a daily routine of healthy activities (Lin & Yang, 2009; Madsen, 2018). Table 7.4 shows some examples of Mobile Health Applications for a healthy life.

7.5 Regulation of the Creative Industry of Mobile Health Applications

An increase in the use of e-Health applications in recent years has led to the emergence of new initiatives for their regulation regarding their use and quality verification. In this regard, we can highlight that in the United States, the Department of Health and Human Services, Food and Drug Administration (FDA) has decided to regulate and recognize a wide variety of medical functions that come from e-Health apps. The rapid growth of the industry and the innovation of these mobile applications has led to taking into account the potential risks and benefits they can have for public health.

In this regard, we must emphasize that the FDA published a report known as "FDA Mobile Medical Applications: Guidance for Industry and Food and Drug Administration Staff", in which reference is made to different applications by subsets within the health industry, indicating in addition, that many of them refer to regulatory supervision by professionals. They also indicate that the use of these types of applications is linked to medical tools or devices and their functionalities can sometimes involve risks for the safety of patients who use them, in the case in which the applications may not work properly or are configured incorrectly.

In addition, the FDA identifies those e-Health mobile applications that are aimed at the diagnosis of a disease, treatment or any type of prevention. The FDA specifies in the indications for regulated applications that the purpose of these should be to help patients, in this case users who use the applications themselves, to self-diagnose a disease or specific treatment conditions or suggestions for these treatments. It also indicates that tools must be provided to users or parties to organize and track their personal health information. Regulated applications must provide tools to access information related to patients' health conditions, as well as the treatments being followed through the application.

The FDA further indicates that the applications should help patients document, show or communicate medical conditions that are potential for providers and their medical care. These applications should also automate simple tasks for providers of medical assistance for patients.

Another potential feature of these applications is that they should allow patients and providers to interact with personal health records or PHR and electronic health record (EHR) systems. Finally, health applications must transfer, store and show each of the data collected in the medical device that complements the operation of the application itself.

In addition, regarding the regulation of the creative industry of Mobile Health Applications, the guide published by the FDA refers to the standards that the devices must establish as well as recommendations designed to help the developers of the applications to generate sufficient technology safely.

Regarding regulation on Mobile Health Applications in the European Union, we must highlight the publication of the Green Paper on mobile health, published by the European Commission in 2014. The publication of the Green Paper on mobile health aims at initiating contact with a broad consultation of interested parties on the barriers that exist on issues related to mobile health, as well as identifying the strategies to develop the potential of this industry in the medium and long terms.

The document published by the European Commission aims to analyze the state of the creative industry of Mobile Health Applications for health care, as well as to establish some general recommendations regarding data protection, information transparency, legal and regulatory framework aspects, as well as the identification of the responsibilities derived from the safety of patients with the use of Mobile Health Applications.

The green book aims to be a reference framework for the exchange of information related to Mobile Health Applications, as well as to stimulate innovation among the parties and providers interested in the development of these types of applications. The big difference regarding the regulation of this creative industry in the European Union compared to the US is that in the former, there are no binding norms of requirements or delimitation characteristics in terms of life and well-being. Authors such as Limato et al. (2018) indicate that there is a Directive on medical devices, but it is non-binding for the Mobile Health Applications industry.

While it is true that most applications of Mobile Health Applications are developed in the USA (Covolo et al., 2017), European developers are beginning to

build a significant number of health applications with an increasing trend in the coming years. Thus, the US and the European Union are positioned as leaders in this industry at global level.

In this regard, we must highlight the European Directory of Health Apps 2012–2013 (Madelin, 2013), which was published by the organization itself and presented in the well-known European Health Forum, in which the keys of the application sector and its regulation in the European environment are updated (Moores, 2012).

As with the health applications regulated by the FDA, the European Directory for Health Apps recommends a series of health applications that comply with requirements authorized by consumer associations of health-related products, also referring to the link of these applications with the Directorate General for Communications, Content and Technology of the European Commission (DG CONNECT), which only includes applications for patients, not applications for professionals.

The applications included in the directory are categorized by specialization (Melzner, Heinze, & Fritsch, 2014). The apps are only included in the directory if they have been reviewed in some way by a group of patients, or a consumer-oriented authorized organization. This directory includes about 200 mobile health applications that are safe for the use and monitoring of diseases and other diagnoses as a reminder of medication, illnesses, physical exercise and stimulators for physical disability. Among other data, these applications provide data on the operating system, the language they use, summaries of patient data and check-ups.

7.6 Exploratory Analysis

After the analysis carried out on mobile health applications, we can see how the list of applications in this industry continues to grow by adding, for example, sensors that measure health-related characteristics, new product associations or new functionalities based on the development of new technologies such as geolocation or thermal measurement.

In addition, the Mobile Health Applications market is continuously growing. We can point out that according to Ashurst and Jones (2017), in the last year a total of 100,000 new health applications were added to all app stores, which means that there are approximately 300,000 mHealth applications available for downloading in app stores. Furthermore, in this sense we can highlight that nearly 15,000 new applications have been generated since 2015 within this industry (Ashurst & Jones, 2017).

Although it is true that the mHealth industry is increasing, the rate of downloads has slowed down in recent years. Users recognize the functionalities of these applications, highlighting their multi-platform feature, that is, they are available in the two main application and software stores, Apple iOs (App Store) and Google Android (Google Play) (Liu, Zhu, Holroyd, & Seng, 2011). Note that about 75% of mHealth applications are developed for these platforms, a fact which users highlight for use by the industry to which they belong.

It is a fact that the mHealth industry is consolidating as a market in which professional health applications are consolidating thanks to legal initiatives to regulate the industry. These initiatives contribute to the security sector, security that users perceive in order to use them and diagnose diseases or treat dementias related to them.

Moreover, users have some concern about the processing of their personal health by the applications. These data range from sick time, consumption habits, working hours or calories to sports time. The concern regarding this area makes users detect that the regulation of these applications makes their use safe and therefore, they tend to use them in a positive way.

Besides, their use by doctors and health professionals also causes patients to detect that the use of these types of applications can be positive for their health, mainly due to the link between the reciprocal communication relationship between the health worker that diagnoses the disease and the patient who wants to carry out monitoring on a continuous and live basis, for example, through the use of an application.

In addition, the integration of these applications in the healthcare system should evolve little by little, mainly due to the development of technologies linked to the use of these applications, so that health professionals and patients can see that they are valid formats for the care of people and the monitoring of diseases and diagnoses.

7.7 Conclusions

The industry of Mobile Health Applications has been the object of study in different investigations over the last decade (Lin & Yang, 2009; Madsen, 2018). After the analysis carried out in this study, it can be said that the Mobile Health Applications industry is a market in development, which is constantly expanding, while developing new hardware and software technologies that can improve their effectiveness such as geolocation, development of devices that monitor heart disease or that monitor the patient's illness.

It is an industry that still does not generate profitable earnings, but long-term added value for professionals or health centres that use them as support for the activities they perform within the specific field, depending on the patient's dementia or illness.

Everything seems to indicate that in the coming years the use of Mobile Health Applications will have increased in the professional field, while health systems evolve to increase the use of new technologies in their centre. Health applications can become the main channel for the distribution of new formats for measuring and diagnosing diseases that connect the patient and the doctor. The applications with the most impact in the future will be those that enable us to collect information, to receive diagnosis and treatment through telemedicine and those dealing with prevention.

Regarding the impact on the industry, the advice and monitoring, as well as coaching through these types of applications can generate a transformation in terms

of the structure of the industry. In addition, the regulation of these applications begins to be clarified, so that users can determine and detect which ones are safe for their health.

Therefore, we can conclude that Mobile Health Applications are consolidating in an industry that evolves while developing new technologies in the sector. One of the objectives of this evolution is to improve communication between the patient and doctor or health professional in order to increase prevention, diagnosis and treatment rates. Issues relating to privacy and data security remain the characteristic that must be improved and regulated to make users feel safe with their use.

The limitations of this study are related to the number of investigations consulted, to the development of the creative industry itself and to the number of Mobile Health Applications consulted. This study can be used for other research in this field.

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Chapter 8
Gamification and New Technologies to Promote Healthy Lifestyles and Its Role in Creative Industries

Borja Sañudo-Corrales, Antonio J. Sánchez-Oliver, and María de la Cruz del Río-Rama

Abstract The aim of the current study was to develop a mobile application implementing gamification design principles to promote healthy lifestyles and enhance overall wellbeing as a possible health strategy in the workplace for creative industries. GameMyHealth is a mobile application (App) designed to help users record and monitor lifestyle-related outcomes. By using associated wearable sensors, the information relating to users' eating (Food Frequency Questionnaire) and activity habits can be recorded (e.g., number of steps, sleep, energy consumption). Therefore, by means of the implementation of gamification mechanics, badges, classification tables, points and levels, challenges and quests, as well as social engagement, were provided. For example, meeting activity or nutrition goals (e.g., greater number of individual steps (ten points); photo eating seasonal fruit (ten points)) can attain badges. Then a classification table will dynamically rank individual/group user progress and achievements as compared to their peers. Challenges are updated daily to provide the user options to keep them motivated, furthermore, "lifestyle quests" are also provided.

Keywords Gamification · Mobile applications · Wearable technologies · Healthy lifestyles · Creative industries

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8.1 Introduction

Sedentary behaviours (i.e., sitting or reclining postures) is a potential risk factor for many chronic conditions and they have been linked to an increased risk of all-cause mortality and this relationship has been reported to be independent of other risk factors such as smoking, high blood pressure, cholesterol, diet, and waist circumference (Dunstan et al., 2010). Furthermore, unhealthy lifestyles have great economic consequences for society, not only in terms of rehabilitation, but also due to sick leave or reduced productivity (Arena, McNeil, Sagner, & Hills, 2017). Unfortunately, these behaviours have become ubiquitous in modern society and one may question why people of today are more sedentary than those of previous generations. One possible explanation to this question can be the increase in sitting time.

Nobody doubts that previous jobs were notoriously physical; however, in urban settings, active time was changed for sedentary work. It is interesting to note how International Organizations such as the American Heart Association have shown an increase in sedentary work (83%) since 1950, which was accompanied by a drop of at least 20% of active jobs (Mozaffarian et al., 2015). It was highlighted that the majority of time that adults are awake is spent being sedentary (Hansen, Kolle, Dyrstad, Holme, & Anderssen, 2012) and a recent study showed that those adults who spent 8 or more hours per day sitting had a 62% higher probability of being obese (Bullock, Griffiths, Sherar, & Clemes, 2017). It was speculated that this association between sitting time and obesity can be related to the fact that sedentary behaviours displace physical activities, thus causing a reduction in energy expenditure (Mansoubi, Pearson, Biddle, & Clemes, 2014); in fact, physical activity was inversely associated with sitting time (Bullock et al., 2017). Furthermore, while physical activity was inversely related to all-cause mortality, a higher amount of TV viewing was associated with higher all-cause mortality. It is paradoxical to think that even in people who exercise regularly, sedentary activities (e.g., watching TV) can contribute to the development of cardiovascular or metabolic diseases such as obesity or type 2 diabetes, and even cancer risk (Dunstan et al., 2010). Additionally, it was demonstrated that prolonged sitting time was associated with increased risks of non-communicable diseases regardless of the physical activity level. Another important consequence of these behaviours to take into account is the development of low back pain, which can also lead to increased obesity and morbidity risk.

Fortunately, it has been suggested that those who are active (e.g., about 60–75 min/day of moderate-intensity physical activity) seem to have no increased risk of mortality, even if they sit for more than 8 h a day (Ekelund et al., 2016). These results show the importance that in those cases where long periods of sitting time cannot be avoided due to commuting or work, periods of time being physically active are important. Despite the completeness of this data and that many observational studies have shown that lack of physical activity is a major risk factor for morbidity and premature mortality (Lee et al., 2012), only 10–15% of adults in Europe, USA, or Canada comply with the recommended levels of 150 min/week of moderate to vigorous physical activity (Weed, 2016).

The reality is that we are immersed in an increasingly sedentary society, where increasing numbers of people have to sit for long hours for work or transport; therefore, strategies that contribute to diminish these behaviours are necessary. In a recent study, Benatti and Ried-Larsen (2015) suggested that those individuals that break up their sitting time more frequently during work seems to be beneficial for various cardio-metabolic risk factors (Benatti & Ried-Larsen, 2015). The importance of breaking up sedentary time has long been acknowledged and recent workplace guidelines stating that workers should aim to reduce their sitting time by at least 2 h/day (Buckley et al., 2015). It has been shown that even short periods of physical activity, performed throughout the day, are capable of triggering positive changes in cellular energy metabolism, suggesting that physical activity does not have to be adjusted exclusively to a specific moment of the day, but rather on incorporating movement into all aspects of our life (Latouche et al., 2013).

What has been defined as "movement breaks"in the literature can be an effective countermeasure to prolonged sitting and fortunately, at present, new technologies offer us an opportunity to become more active.

8.2 New Technologies and the Promotion of Healthy Lifestyles

There is evidence suggesting that mobile phone use is related to sedentary behaviour and that technological advances can even play a role in reducing our physical activity (Barkley & Lepp, 2016). However, we are now seeing technological solutions to the inactivity problem. As recently reviewed by Stephenson, McDonough, Murphy, Nugent, and Mair (2017), wearable technologies can provide a means to change health behaviours, although their role in reducing sedentary behaviours is still debated. Interventions using wearable technologies were able to reduce sedentary time (approximately 45 min/day), what has previously been reported (if reallocated to light physical activity) to result in a 2–4% improvement in triglycerides, insulin or certain biomarkers (Stephenson et al., 2017).

Based on the aforementioned data and together with the increasing adoption of smart devices and the continued development of mHealth applications, wearable technology has recently become a key area for the development of health-related behavioural change interventions. According to the Mobile Health Market Report by Research Guidance, a mobile applications market analysis firm, it is projected that this year there will be 3.4 billion smartphone users, of whom about 50% will have downloaded at least one mHealth application. Some studies have reported that these mobile health applications are an effective channel for the delivery of health interventions designed to study various health topics such as physical activity, energy intake, smoking cessation or nutrition habits. These interventions have also had an impact on sitting time, at least in the short term as results usually decrease over time (Stephenson et al., 2017).

These wearables allow for the monitoring of clinical and behavioural outcomes in real time. Numerous researchers have integrated these technologies into different interventions to increase levels of physical activity and adherence to these programs thanks to relevant feedback to set goals, social support (professionals or the family), the possibility of individualizing programs or the capacity to track other health behaviours. An important line of work investigates physical activity to predict health parameters with these monitors. For example, by recording the number of steps (Fitbit Charge HR), they try to predict lung function in young asthmatics or blood pressure (Withings Pulse) in adults (Bian et al., 2017; Lee, An, Kang, Kim, & Dinkel, 2016). Fundamentally, these wearables aim to motivate users through achievable objectives (e.g., walk 10,000 steps/day), allowing the user to become aware of the distance travelled daily to ensure that he/she maintains sufficient activity in the daily routine to maintain a healthy life. It is also possible to control body weight (estimating caloric expenditure) or monitor the cardiac function through heart rate sensors. However, the overall effect of these devices on health and practice levels in older people is unknown.

Recently, Apple has launched a new framework called CareKit (http://arekit.org/) that allows developers to create applications for patient care, allowing monitoring their progress in different areas (pain, temperature, hunger, dizziness, range of mobility, and medication, are some examples), which allows to be connected to medical teams and send alerts to patients or relatives in the case of adverse events. For example, if the normal activity level were below a defined threshold, certain alerts could be sent. In addition, if applications such as One Drop are implemented, it could, for example, incorporate glucose levels in patients with diabetes and provide movement reminders.

Another interesting area of research is the work site health promotion, aimed at improving the health and wellbeing of employees. Most workers have behavioural risk factors that sometimes lead to high absenteeism, high medical expenses and decreased productivity at work (Goetzel et al., 2007). In the UK, accelerometer data showed high levels of sedentarism in office workers, that on average were sedentary more than 60% of their waking hours (Freak-Poli, Cumpston, Peeters, & Clemes, 2013). By means of these wearables, it could be possible to reduce health care or disability costs. The programs are usually designed to prevent the occurrence of disease (primary prevention) including programs that encourage physical activity, healthy eating, weight management and other healthy habits such as moderate alcohol consumption or stress management (Goetzel et al., 2007). As highlighted above, the prevalence and disease burden of obesity-related syndromes are increasing globally and most of the diseases associated with these conditions are strongly affected by modifiable behavioural factors that may be addressed in the worksite setting (poor diet, physical inactivity, and alcohol or tobacco use). Therefore, secondary prevention may be another area of interest considering that the prevalence of these illnesses is usually caused by modifiable health risk factors and poor lifestyle habits.

Considering that most adults spend a substantial portion of their waking hours in their workplaces, this could be an important setting for introducing health-promotion

programs, not just for the worker's health but also for the possibilities of enhancing company profitability. It is, therefore, a challenge for what has begun to be called "creative industries".

8.3 Creative Industries

Digital creative industries exemplify innovation processes in which user communities are highly involved in product and service development, bringing new ideas, and developing tools for new product uses and environments. Recognition of the importance of the creative industries is one of the remarkable developments of the twenty-first century. It has been realized that as the industrial participation of world economies declines, other forms of business are gaining significance. The creative industries can play a significant role in tackling the great societal challenges relating to sustainability, quality of life and the promotion of inclusive societies.

The creative industries refer to a range of economic activities that deal with the generation or exploitation of knowledge and information. It has been seen that creative industries are increasingly important for economic well-being. Human creativity can become a very powerful economic resource, so much so that the industries of the twenty-first century will depend more and more on the generation of knowledge through creativity and innovation (Florida, 2004).

The nomenclature on creative industries is a controversial issue. Several authors have even made various suggestions on what kind of activities should be included in the concept of creative industries. Regarding the issue that concerns us, we have found authors who consider it appropriate to include games, and others, which also include the much broader area of research and development in science and technology (Howkins, 2001).

Our experiences and understandings of the world are increasingly being filtered through multiple layers of digital environments. Digital technology, augmented reality, virtual reality and the corresponding technical capabilities are continuously transforming all aspects of our lives, either social, cultural or economic. Today's business world is formed and challenged by the development of highly innovative, competitive and disruptive technologies. New emerging technologies such as cloud computing, the internet of things, portable devices, 5G, big data analysis and three-dimensional (3D) technologies urge all interested parties to reconsider and reinvent their approach to respond to them quickly and effectively (Abbasi, Vassilopoulou, & Stergioulas, 2017).

Creative industries suggest added value, an improved market and new jobs, important bases for a competitive and growing economy. Policy makers emphasize that innovation, creativity and independent thinking are increasingly crucial for the development of the global economy (Moore, 2014). The 2010 European Competitiveness Report identified Creative Industries as one of the most dynamic sectors in Europe, with a growing potential as the Internet develops. They currently represent approximately 3.5% of the EU Gross National Product. In 2011, the EU

accounted for 38% of exports and 35% of imports in international trade of cultural and creative products.

A report by the McKinsey Global Institute (2013) identifies 12 technologies that could really promote massive economic transformations and disruptions in the coming years (Manyika et al., 2013). The report also looks at exactly how these technologies could change our world, their benefits and challenges, and offers guidelines to help company leaders and other institutions respond to these changes. In addition, it predicts that by the year 2025, between two and three billion more people will have access to the Internet and a possible economic impact of $5–7 billion is estimated for the automation of knowledge work. Gartner's hype cycle report for emerging technologies provides an intersectoral perspective on technologies and trends. Hype Cycles develop the possible viability of technology in five evolution phases (Linden & Fenn, 2003):

1. Technology Trigger: launch of new technology and its first repercussions and expectations. They are generally unusable products with unproven commercial viability.
2. Peak of Inflated Expectations: excessive expectations are generated about the possibilities of the technology in question. The cases of success (and some of failure) take place and are publicized, and we all want to adopt that technology. Expectations are exaggerated far from reality.
3. Trough of Disillusionment: the interest is diluted, the implementations are delayed or they do not arrive and some investors begin to fall. Initial expectations created are not met and some abandon the technology.
4. Slope of Enlightenment: more and more real and successful applications of technology are appearing. Companies take their tests with interest.
5. Plateau of Productivity: commercial viability begins to be a reality. The mass adoption of technology begins to be a reality, beginning to be profitable.

In recent years, the evolution of digital technology, tools and applications (or applications) has allowed users to easily access a variety of new technologies and digital tools. Technologies have become common and ubiquitous in creative industries, and are often used as a means to directly improve creativity, and in doing so, contribute to the life and culture of society as a whole, as well as to the identification of ways to overcome barriers or solutions to specific problems (Loveless, 2002).

8.3.1 Social Entrepreneurship

In recent decades, a new field has emerged to address social and public health challenges, social entrepreneurship (Harding, 2004). Social entrepreneurship generates benefits based on a business model that pursues a social goal, creating a business that meets the needs of society without giving up market strategies, that is, it is based on the idea of a business that exists partly due to a social good and not only for the benefit (Sullivan, 2007). Roughly speaking, it can be defined as the oriented business that

uses market forces to address social challenges, where the impact related to the mission becomes the core criterion, not the creation of wealth (Dees, 1998).

Social actions often work in the prevention or improvement of health, focusing on diet or promoting physical activity among others. In order to achieve improvements in any of these behaviours, structural changes are essential to improve opportunities and access to them (Sánchez-Oliver, Grimaldi-Puyana, & Alcaraz-Rodríguez, 2018).

If we focus on companies that use physical activity, we find many organizations that work through new technologies (Cai et al., 2016; Gao & Chen, 2014; Thomas & Bond, 2014). When observing social enterprises, it can be observed that they usually work through gamification or counting physical activity. Thus, in this way, we find active videogames, known as exergames, which are another most used option to increase physical activity levels, and therefore for promoting physical activity (Lamboglia et al., 2013). There are different models that are based on active video games. Those models that make use of the classic concept of the videogame console, such as the Xbox 360 Kinect exergames (Boulos, 2012) are among the most used for promoting physical activity, or those that use the phone and the GPS system to play outdoors (Maamar, Boukerche, & Petriu, 2012). Similarly, companies such as Fitbit (https://www.fitbit.com/es) or Jawbone (https://jawbone.com) have created mobile technology trackers to encourage people to increase their physical activity, or mobile applications such as Google Fit (https://www.google.es/fit) or Endomondo (https://www.endomondo.com), that help monitor the physical activity done and that in turn also use gamification among the many users who use them.

This type of initiative has been studied very much in recent years (Cai et al., 2016), and although we must continue to investigate it since there are contradictory reviews, today they are one of the most widely encountered options for promoting physical activity (Thomas & Bond, 2014). In addition, mobile applications that combine playing with physical activity, such as Pokémon Go, lead to substantial increases in short-term activity and unlike many existing interventions, they have the potential to reach populations with low activity levels (Althoff, White, & Horvitz, 2016).

Together with the social entrepreneurship initiatives mentioned previously, others have emerged, although in a more dispersed way, which should also be taken into account. Thus, we find initiatives such as Zamzee (www.zamzee.com), which seeks to turn physical activity into a game for children and physical activity monitors, registering physical activity and transforming it into prizes, or others like Let Kids Play (www.letkidsplay.com) that encourage physical activity by increasing the accessibility of outdoor physical activity spaces.

8.3.2 Examples of Worksite Health Promotion in Creative Industries

We have previously highlighted the importance of worksite health promotion. Over the past years, the number of organizations and companies that offer a health promotion program for their employees at the worksite has increased exponentially.

Several studies have addressed the question of whether health programs can influence employees' lifestyles and behaviours and thus reduce health care costs. In this line, different work site programs based on individualized counselling are likely to produce acceptable financial returns. In the literature, it is possible to find examples of work site studies done in well-known companies such as Johnson and Johnson (Breslow, Fielding, Herrman, & Wilbur, 1990), Citibank (Ozminkowski et al., 1999), Bank of America (Fries, Bloch, Harrington, Richardson, & Beck, 1993) and more recently in Johns Hopkins Medicine (Safeer, Bowen, Maung, & Lucik, 2018).

Classical studies by Goetzel et al. (1998) and Anderson et al. (2000) assessed 46,000 employees from both private and public sectors, over a 6-year period. Authors examined ten modifiable health risk factors to determine whether these risk factors (e.g., diet, physical activity, obesity, high blood pressure or glucose, cholesterol, stress, depression, smoking or excessive alcohol consumption) were related to medical claims. It was reported that more than 25% of the employer health care expenditures could be explained by the employees' risk factors in the study. Furthermore, those with greater risk factors represented a greater expense than those with a lower number of risk factors. Interventions aimed at enhancing access to physical activity programs (exercise facilities or time off for exercise), providing healthy food choices in coffee corners, and enacting policies that support a healthier work site environment (such as a smoke-free workplace) should be recommended.

Among these factors, probably the most sensitive and frequently evaluated have been physical activity and dietary behaviours. In most cases, worksite health promotion interventions provided at the work site were offered free of charge to encourage participation; however, despite the possibilities of these variables, the programs that reported intake of fruits or vegetables have obtained inconclusive results with only a small proportion of employees who increased their intake. Similar trends can be observed regarding physical activity (i.e., time spent engaged per week). Although small increases were generally achieved (11%), some employees did not comply with the current physical activity recommendations. The evidence of the effectiveness of these programs in most outcomes such as increasing dietary intake of fruits and vegetables, reducing overweight and obesity, and improving physical fitness is insufficient (Goetzel et al., 2007).

It is necessary to dig deeper into the mechanisms and processes that facilitate the change of workers' behaviour. Therefore, it is necessary to explore other promotion ways. In this sense, in the face of this need to find companies offering some type of health promotion program for their employees, a wearable device has recently appeared as an alternative to promote physical activity in these settings (Monroe, 2016). There is recent evidence suggesting that these trackers can improve physical activity in workers (Finkelstein et al., 2016). One key study that included more than 35,000 active employees and adult dependents during 4 years analyzed the effect of participation in the physical activity tracking application on BMI, total cholesterol, and blood pressure and reported that individuals changed their exercise behaviours in response to the intervention (Yu, Abraham, Dowd, Higuera, & Nyman, 2017).

The number of interventions focused on reducing workplace sedentary behaviours has been increasing over the last years (De Cocker, De Bourdeaudhuij, Cardon,

& Vandelanotte, 2016; Evans et al., 2012; Pedersen, Cooley, & Mainsbridge, 2014; Urda, Lynn, Gorman, & Larouere, 2016; van Berkel, Boot, Proper, Bongers, & van der Beek, 2014). A recent systematic review and meta-analysis suggested that interventions using mobile and wearable technology were able to reduce sedentary behaviours, especially on sitting time in the short term (Stephenson et al., 2017). Despite these promising results, there are still some potential barriers related to levels of employee participation in these workplace programs that need to be considered.

8.3.3 Limitations of the Use of Technology in Worksite Health Promotion Programs

Despite the increasing popularity of wearable technologies in our society, their inclusion in work site programs has not been broadly adopted yet due to different barriers. The effectiveness of interventions using these technologies to reduce sedentary behaviours is not consistent in the literature, especially regarding diet, body composition or physical activity. Therefore, an effort must be made to discuss barriers to implementing work site programs.

One of the main arguments against their implementation, besides the lack of demonstrated utility, is confidentiality (Reale, Slater, & Burke, 2017). There is a generalized lack of confidence in the technologies that may be related to a lack of experience using these devices to assess health outcomes (i.e., physical activity). Furthermore, although workers who are less healthy might benefit more from these programs, those participants with important health risks may be less likely to participate and it can be counterproductive for those who typically seek out medical information. To address this potential barrier and ensure the levels of employee participation, the privacy of the data must be ensured. These authors also highlighted the cost as one of the barriers, any strategy that arises in this line must be paid by the employer and must provide a value to the worker.

There is no doubt about the potential of these technologies, or their potential in this field. In fact, in a recent survey on Wearables in the Workplace, participants surveyed suggested that they would be willing to use wearable technologies at their workplace to track relevant health metrics and their primary motivation was the possibility to track their physical activity (Brown, 2016). Another concern is that these worksite programs promoted during work hours may distract workers from their duties and thus, impact negatively worker productivity. Consequently, future strategies should consider activities/challenges that have a minimum impact on the worker's daily routine (e.g., getting up every 30 min).

In parallel with these limitations, it is necessary to consider the adherence to these programs. In order to maintain the participation, we need easy access to programs and that should be preferably during working hours. It was suggested that the interest in these proposals is substantially greater if they are offered onsite when compared with classes offered off-site (Goetzel et al., 2007). Social support and reinforcement have also been highlighted as possible determining factors that may

influence participation in exercise programs (Lovato & Green, 1990). It seems that the support of relatives or other significant people, contributes to the persistence in the program. Therefore, it is necessary to look for strategies to reduce the poor attendance in health education sessions. A possible alternative in this sense could come from the hand of gamification.

8.4 Gamification

Gamification has become a trend nowadays. The growing popularity of gamification stems from the belief in its potential to encourage motivation, behavioural changes, friendly competition and collaboration in different contexts, such as customer participation, employee performance and social loyalty (Dichev & Dicheva, 2017). It is considered that these desired patterns of use emerge as a result of positive, intrinsically motivating experiences triggered by the motivational game implemented (Deterding, Dixon, Khaled, & Nacke, 2011), either from a business or marketing perspective (Huotari & Hamari, 2012) or from the point of view of learning and teaching (Dong et al., 2012).

It is a new strategy to influence and motivate groups of people. The implementation of web 2.0 has accelerated the creation of communities around all types of social networks, digital media or corporate websites. A correct implementation of gamification strategies allows going from mere connectivity to engagement (or commitment), achieving that the members of a community, in this case the university, participate in a dynamic and proactive way in actions that generally require an effort of the will. This technique considers three possible categories, external gamification, in which the users acquire a commitment or an affiliation to the "product, objective or company"; internal gamification that consists of applying gamification techniques within "a specific work or task" in order for the users to conceive their responsibilities as an entertainment; and the gamification of behavioural change that is used in order to motivate a change of behaviour in people, either towards their health, education or other aspects (García, Fernández-Gavira, Oliver, & Puyana, 2017).

Gamification is defined as the implementation of the most common and entertaining mechanics of videogames, in contexts not related to videogames (Handel, 2011). Badges, classification tables, points and levels, challenges and missions, as well as circuits of social interaction and incorporation are among the most implemented gamification mechanics. Although several studies have described the concepts of gamification in its application to health, very little research has specifically focused on mechanics, a justification for its use and the best way to apply them to mHealth applications. Gamification functions are integrated into the broader context of the application in order to reinforce usability and appeal to the gaming facets that players usually enjoy and that make them play continuously (Miller, Cafazzo, & Seto, 2014). An understanding of these mechanisms and their associated design and development considerations, contextualized through examples of mHealth applications, could help guide the development of gamified mHealth applications that could better incentivize user self-management.

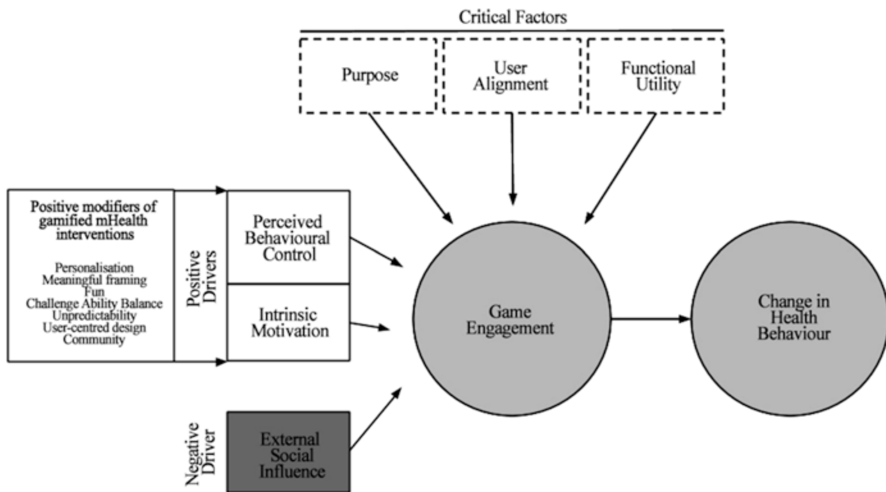

Fig. 8.1 How can positive health behaviour through the gamification of mHealth applications be promoted? (El-Hilly et al., 2016)

The theoretical framework suggests that a change in health behaviour depends on the degree of commitment to the gamified intervention and that this was influenced by "critical factors" and "controllers"of participation in the game (Fig. 8.1). An mHealth application that seeks to promote a positive change in health behaviour needs a "purpose" that is explicit and clear to the user. However, this 'purpose' must be aligned with the user's personal goal ('user alignment'). This 'user alignment'is key to take advantage of the user's intrinsic motivation, ensuring a sustained commitment to the intervention, as explained by experts and users alike. In the context of health behaviour, participation in the game can be maximized by taking advantage of modifiers that increase self-efficacy and minimize control beliefs (El-Hilly et al., 2016).

8.5 The Case of GameMyHealth

Briefly, this project was designed to determine the role of wearable technologies and gamification in sedentary behaviours and nutritional habits of university students, although its transfer to the worksite with health promotion is proposed. In this experience, a total of 13 lecturers from three different universities (University of Seville, University of Cádiz and Universidad CEU San Pablo, all in Spain) were included, representing 24 subjects in four different degrees. Strategies to promote a healthy lifestyle (regular practice of physical activity and monitoring healthy eating patterns) were applied. Furthermore, the acquisition of knowledge related to previous habits through gamification was assessed. A mobile application synchronized with a personal wearable activity tracker that allowed for individualized planning and follow-up of users' lifestyle was developed and provided to each participant (Fig. 8.2).

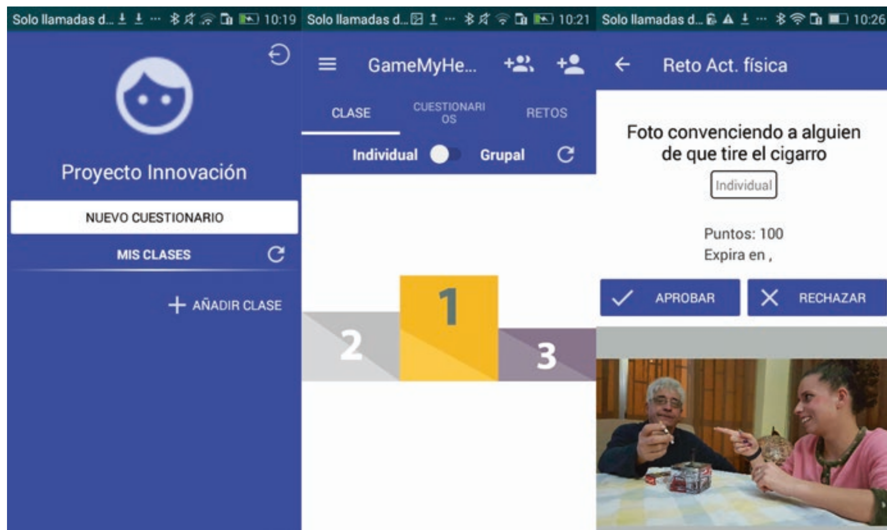

Fig. 8.2 Example of GameMyHealth App screenshots

The students in the different degrees were divided into groups of a maximum of four people, who designed an avatar that represents their team. Through the application, the activity habits of the participants were recorded (e.g., sitting time, number of steps taken) and challenges were established for the different outcomes, for example:

Physical activity

(a) Greater number of individual steps (10 points).
(b) Greater number of steps of the team (30 points).
(c) Time intervals greater than 30 min sitting (−10 points).
(d) Photo with the exercises and challenges proposed.

Nutrition

(a) Photo eating seasonal fruit (10 points).
(b) Photo eating vegetables, oily fish, legumes or nuts (10 points).
(c) Compliance with breakfast, lunch or dinner of the Harvard dish (10 points).
(d) Photos of the whole team eating the established foods (30 points).
(e) Photo drinking water (10 points).

At the same time and also in a group, questions related to both physical activity and diet were asked and involved additional “rewards“. In addition, throughout the process, students received specific training on contents related to the project:

(a) Impact of physical inactivity and sedentary lifestyle on health.
(b) Gamifying from the educational field in healthy habits.
(c) New technologies applied to monitoring of physical activity.
(d) False myths in nutrition. Guidelines for a healthy diet.

At the beginning of the experience, the physical activity and feeding habits of the participants were recorded through the IPAQ questionnaire (International Questionnaire of physical activity) and an FFQ (Frequency Food Questionnaire). In addition, age, sex, and height were also collected. Basal metabolism and total energy expenditure were estimated. The questionnaires were completed again at the end of the process (8 weeks). Each student also fills in a questionnaire about their expectations and the degree of compliance with the competences established.

8.6 Conclusion

The gamification mechanisms are represented in several mHealth applications and are an encouraging implementation to stimulate the user's self-management better. As the developers of mHealth applications become increasingly familiar with these concepts, it is logical to think that applications can be gamified more and more and, hopefully, improve self-management and control of different variables. While additional research is needed to discern the effects of gamification in the context of mHealth applications, the recommendations and the example discussed in this chapter could be taken into account to design applications that have the potential to incentivize and enable people to improve their health through games.

Gamification has the potential for highly effective, low-cost mHealth solutions that can replace or complement the behavioural support component found in current health-improvement programs. In addition, it can be extended to pave the way for new methods of public health education, since gamification could be an effective way to involve people more globally. However, there are still questions regarding the long-term effects of gamification. Future research is needed to evaluate the effectiveness of the previous framework against current behavioural interventions to improve lifestyle.

A novel approach in this study was that it allowed the user to view lifestyle-related trends for physical activity and eating outcomes. Perhaps the most valuable feature of the GameMyHealth application is the use of game mechanics, which was perceived to highly motivate users to change their health behaviours and stay engaged with the application. This solution incorporates a feedback system that motivates users in achieving goals, even in groups, and self-manage their own wellbeing.

A mobile application that allows participants to monitor their lifestyle is proposed. The major advantage of gamification in this context is, perhaps, the inducement of positive changes in users' behaviour that are beneficial for their overall health and wellness. This solution can easily be implemented in different contexts (e.g., companies), providing opportunities not only for promoting health but also, from a social perspective, improving communication and bilateral encouragement among users.

Gamification, applied with mobile health applications, has the potential to facilitate patient self-management better. Although it is accepted, the short-term

effect on users' motivation as the users' interest in the game-like features seems to decrease in the long run, by implementing group strategies or daily goals we have tried to keep their interest. Future analyses should identify factors that promote users' app engagement. Another area of interest would be to investigate the best way to contextualize the use of gamification mechanics for specific condition types or even departments in a company. In short, we consider that upon completing the tasks, users may feel inclined to adopt or maintain the behaviour without further reinforcement from the system.

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Chapter 9
Innovation and Collaboration in the DNA of a Cultural Industry: Craft Beer in Baja California

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Abstract This chapter describes the structure and dynamics of the craft beer sector in Ensenada, Baja California. It identifies elements of innovation and collaboration in the way this cultural and creative industry has evolved into its current form. This is achieved through a quantitative study that is descriptive in scope, and in this sense, the innovation value chain model was adopted as an analysis framework. One major finding is that the highest degree of innovation is recorded in production processes and brand management. Also of special note is the fact that collaborative networks between actors in this industry are established naturally and organically, and therefore they become part of the industry's DNA. The chapter provides first-hand insights into the field of cultural and creative industries, explaining key factors in its development process and identifying the challenges that this sector faces in becoming an entrepreneurship and innovation ecosystem in the CaliBaja region. Studying aspects of innovation and collaboration legitimizes craft beer as a cultural and creative industry, and also generates knowledge of a sector with economic potential in Baja California.

Keywords Craft beer · Innovation · Cultural industry · Creative economy · Collaboration networks

9.1 Craft Beer in Baja California: The Emergence of a Cultural Industry

The concepts of cultural and creative industries first came to the fore in specialized literature in the 1990s. One reason for this is their growing prominence in regional economies, which in turn responds to the disruptive potential held by this kind

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of industry. Moreover, this disruptive potential is associated with intense creative, innovative, and knowledge activity that plays a part in shaping the pillars of the so-called orange economy (Buitrago & Duque, 2013; Cunningham, 2002; Flew & Cunningham, 2010; Florida, 2000; Lazzaretti, Boix, & Capone, 2008; Throsby, 2001).

Authors like Borseková, Cole, Petríková, and Vanová (2015); Castells and Hall (1994), and Florida (2008) have maintained that when the emergence of cultural and creative industries is encouraged, the regions where this occurs become global poles of attraction, drawing in capital and talent and bringing an opportunity for economic development and an enhanced quality of life for society.

UNESCO (2010), for its part, states that cultural and creative industries stem from individual creativity, skill, and talent, and have the potential to create value by using intellectual property (p.18). Similarly, the same document asserts that these industries are distinguished by sectors in which goods and services cannot be reproduced on an industrial level, and as a result the scale of their operations is small or medium-sized. Thus, craft activity is another productive and sociocultural means of boosting the economy, and through which craftsmen combine technique, skill, and creativity to preserve an industry as part of their cultural heritage.

Some of the undertakings that illustrate the variety and scope of these creative industries involve advertising, architecture, art, design, fashion, film-making, publishing companies, artistic performances, and research and development (Howkins, 2001, pp. 88–117). These are joined by tourism, gastronomy, and high-value wine production, in addition to craft production, as is the case with the beer sector.

In the Baja California region of Mexico, three cultural industries have seen considerable growth over the last 15 years, particularly in the city of Ensenada (Deloitte, 2017; González, 2015): the *gastronomy sector*, which has positioned several of the city's restaurants among the best in the country, leading UNESCO (2015) to name Ensenada a Creative City; the *wine sector*, with Ensenada named the "Wine Capital of Mexico" by virtue of the fact that this region produces 90% of Mexican wine (García, 2016); and the *craft beer sector*, with Baja California recognized as one of the main regions for production and high quality in Mexico, which explains why each year many beer makers from Baja California earn the highest distinctions in Mexico, including best brewery in Mexico (Heras, 2016). These three major sectors define Baja California as a cultural and creative pole of major importance in Mexico.

In particular, the craft beer industry is one sector that has spawned particular interest due to the economic impact documented in other parts of the world. Particularly noteworthy in this respect is southern California, where the industry accounts for 7.3 billion dollars and 900 producers, creates almost 49,308 jobs, and pays 868 million dollars in taxes to the state government, in addition to 617 million dollars to the federal government (California Craft Brewers Association, 2017).

This success story has encouraged the emergence of other markets in multiple regions of the world with significant potential for growth, and Baja California, Mexico,

is one of the areas most strongly influenced by this phenomenon. This region boasts certain distinctive features within the framework of the socio-territorial system known as CaliBaja, which includes southern California and Baja California.

To understand the potential of this emerging cultural industry, it is important to consider that the "conventional" beer industry in Mexico currently comprises 55 beer-making companies that account for 1.2% of the total gross industrial production. This gross production was valued at just over 78.4 billion pesos in 2014. The companies' assets amount to over 66.6 billion pesos and they create 11,834 jobs for Mexicans (INEGI, 2014). Furthermore, the industry's 63 million consumers mean Mexico ranks sixth in the world for beer consumption, at approximately 62 l per person per year. However, the craft beer market accounts for just 0.5% of the total market in Mexico, meaning that this sector offers significant growth opportunities (Tarango, 2015). For example, as of 2017, records show 635 craft beer producers in the whole of Mexico, and the last decade has seen a sustained average growth rate of 30% (Beerectorio, 2017).

Thus, the boom in craft beer began in 2008, but really only made leaps and bounds from 2013 on the back of a resolution by the Federal Economic Competition Commission (COFECE) on non-exclusivity in beer distribution. This benefitted major beer companies immensely (Deloitte, 2017). This beer boom attracted considerable interest due to its rapid development. Nonetheless, as mentioned above, craft beer only accounts for 0.5% of annual beer production, a third of which is located in Baja California (Manzano, 2015).

In this sense, Baja California has over a hundred registered craft beer producers. However, in spite of this boom and like everywhere else in Mexico, there are several constraints that are preventing this industry from developing optimally. These include tax liability, high production costs, and a market that has been molded by major producers. Additionally, and above all, there is a lack of accurate information on the structure, dynamics, and behavior of the industry (Beerectorio, 2017; Bernáldez, 2013; Deloitte, 2017).

Meanwhile, *collaboration networks* and *innovation* are variables that are clearly present in the craft beer industry, and have the potential to compensate for the constraints faced by the sector and continue to boost its competitiveness. However, and despite their importance, Duarte, Bressan, and Sakellarios (2017) report that research into these variables is still at an early stage. This situation is even more dire in Mexico, where this sector remains unexplored.

In light of the foregoing, this study arises from a desire to study the craft beer industry as a markedly innovative sector that exhibits a high degree of collaboration based on the construction of social networks that make it possible to encourage creative processes and knowledge transfer, and which take shape as a vehicle for the reactivation of the regional economy. In other words, the objective of this study is to analyze the presence of innovation in this industry using the innovation value chain model proposed by Hansen and Birkinshaw (2007) as an analysis framework, and explore the collaboration dynamics that characterize this industry.

9.2 Innovation in Craft Beer

The growth potential for craft beer has been clearly observed in other markets such as in the United States, where the industry began to experience a dramatic expansion in the late 1980s. Small beer companies emerged across the whole country, particularly in the state of California, in response to growing demand by consumers with distinct tastes and an interest in high-quality, locally-developed products.

The craft beer industry in the United States continues to grow significantly today, both in production value and market share (California Craft Brewers Association, 2017; Nurin, 2017), and its competitiveness is based on a set of specific circumstances.

In this sense, Kleban and Nickerson (2012) acknowledge that the industry's success is mainly a response to the high value perceived by consumers, which stems from the quality of their experience drinking craft beer. In turn, this added value responds to differentiation-oriented strategies in creativity in brand management or the production process, which combines traditional processes with unique formulae using nontraditional ingredients, leading to a wide range of new styles that not only meet demand by very specific niche markets but also diversify the offerings of the traditional beer industry, enabling it to compete with other segments of the market such as the wine sector. This strategy allows craft beer to compensate for its competitive disadvantage compared with the economies of scale enjoyed by major breweries, which are able to price their products more freely.

In this manner, it can be inferred that a brewery's success is associated not only with prestige based on the quality of the product, but also the originality and creativity of production process and the design of the establishment, images, logos, and slogans that make up the brewery's brand. This is an aspect that creates added value and attracts consumers, but above all, one that has become the main driver of innovation in this industry.

In this sense, and throughout the twentieth and twenty-first centuries, various authors have contributed to developing a theory of innovation that highlights its importance as a trigger of economic and social development. Such is the case with Dosi (1988), Dosi and Nelson (1994), Etzkowitz and Leydesdorff (1995), Freeman (1998), Pérez (2001), Rogers (1995), and Schumpeter (1934), among others. Even authors such as Nieto (2008) claim that innovation is a vital human need for survival and progress.

Schumpeter (1934), for his part, defines innovation as a combination of mostly intangible forces that revolutionize the structure and socio-economic dynamics of an organization, community, or region. It destroys old paradigms and generates new elements through creative processes. This combination of forces can manifest itself in five ways: (a) the introduction of a new good or service, (b) the introduction of a new method of production or commercialization; (c) the opening of a new market, (d) a new source of supply of raw materials, or (e) the creation of a new organization or radical changes in its structure.

The Schumpeterian conceptualization of innovation underscores its disruptiveness, whereas authors like Freeman (1998) and Dosi (1988) recognize and value its progressive nature, arguing that many innovations are the result of tacit knowledge derived from experience in the design, development, production, and commercialization of the company, reverse engineering, or informal relationships established with competitors, suppliers, contractors, and consumers. In that perspective, innovation is not strictly scientific or technological in nature. Even Dosi (2000) asserts that, up until the nineteenth century, innovations were introduced by creative craftsmen, which shows that innovation can be found in all kinds of environments.

Similarly, the Oslo Manual is based on the idea that innovation is also present in sectors with scant scientific and technological activity, as is the case with the service sector, where innovation occurs in continuous increments and stems from high levels of collaboration, a permanent bond between suppliers and consumers, and an efficient flow of tacit knowledge (OECD, 2006). Added to these factors are those mentioned by Dosi (1988), such as the supply of human capital, consumer culture, location, regulatory framework, and development policy. Indeed, the Oslo Manual defines innovation as:

> The implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization, or external relations. (OECD, 2006, p. 46).

In this sense, it can be noted that the 2006 edition of the Oslo Manual adds two types of innovation: organizational innovation, which concerns the implementation of new methods of organization; and marketing innovation, which entails the implementation of new methods of marketing. These forms of innovation may include changes in the design, packaging, advertising, and distribution of products, in order to meet a diverse demand. In this context, knowledge management and product originality and differentiation are the cornerstones of innovation processes.

Hansen and Birkinshaw (2007) organize these elements within their innovation value chain model, which is a sequential process comprising three phases:

(a) *Idea generation*. This phase is based on knowledge production and transfer, which may occur within the company or come from external actors such as consumers, suppliers, competitors, universities, and other industries; (b) *Idea conversion.* This phase consists of selecting the ideas that show the greatest potential and facilitating the necessary conditions, including funding, so the idea can be transformed into a new product, service, or process; (c) *Idea diffusion.* At this stage of the innovation value chain, the concepts that were funded and successfully developed and transformed into a new product need to be accepted, both by internal and external customers.

In particular, this process by which innovations are adopted has been well studied by Rogers (1995), who categorizes users based on how quickly they respond to the emergence of a new technology.

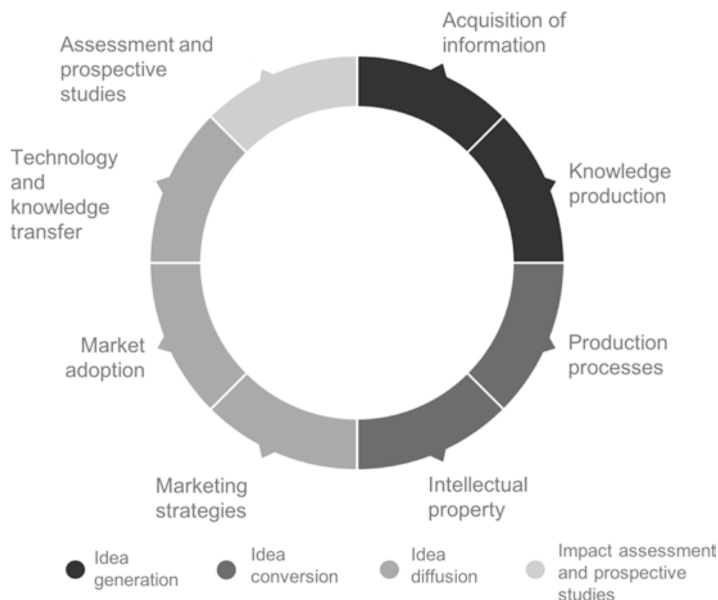

Fig. 9.1 Innovation value chain in craft beer. (Duarte et al., 2017; Hansen & Birkinshaw, 2007)

Likewise, these three phases include a series of actions that go from acquiring explicit knowledge (research) or tacit knowledge (experience) to commercialization and market adoption, via intellectual property protection processes and the production process itself (see Fig. 9.1).

As previously mentioned, few studies have been conducted on this industry. Some have focused on analyzing factors that influence loyalty toward brands of craft beer (Murray & Kline, 2015), and others on the competitiveness of the sector (Kleban & Nickerson, 2012; Zhang, Barbe, & Baird, 2015). Even historical analyses of craft beer have been published (Elzinga, Tremblay, & Tremblay, 2015). However, studies on innovation in this industry are scant.

As a result, research by Duarte et al. (2017) is of particular interest owing to its focus on innovation perception and practices in microbreweries. In this respect, their study reports that innovation is perceived within production processes, and specifically in the originality of the recipe (the combination of ingredients and methods), which in turn results in the development of a wide range of new styles and flavors, encouraging constant variation in consumers' preferences and a continuous transformation of the market. Schumpeter (1934) considers this behavior a determining factor in his concept of innovation.

Additionally, Duarte et al. (2017) stress that brewers' perpetual interest in and pursuit of novelty (discovery, ingenuity, creativity, and originality) is not only reflected in production processes but also in phases relating to brand management and commercialization, which has become a means for breweries to stand out and build long-term sustainability.

Furthermore, certain situations, such as the construction of social networks and closer relationships with other cultural industries like gastronomy, enology, and tourism, as well as a reduced number of decision-makers in craft breweries, who in turn facilitate trial and error processes, provide a significant boost to innovation in this sector.

9.3 The Collaborative Nature of Craft Beer

Kleban and Nickerson (2012) point to the companies' close relationships and familiarity with consumers and local suppliers as one distinctive factor that has been observed in the craft beer sector. In other words, the craft beer industry encourages the establishment of ties and partnerships with local and regional companies and economies in order to strengthen their competitiveness.

For example, it has been observed that brewers rely heavily on their ties with local stores, restaurants, and bars to launch their products, in addition to participating in regional events and festivals. This proximity to the community enables beer makers to take part in corporate social responsibility programs, thus strengthening their commitment to the communities that sustain them.

However, network construction does not only follow a vertical integration model between suppliers and distributors, but also—and sometimes even more so—between competitors.

One explanation for this behavior is provided by Stebbins (2007) and Murray (2009), who report that in the craft beer industry it is common to see homebrewers progress into craft brewing. Homebrewers make beer as a hobby and do not operate on any commercial premises, while craft brewers generally have spaces for beer production and distribution. The fact that brewers often start out as homebrewers allows them to gain the knowledge, experience, and technical skills required to expand their reach.

During this first stage of development, craft brewers often forge collaborative ties and establish networks among themselves at events, in courses or simply by engaging with others and sharing suggestions and knowledge (Murray, 2009; Murray & O'Neill, 2015; Olson, Murphy, & Ro, 2014). Specifically, Duarte, Alexander, and O'Brien (2018) study the benefits of and barriers to networking and collaboration between homebrewers. McGrath and O'Toole (2013), for their part, find that identifying craft brewers not just as individual units but as organizations distinct from larger breweries is an enabler for collaboration networks, and this is similar in Canada, New Zealand, the United Kingdom, Australia, and the United States. Rodgers and Taves (2017) report that brewers describe the social aspect of beer-making as an environment of friendship, a term that also indicates social dynamics such as collaboration, trust, and a sense of community.

So it is that these collaborative networks focus on direct or indirect links between actors. These links may potentially be of great help in enabling the growth of breweries, and are based on the exchange of information, contacts, and material,

which fosters a certain level of consistency between knowledge practices (Casson & Giusta, 2007; Duarte et al., 2018; Forret & Dougherty, 2004; Roberts & Bradley, 1991; Rodgers & Taves, 2017). McGrath and O'Toole (2013) believe collaborative relationships exist between consumers, competitors, suppliers, distributors, funding agencies and research institutes, among other actors.

Collaborative relationships in the craft beer sector are extremely important as they allow brewers to share valuable resources like supplies and specialized or strategic knowledge (Duarte et al., 2018; Plummer, Telfer, Hashimoto, & Summers, 2005). Indeed, literature highlights the importance of collaborative networks for entrepreneurs, particularly in this sector. Networks exist at a local or regional level (Duarte & Bressan, 2014), and enable entrepreneurs to discover and develop opportunities through a commitment to the socio-economic system they are bound to. These relationships come more naturally to businesses that work on a smaller scale (small and micro-businesses), as through collaboration these organizations are able to explore new territories, particularly when there is the opportunity to acquire new skills and abilities, which in turn results in greater efficiency and profit (de Jong & Freel, 2010). In this sense, networks are key in countering the vulnerability of a smaller business and overcoming resource limitations, which otherwise would not be possible (McGrath & O'Toole, 2013). The ability to participate in effective collaboration activities has become fundamental for successful entrepreneurs, as it enables them to overcome the contextual obstacles they face in a climate of knowledge exchange and problem solving (McGrath & O'Toole, 2013). Various studies have contributed to the understanding of the benefits of collaboration between small businesses (Polenske, 2004; Smith, Dickson, & Smith, 1991). Gray (1989) identifies three phases in collaboration processes: (a) definition of the problem and relevant stakeholders, (b) the orientation and establishment of basic rules, and (c) implementation and assurance of execution.

Rodgers and Taves (2017), for their part, assert that despite high levels of collaboration in this sector, craft brewers maintain their autonomy and individuality. Home brewers and micro-brewers appear to be driven by the recreational and leisurely nature of their activity, excitement and enjoyment rather than financial gain. A certain openness and collaboration is noted among those learning the trade, and their study finds that, in contrast to what they originally believed, craft brewers are prepared to share knowledge and feedback among themselves.

9.4 Methodology

This exploratory study is an initial approach to the craft beer industry in the Baja California region, and seeks to contribute to literature on innovation in the region's craft breweries and their ability to establish collaborative networks. In this sense, the study focuses on micro- and medium-sized craft breweries in Ensenada, Baja California, Mexico, in light of their distinctive features such as their ties to the

gastronomy and wine sectors, and the proliferation of small-scale craft beer producers.

The impetus behind the study is Mexico's position in the global beer market as one of the largest producers and exporters of beer, and one of the heaviest consumers in Latin America. This market has seen a huge surge in craft beer in recent years. Supply was estimated in 2013 at 300 craft breweries at least, with Baja California producing at least a third of the country's craft beer (Deloitte, 2017; Antúnez, cited in Bernáldez, 2013).

This chapter draws from a broader study that seeks to describe the conditions of competitiveness in the craft beer industry across the state of Baja California. However, this study is confined to describing the conditions of innovation and collaboration within the industry in the city of Ensenada, Mexico; the other aspects will be addressed in future work.

The study population is made up of 21 craft beer producers currently located in the city of Ensenada, Mexico, all of which have at least one tap room. Data was collected between February and March 2018 by way of a survey that was personally delivered to each of the 21 breweries and addressed to the owners. Over the course of this period a response was received from 19 of the 21, which is equivalent to a 90% response rate. It should be noted that the sample was made up of breweries that did not just have production facilities, but also at least one tap room.

The survey was designed with closed-ended questions, the aim of which was to characterize craft brewers and their operating practices, and the impact they had on competitiveness in the sector. Response analysis was performed using descriptive statistics, through frequency analysis. Figure 9.2 illustrates the general framework of the study; this work only addresses innovation and collaboration whereas Table 9.1 shows the design of the study instrument.

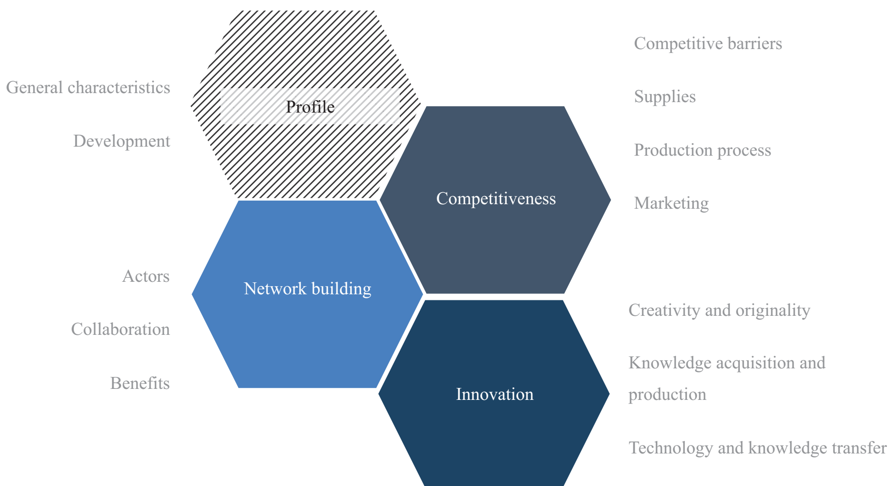

Fig. 9.2 General framework of the study. *Source:* Authors

Table 9.1 Research instrument

Innovation	Creativity and originality	Diversity of beer styles Differentiating aspects Most creative and original aspects of the business model Elements displaying the greatest differentiation
	Knowledge acquisition and production	Learning how to make craft beer Degree of specialization Business management
	Technology and knowledge transfer	Elements that could potentially be registered as intellectual property Shared knowledge
Network building	Actors	Main competitors Sources of funding Partners in company positioning
	Collaboration	Knowledge of beer-making Sharing knowledge Chambers or associations Collaboration or knowledge exchange (breweries)
	Benefits	Ties or relations with other sectors Benefits of collaboration

Source: Authors

9.5 Analysis and Discussion of Innovation

A description of this sector reveals a young industry in which, on average, companies have formally existed for around 3.5 years and have about 5 years' experience producing beer; furthermore, 81% of producers have only one tap room.

Regulatory and normative aspects stand out among the challenges faced by beer producers. By way of example, the impact of this factor becomes clear upon analyzing the significant growth experienced by this industry in 2013, when changes were brought into law to fight market monopolization (Deloitte 2017).

On the other hand, it is noticed that this industry carries out extensive and varying forms of innovation at different stages of Hansen and Birkinshaw's (2007) innovation value chain (Fig. 9.1). However, added value, creativity, originality, and differentiation are all concentrated in two of its links: idea conversion and idea diffusion.

With regard to acquiring knowledge to provide added value, 38% of craft producers report that they learned to produce beer from other brewers, both from Baja California and southern California, whereas 25% stated that they learned through courses and workshops and mentioned that these had also been organized by actors in the region: San Diego State University and the Ensenada Beer Fest forum (see Fig. 9.3).

This means that 60% of those surveyed agree with Hansen and Birkinshaw (2007) that high-value knowledge acquisition comes mainly from actors that are

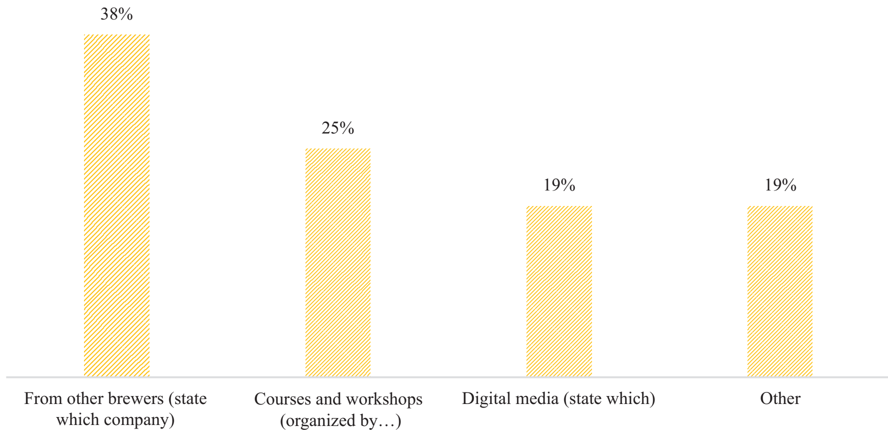

Fig. 9.3 How respondents learned to make craft beer. *Source:* Authors

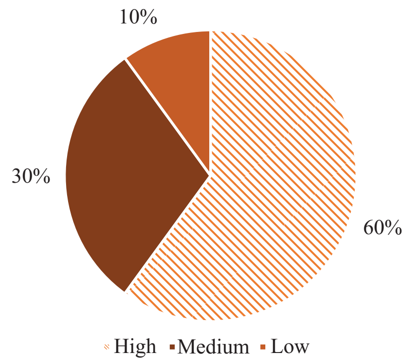

Fig. 9.4 Degree of knowledge specialization. *Source:* Authors

external to the company. Often it even comes from engaging with competitors, as stated by Freeman (1998) and Dosi (1988). Continuing this line of thought, 89% of brewers acknowledge having received, at some time, significant knowledge from other brewers.

As for the degree of specialization necessary in the industry, in terms of knowledge, 60% of producers consider they required a high degree of specialization to develop their company (see Fig. 9.4).

Furthermore, they report that the technological infrastructure, production process and formalization and regulatory compliance processes were the most difficult aspects to develop, which suggests a better understanding is required at these stages (see Fig. 9.5).

Creativity, originality, and differentiation—determining factors in innovation—are prominent in the production phase, which corresponds to the second link in the model proposed by Hansen and Birkinshaw (2007), particularly regarding recipes, in which—as reported by Duarte et al. (2017) and Kleban and Nickerson (2012)—a combination of nontraditional ingredients and traditional methods give rise to a

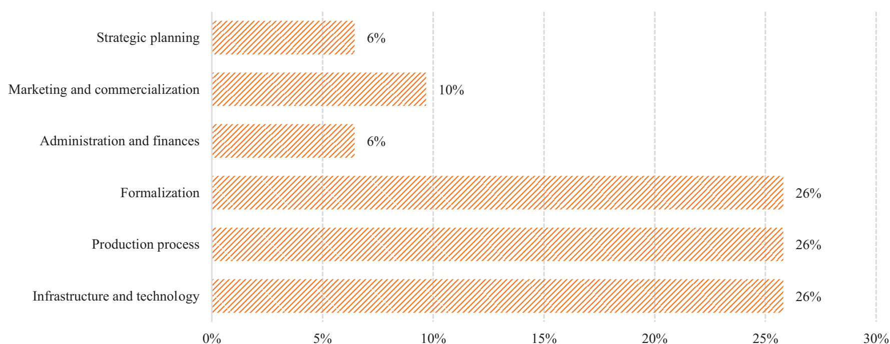

Fig. 9.5 Business management. Difficulty in developing the different stages of management. *Source:* Authors

Fig. 9.6 Diversity of beer styles. *Source:* Authors

wide range of flavors and styles (see Fig. 9.6), and thereby what is known by the OECD (2006) as a "product innovation," which in turn creates new markets.

On the other hand, and regarding so-called process innovations (OECD, 2006), this industry also sees innovative activity, but of a gradual nature, since this sector has not simply adopted existing technology in the domestic and international markets as part of production processes, but one segment has opted to develop and improve production systems and technology. In this sense, 34% of those surveyed reported having developed their own production system, whereas the other 34% mentioned having innovated, in some way, the technology they acquired (see Charts 22 and 37). As reported by Freeman (1998) and Dosi (1988), this kind of innovation is usually the result of the company's accumulated experience in different business processes, including production operations like in this case. This in turn suggests high levels of specialization and knowledge in craft beer producers.

With regard to differentiating aspects, although it is true that 50% of those surveyed considered that it was the flavor and diversity of the beer styles they produced

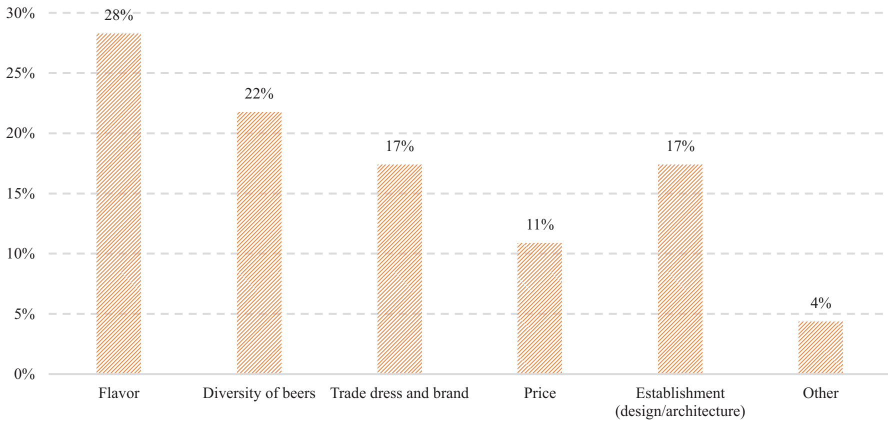

Fig. 9.7 Elements enabling differentiation. *Source:* Authors

that set them apart from their competitors—both of which are associated with product innovation—it is also true that 34% attribute their distinctiveness to aspects related to their business concept, such as their trade dress and the architecture of their establishment, which are features that come under marketing innovation. As reported by the OECD (2006), this is associated with new marketing methods that correspond to the idea conversion link in Hansen and Birkinshaw's (2007) model (see Fig. 9.7). Similarly, 61% of brewers consider that most creativity occurs in the product development process. Nevertheless, the remaining 39% of producers believe the creative process is strongest in marketing and commercialization aspects (see Fig. 9.8).

All of these findings match studies by Kleban and Nickerson (2012) and Duarte et al. (2017), who assert that innovation in the craft beer industry is not only present in the production phase, but also in brand commercialization and management, which are aspects that may not only translate into a dominant position in the market, but can at times also be vital for a company's survival.

As far as originality is concerned, 42% report that their product is most difficult to mimic, compared to 35% who consider the trade dress, brand, and architecture of the establishment the most difficult aspects to mimic. Again, these innovation variables are concentrated in the idea conversion and idea diffusion phases (see Fig. 9.9).

Based on the fact that these results show that innovation is greatest, first and foremost, in production processes, and secondly in marketing processes, it is to be expected that products most likely to be registered as intellectual property would reflect these stages and this same order. However, 77% of those surveyed consider that the brand and trade dress have the greatest potential to be registered as some form of intellectual property, followed by technology and machinery, and only 9% mention the development/production process (see Fig. 9.10). In this sense, intellectual property is an important variable in innovation, as it adds and protects the value of processes and products and directly impacts technology and knowledge transfer activities.

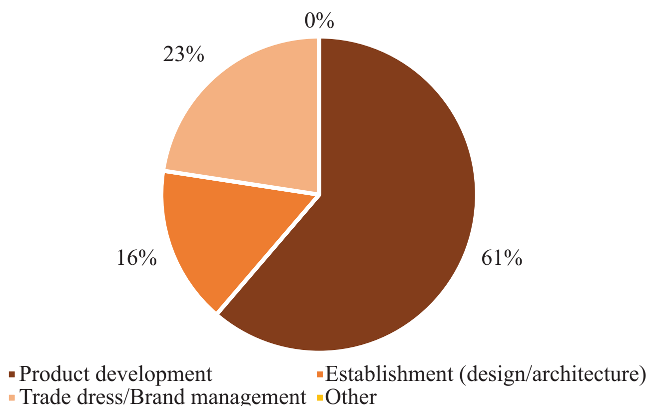

Fig. 9.8 Elements of the business model that reflect the most creativity and originality. *Source:* Authors

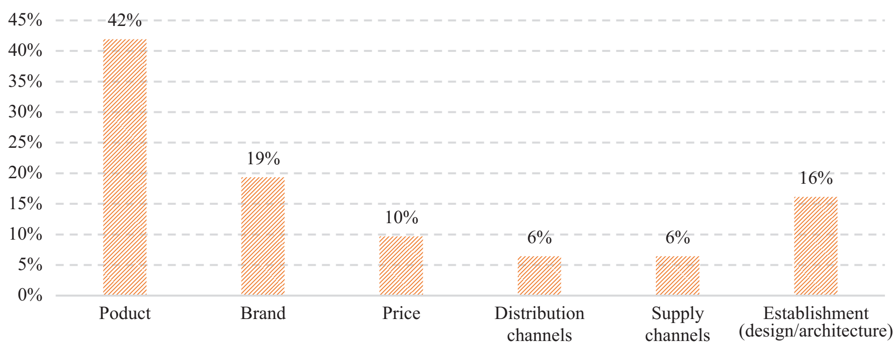

Fig. 9.9 Most differentiating aspects. *Source:* Authors

Finally, regarding technology and knowledge transfer, a collaborative industry is perceived in which 84% of those surveyed report having shared significant knowledge with other brewers, and as previously mentioned, 89% acknowledge having received knowledge from other producers. Without a doubt, this situation encourages innovation processes and its importance merits a separate study (see Fig. 9.11).

9.6 Analysis and Discussion of Collaboration

Regarding this sector's capacity to create collaborative networks, 61% of producers surveyed reported that their business started out as a hobby, which is consistent with findings by Murray (2009) and Stebbins (2007). This is a factor likely to facilitate collaboration among producers, since, as reported by Rodgers and Taves (2017), they are motivated by leisure, excitement, and enjoyment, rather than economic

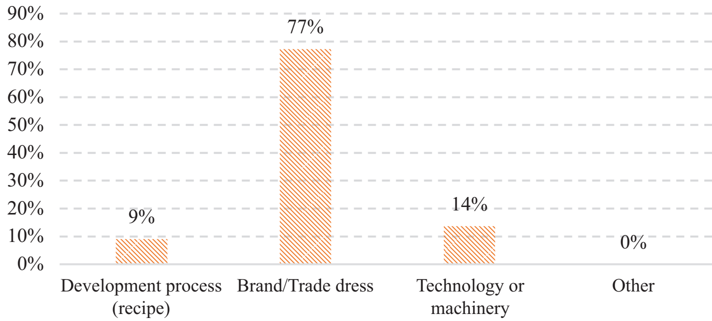

Fig. 9.10 Elements that could potentially be registered as intellectual property. *Source:* Authors

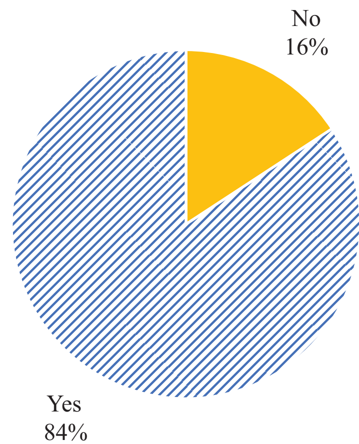

Fig. 9.11 Significant knowledge shared. *Source:* Authors

interests, which often means that during the initial stages of training and development in beer-making, collaborative bonds are forged with other producers, with whom they share knowledge (Murray, 2009; Murray & O'Neill, 2015; Olson et al., 2014). All of this produces an environment of familiarity and camaraderie, which significantly reduces aggressive competitive practices.

Another considerable challenge faced by brewers is the economic aspect, and in particular how to fund their companies, with 75% of producers acknowledging that they financed their venture with their own resources and just 25% reporting having used government or bank financing or a private capital investment (see Fig. 9.12).

Most noteworthy in Fig. 9.12 is the fact that only 12% have received support from the banking system or government. This is a clear indicator of the low level of engagement between these actors and beer producers. This is in contrast to the stance taken by McGrath and O'Toole (2013), who claim that collaborative relationships exist between actors of all kinds, including funding agencies.

Figure 9.13, on the other hand, shows that 43% of producers do not see other craft brewers as competitors, despite the fact that naturally this should be the case.

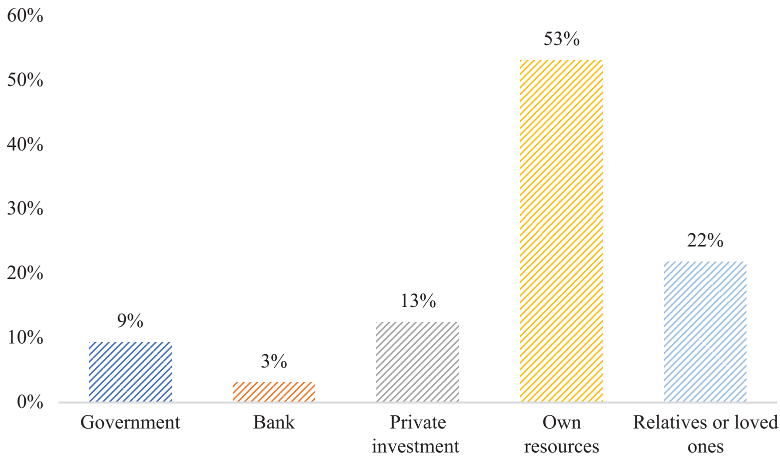

Fig. 9.12 Main sources of financing for companies. *Source:* Authors

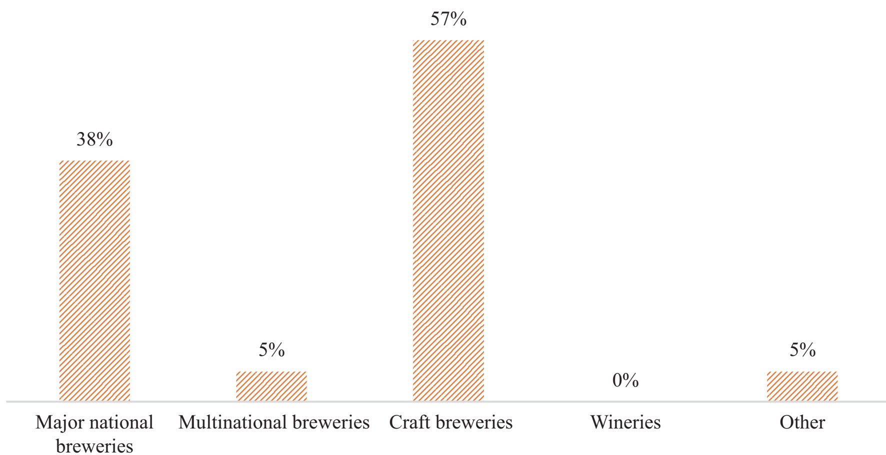

Fig. 9.13 Main competitors. *Source:* Authors

As far as knowledge transfer is concerned, Roberts and Bradley (1991), Forret and Dougherty (2004), Casson and Giusta (2007), Rodgers and Taves (2017), and Duarte et al. (2018) discuss engagement between actors in collaborative networks and focus, among other things, on information exchange, which standardizes—to a certain degree—knowledge practices. In this regard, 89% of those surveyed reported having received information, advice, or significant knowledge for their own development from other producers, in particular certain breweries from southern California. This strengthens the hypothesis that the proximity to southern California has had a positive impact on the emergence of this industry in Baja California, and has played a key role in knowledge exchange.

Table 9.2 How respondents learned to make beer

How respondents learned to make craft beer	Percentage
From other brewers (state which company)	57
Courses and workshops (organized by…)	38
Digital media (state which)	29
Other	29

Source: Authors

Despite this considerable knowledge transfer between brewers, Table 9.2 highlights the fact that, when it came to acknowledging how respondents had learned the trade, only 38% attributed it entirely to their beer-making colleagues. However, courses, workshops, and speeches, which are generally organized by brewers' associations, are important for 25%, which could be added to the previous 38%. In this respect, some courses offered by universities in San Diego, California, are mentioned, which is in line with McGrath and O'Toole (2013), who include research institutions among the actors with which networks are built.

As for knowledge exchange, in top place are aspects relating to the production process and an analysis of theoretical foundations, as reported by Plummer et al. (2005) and Duarte et al. (2018), who assert that collaborative relationships enable them to share valuable resources such as specialized knowledge or strategic knowledge (see Fig. 9.14).

As far as associations or chambers of commerce are concerned, it is observed that 67% are members; nonetheless, it must be considered that this sector is still in the early stages of development, so many companies have only recently been created and have still not enrolled in any of these organizations, which may explain why the remaining 33% have not yet joined any of these entities. In this regard, McGrath and O'Toole (2013) identify the fact that brewers tend to see themselves as a community rather than individual units as a key factor. This empowers them to meet the challenges of their environment (see Fig. 9.15).

As for which actors brewers consider their best allies, brewers themselves stand out at 71%, followed by other industrial sectors including suppliers and distributors, and in third place respondents also mention some universities from southern California offering certification and specialization programs in the field. In this sense, McGrath and O'Toole (2013) point out that collaborative relationships exist between consumers, competitors, suppliers, distributors, funding agencies, and research institutions. However, scant engagement by brewers with governmental actors and funding agencies—which should theoretically constitute the mechanisms that would generate favorable conditions to enable an industry to thrive—is also notable (see Fig. 9.16).

Figure 9.17 illustrates the diversity of breweries mentioned as providers of information and knowledge. This shows this industry's openness toward collaboration in

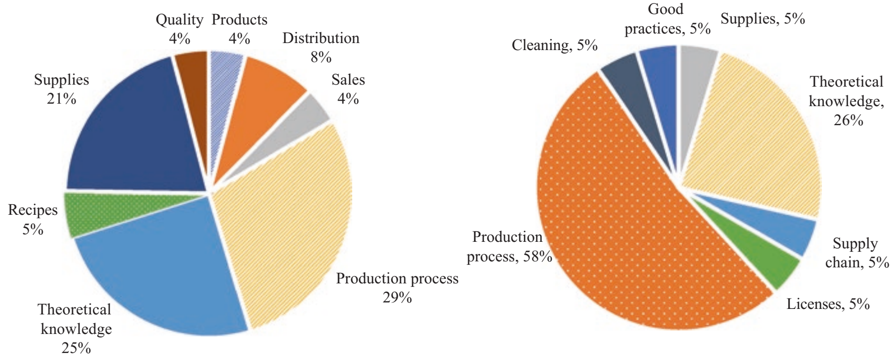

Fig. 9.14 Aspects on which knowledge has been shared. *Source:* Authors

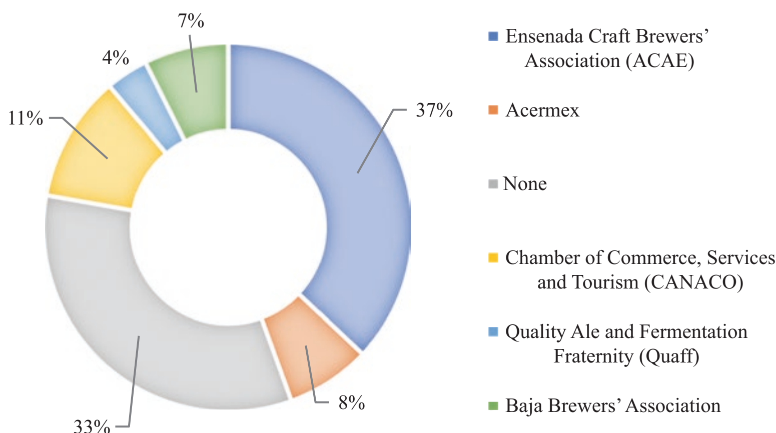

Fig. 9.15 Chambers or associations to which craft beer producers belong. *Source:* Authors

the processes of teaching and learning the trade. This is touched upon by Rodgers and Taves (2017).

Figures 9.18 and 9.19 give the main reasons for which brewers decide to establish ties and the benefits they gain from these relationships. There is an association between the expectations of collaboration and results obtained, as these have become aligned. Indeed, the two most common expectations for engagement are product improvement and the opportunity to help other brewers, which are the exact same benefits brewers reported to have gained. This is consistent with findings by Duarte et al. (2018), who remark that benefits gained include strategies to improve products and satisfaction derived from an environment of camaraderie.

Finally, regarding tax regulation, Kleban and Nickerson (2012) report that this industry is highly regulated at federal, local, and state levels. These three levels regulate beer production and distribution, but also licenses, labeling, marketing and

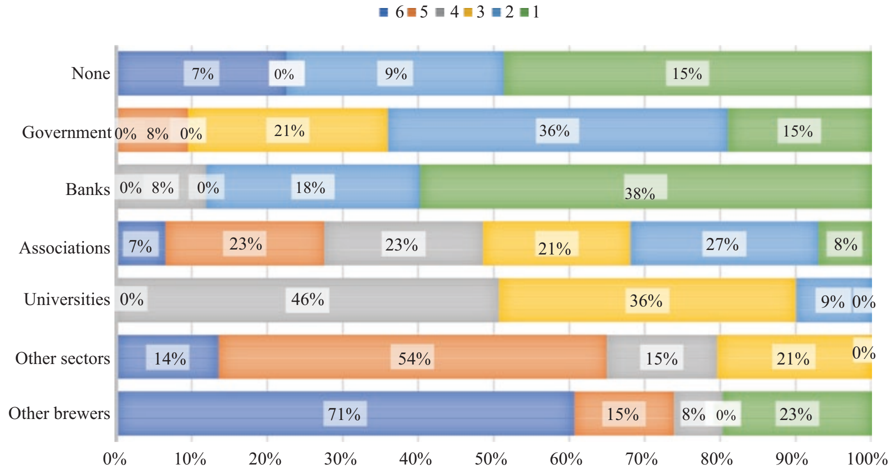

Fig. 9.16 Actors that have become best allies for the company's development and positioning. *Source:* Authors

Fig. 9.17 Breweries between which there is collaboration or knowledge exchange. *Source:* Authors

commercialization practices, and distribution agreements, among other aspects. Furthermore, the entities responsible for collecting these taxes, licensing fees, and other similar contributions vary across the three levels.

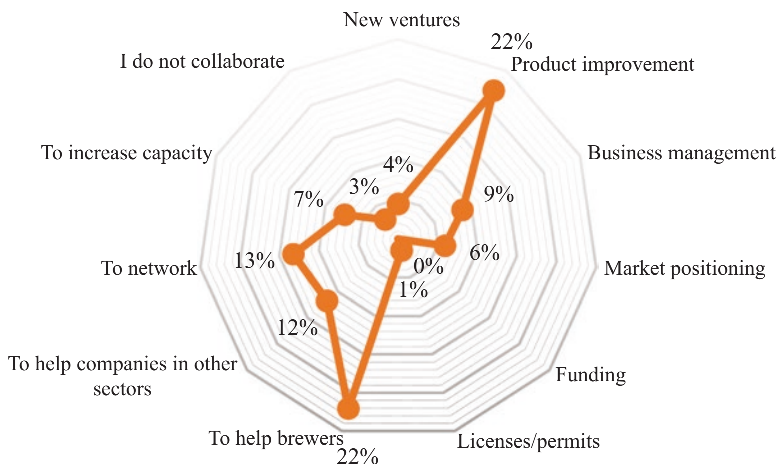

Fig. 9.18 Reasons for which ties or relationships are established with other sectors. *Source:* Authors

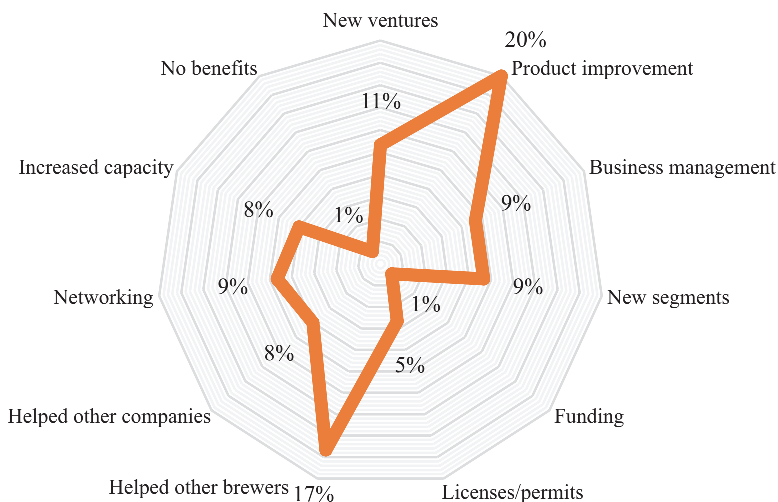

Fig. 9.19 Benefits gained through collaboration with other actors. *Source:* Authors

9.7 Conclusions

The purpose of this study was firstly to recognize the impact that an emerging cultural industry like the craft beer industry can have on a region's economic development, so long as appropriate conditions for competitiveness are provided to help it thrive. As part of this analysis, the boom in beer production in southern California,

United States, was taken as a reference (California Craft Brewers Association, 2017). Thus, and in recognition of the growing importance of innovation in triggering competitiveness in companies, industries, and sectors, this variable was studied in the craft beer sector. Our study drew from the perspective of the Oslo Manual (OECD, 2006) and the innovation value chain model (Hansen & Birkinshaw, 2007) and is supported by the neo-Schumpeterian school represented by Freeman (1998) and Dosi (1988), as well as various studies linked to the craft beer sector (Duarte et al., 2017; Kleban & Nickerson, 2012). Lastly, the study sought to describe this industry based on an analysis of its structure, revealing a collaborative dynamic between actors that make up this industry.

The main findings show that the craft beer industry in Baja California is at a stage of development and its emergence has been driven both by the success experienced in southern California and producers' own interests, which at the outset were not necessarily purely commercial in nature, but due to a genuine desire to develop their own craft skills.

With respect to Hansen and Birkinshaw's (2007) innovation value chain, it has been shown that in this industry, innovation is greatest in the idea conversion and diffusion links, as producers view attributes of differentiation, creativity, and originality as being present in their production processes, in which they combine new ingredients with traditional methods, giving rise to a wide range of styles and thereby new markets. And, on the other hand, these attributes are also found in trade dress and brand management, where creativity and originality are observed in aspects that range from the product name to the architecture of the establishment.

This means that, based on the classification by the OECD (2006), this industry features innovations in three of the four types of innovation, namely product, process, and market innovation, and there is no evidence of organizational innovation.

The industry is based on differentiation, which translates into (1) product innovations, with a wide range of styles and flavors derived from unique recipes, and which have given rise to a new market niche in which consumers place value on the whole experience surrounding beer consumption; (2) process innovations, in which producers have achieved a high degree of specialization that has enabled them to develop their own production technology or enhance existing technology; and (3) marketing, in which differentiation has become a competitive strategy.

Nonetheless, as in any emerging industry, there are also significant challenges. In this sector, normative and regulatory aspects in particular have been identified as a considerable obstacle for the development of the industry.

Similarly, regarding technology and knowledge transfer, a cooperative industry is noted in which many producers do not only claim to have received significant knowledge from other producers, but also to have developed it themselves. This characteristic is emerging as a variable that merits more in-depth research.

Furthermore, it is acknowledged that building collaborative networks is a factor that entrepreneurs must consider to achieve success, as it empowers them to meet the challenges posed by their environment. In the case of craft beer, this factor is part of their DNA, so is perceived as natural in their day-to-day activities. This can be explained by the fact that their interests go beyond business, and is associated

with the sense of belonging to a community. This dynamic has enabled micro and small breweries to leverage these relationships to compete in a market dominated by major national and transnational companies, as by working together it becomes easier to exchange valuable resources, such as supplies and other aspects of the value chain infrastructure, but above all, specialized and strategic knowledge (Duarte et al., 2018; Plummer et al., 2005).

Based on the above, this chapter also salvages the idea of the craft beer sector as a collaborative industry, the potential impact of which on the economic development of the Baja California region is imminent.

Similarly, this study describes a recently created industry with marked collaborative efforts between participants, based on friendship rather than business, which is in line with Rodgers and Taves (2017), who describe how brewers are driven by satisfaction and enjoyment rather than economic gain. This climate in particular produces a friendly context and reduces rivalry between competitors. Similarly, a high degree of collaboration was identified between brewers themselves, and it has been ascertained that this does not occur to the same extent with other sectors, especially the banking sector and the government, which has been identified as an obstacle rather than an ally.

On the other hand, it can be seen that knowledge exchange is an aspect that should be studied further. It was found that a high percentage of those surveyed had exchanged significant knowledge for development, as shown by literature (Casson & Giusta, 2007; Duarte et al., 2018; Forret & Dougherty, 2004; Roberts & Bradley, 1991; Rodgers & Taves, 2017).

As far as the implications of this study are concerned, it is important to mention that this is an initial approach to the industry in the region, so it was decided to begin by studying the city of Ensenada before expanding the study to the entire Baja California region.

Finally, it follows that craft beer is an industry that faces great challenges, such as defending itself against control by major traditional breweries, with an economic power that entails significant disadvantages for craft brewers, or extreme local and national regulation. However, strategies focused on differentiation and their integration into the local socio-economic fabric offer advantages that are enabling the industry to become more competitive. These strategies are closely linked to the two variables analyzed in this chapter: *innovation* and *collaboration*, which due to their importance merit a more in-depth study in future research.

The lessons learned and findings in this study of the development of the craft beer industry in Ensenada lay the foundations for a study of the sector in the cities of Tijuana and Mexicali. However, it should be mentioned that the analysis strategy used, which incorporates key aspects of the innovation chain, is unprecedented in cultural industries. Indeed, there are other aspects that are relevant, such as those relating to intellectual property and technology transfer, which will be considered topics for future work, and which we believe will offer economic certainty and strength to a booming sector with great potential for economic development in Baja California.

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Chapter 10
Wine Tourism and Wine Vacation as a Cultural and Creative Industry: The Case of the Bullas Wine Route

Inmaculada Carrasco, Juan-Sebastián Castillo-Valero, and Ana Pérez-Luño

Abstract Wine is a part of the Mediterranean culture that has gradually taken root in other parts of the world. Every single wine is an artistic creation that emerges in a terroir, combining a sample of physical and cultural traits such as grape variety, soil, planting, yields and winemaking. It reflects a culture, based on natural conditions, knowledge, and rituals that are passed on through generations, forming part of the cultural identity and heritage.

Academic interest in wine tourism has grown as the wine industry has developed, diversifying its supply of services. This interest has partly been generated by the concern for creating value and the need to look for sustainable business activities allowing local development. Thus, most of the literature has an economic focus, interpreting wine tourism and wine tourism vacation as a way to revitalize rural areas in decline, a context of direct sale and promotion, or a marketing opportunity to position the brand using a specific image.

The link between culture, intangibles and the economy is complex and requires an open approach. Thus, in this chapter, our purpose is to present wine vacations and wine routes as a product of the wine industry that leverages local cultural traits to create wealth, contribute to sustainable development and preserve cultural heritage.

To achieve this goal we use a case study of the Bullas Wine Route in Murcia (Spain). Archaeological discoveries date the existence of vineyards and wine activity in this area to the Roman era. More than 200 traditional wineries still remain,

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some of them are in operation since the eighteenth and nineteenth centuries. History and Culture form the framework of a recent innovative wine route project based on a participative and sustainable model of social, economic, and environmental development. This case study has been selected as it presents ethnographic, historic, cultural, recreational, productive, social, landscape and environmental synergies, conforming an initiative of great interest.

Keywords Wine vacation and tourism · Route of wine · Case study of Bullas Wine Route (Murcia Spain) · Cultural heritage · Sustainable development

10.1 Introduction

The global financial crisis has demonstrated the need for new sectors to drive innovation and economic growth. The cultural and creative industry has been successful in innovating and exporting creative technologies to other industries (Fleischmann, Daniel, & Welters, 2017). Companies have reacted by applying user-led innovation processes that allow them to increase markets, quality of products (which better meet customers' preferences) and reduce risks (Sniukas, 2016).

Rural contexts pose specificities that need place-based analysis and confirm the importance of place-making processes. Following Woods (2007), globalization produces new ruralities and the reconstruction of rural spaces under a globalized environment. This has to be led by focusing on the interaction between local and global actors, human and nonhuman actors, in a hybrid relational model where networks (based on economic, social, ecological and cultural streams) connect rural locations with other parts of the world, permitting the mobilization of local resources and the creation of new development paths. These new trajectories in rural transformation require the re-dimensioning of capital, resources and rural connections to profit from the geographical opportunities and to encourage rural heritage commodification.

Rural actors can respond to socio-economic changes and political incentives by innovating and restructuring their spaces to engage in the service economy as tourist entrepreneurs (Hjalager, 1996). Rural landscapes and environments are perceived as genuine and authentic, constituting a context for a range of recreational activities for non-rural visitors (Silva, 2014).

The link between culture, intangibles and economy is complex and requires an open approach. Thus, in this chapter, our purpose is to present wine vacations and wine routes as a product of the wine industry that leverages local cultural traits to create wealth, innovate, contribute to sustainable development and preserve the cultural heritage. In this sense, wine routes should be considered part of a cultural and creative industry.

To achieve this goal we use the study case of the Bullas Wine Route in Murcia (Spain). Archaeological discoveries date the existence of vineyards and wine activity in this area to the Roman era. History and Culture form the framework for a

recent, innovative wine route project based on a participative and sustainable model of social, economic and environmental development. This study case has been selected as it presents ethnographic, historic, cultural, recreational, productive, social, landscape and environmental synergies, conforming an initiative of great interest.

This chapter is organized into six main sections. After this introduction, the second section is devoted to defining the concept of cultural and creative industries. The third section presents a review of the academic literature in order to establish the relationship between culture and cultural heritage in the wine sector. The fourth section describes the "Wine Routes of Spain" product, in which the Bullas Wine Route is integrated. The fifth section presents the study case and we discuss the information collected and its contributions to the literature. The sixth section presents the main conclusions.

10.2 Cultural and Creative Industries: Definition and Role in Economic Development

The concept of "cultural industry" comes from the Frankfurt School. Since T. Adorno and M. Horkheimer first developed the idea of the culture industry in 1944, the term has taken on a broader meaning, not without controversy and tensions. These authors' intention was to describe the standardized mass production of cultural merchandise, such as films, radio programs, magazines (Su, 2015), identifying different branches of culture, forming a system that transcended the notion of art towards a concept of business. Following Hesmondhalgh and Pratt (2005: 6), all industries can be considered cultural because they produce goods and services that share the network of meanings and symbols that we know as culture, but it is also possible to recognize that the core concern in cultural industries is the symbolic, aesthetic and artistic nature of the output.

In the late 1990s, the term "creative industries" was coined to refer to "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" (DCMS, 2001, 5). These sectors were reduced in 2015 to a list of nine: Advertising and Marketing; Architecture; Crafts; Design: Product, Graphic and Fashion design; Film, TV, Video, Radio and Photography; IT, Software and Computer Services; Publishing; Museums, Galleries and Libraries; Music, Performing and Visual Arts (DCMS, 2015, 32).

Nevertheless, a wider conception explains that culture and economy are inherently interwoven (Pitts, 2015). Cultural and creative industries have been intrinsic to the development of modern industrial economy. Moreover, creativity and culture cannot be isolated from production and consumption but are common to them (Freeman, 2012). Following Galloway and Dunlop (2007), there are five competing conceptions that allow creative and cultural industries to be defined as a separate

industry: creativity, intellectual property, symbolic meaning, use-value and joint goods. Creativity is not an exclusive trait of the creative industry, but what differentiates it here is the role it plays. Neither is intellectual property specific to the cultural and creative industry; in this case, the distinction is in its creation and use. Thirdly, the symbolic meaning refers to goods whose economic value derives from their cultural value, with the latter being preeminent. A further trait refers to the value of use offered by cultural and creative goods. Finally, the symbolic and functional values form a joint element.

None of the previous qualities is exclusive to the cultural and creative industries and they seem potentially applicable to all industries, but the difference is the cultural nature of the good or service. What makes an industry "cultural" is its consumption, more than its production (Miller, 2009): consumers demand commodities for their material and social needs and also for the symbolic power derived from them (Pitts, 2015). The costs of cultural products are less related to their resources and more to establishing taste (Freeman, 2012).

Considered an industry, cultural and creative activities are increasingly being positioned at the vanguard of global economic growth, constituting a factor for economic growth (Fleischmann et al., 2017; Flew, 2014; UNESCO, 2013). In 2015, their value was calculated as 3% of world GDP, creating more than 30 million jobs (EY, 2015). It is one of the most dynamic sectors, whose growth rate exceeds the average overall growth rate in many developed and developing countries (Yu, Jin Hong, Zhu, & Guo, 2014).

Besides this direct contribution to economic growth, authors are now focusing on the indirect contribution of creative industries by means of innovation (Lee & Rodríguez-Pose, 2014). Industries that purchase creative services present a stronger performance (Bakhshi, McVittie, & Simmie, 2008). In general terms, the impact of creative industries on innovation systems stems from "knowledge spillovers" and "learnt innovation" (Lee & Rodríguez-Pose, 2014).

The relationship between cultural and creative industries and economic growth is robust: European regions with the highest income levels have the greatest concentration of creative and cultural industries (Power, 2011), with this being a circular relationship (Marco-Serrano, Rausell-Kosterb, & Abeledo-Sanchis, 2014). This means that the prosperity of a region drives the growth of employment and income creation in cultural and creative industries.

Nevertheless, the estimates of the size and economic contribution of the cultural industry to the global economy depend on the definition of the term. Different models (see Throsby, 2008) propose different classification systems to define cultural industries. Among them, the Concentric Circles Model identifies four layers into which the different activities can be classified: the core creative arts, other core cultural industries, wider cultural industries and related industries. Museums, heritage services and architecture are included in the second, third and fourth circles respectively. Considering that wine routes comprise a sample of activities related, among others, to visits to cellars and wineries (some of which are true monuments): visits to wine museums and interpreting centres, recipient agencies, guided tours, visiting centres at the vineyards and tasting services. They all revolve around wine,

which is a unique and creative product that depends on *terroir* characteristics and oenologist *savoir-faire*. Thus, we can conclude that wine routes are part of the cultural and creative industry.

10.3 Culture and Cultural Heritage in the Wine Sector and Wine Routes

Global wine markets are undergoing radical transformations from the producer and consumer perspective, mainly as regards new actors, new preferences and a changing environment. More than three quarters of world trade, production and consumption are still related to the traditional European producers, but a growing proportion of the global market is being provided by "New World" countries (Anderson, 2004). The rapid growth of wine exports from countries without a tradition in production is remarkable.

In this context of growing competition, producers can leverage the regional brand image to strengthen their sale strategy, because the perceived quality of a region increases expectation of the quality of wines in sub-regions or denominations inside this region (Johnson & Bruwer, 2007).

The exploitation of cultural heritage and local identity has sometimes been related to marketing strategies of local wine producers (Riviezzo, Garofano, Granata, & Kakavand, 2017). The French concept of "terroir" is very important in viticulture as it refers to environmental conditions where grapes are grown (van Leeuwen & Seguin, 2006; Vaudour, 2002). The *terroir* encompasses not only physical conditions such as climate, ground, humidity and hydric conditions but also human action (the agronomics). It has been demonstrated that a great *terroir* emerges when there is a convergence of the socioeconomic conditions favourable for the establishing of a wine producing system oriented to quality (van Leeuwen & Seguin, 2006). In addition, with regard to relationships, the patterns that regulate, develop, stress or interrupt routinized ways of working explain how practices in the wine sector are interdependent, creative and emergent.

In this sense, a set of historical, environmental and economic conditions facilitates two different processes in wine production (also in other agricultural products): an enterprise can legally (by means of Denominations of Origin or Controlled Denominations) declare the heritage value of the characteristics of its *terroir* as a way of claiming its authenticity and by extension, its quality, while product salience establishes its uniqueness (Gade, 2008). In addition, the *terroir* offers wine producers certain potentialities as a way to exploit local identity and cultural heritage in their marketing strategies (Riviezzo et al., 2017).

The concept of cultural heritage, a growing phenomenon with a changing structure over time, has evolved from an objective idea to an organic, multifunctional concept, a socioeconomic dimension integrating the various perspectives from a great variety of academic fields that interact and complement one another, incorporating not only monuments but also people; not only the objects but also the

functions, and not only preservation per se but also preservation as a tool for sustainable use and development.

Culture and cultural heritage influence social and economic development by means of social capital construction, providing a variety of community meeting-points and spaces for social integration and inclusion, working as a source of identity and local pride and generating reasons for collective action.

Ordinary landscapes reveal the interaction of people and places, especially the places to which people belong and from where a part of their shared identity derives (Groth, 1997). Vernacular heritage is the expression of a community's culture as it draws on the relationship of people with territory (ICOMOS, 1999). In rural areas, it is composed of buildings representing old crafts, rural life and agricultural activities. Some now serve as monuments while others are used for tourism purposes and for commercial and entertainment uses (Cano, Garzón, & Sánchez-Soto, 2013).

This interaction between people and places leads the researcher to the concerns of wine tourism sustainability: minimizing the negative impact on the environment, committing to long-term economic development and respecting local culture. The World Wide Fund for Nature defines sustainable tourism and associated infrastructures as those that "both now and in the future operate within natural capacities for the regeneration and productivity of natural resources; recognize the contribution that people and communities, traditions and lifestyles make to the tourism experience; accept that these people must have an equitable share in the economic benefits of tourism; are guided by the wishes of local people and communities in the host areas" (Tourism Concern and WWF, 1992).

10.4 Wine Routes and Oenoturism in Spain

Wine is one of the signs of Spanish identity and its economic, social and environmental standing makes it extraordinarily important for the country (Plataforma Tecnológica del Vino, 2017). The surface of vineyards in Spain accounts for 30% of the total surface in the European Union and around 14% of the World's vineyards. Spain is also the world's leading exporter (in terms of volume) and the importance of the wine sector in the national GDP is 1%. However, its importance goes beyond these figures. The wine industry in many cases has facilitated settlement of rural populations, recovery of grape varieties in decline, environmental protection of ecosystems, investment in R + D + I and innovative business administration models, and the revaluation of the sense of belonging in the population involved in viticultural activities (Hernández, Alonso, & Pueyo, 2013). In addition, the wine sector has demonstrated potential to become an ally of other economic activities such as gastronomic and oenological tourism, creating, in turn, highly interesting synergies.

Tourism contributes significantly to Spanish employment and GDP creation, 13% and 11.1%, respectively (INE, 2006) and is one of the drivers of the national economy. Novel types of tourism associated with heritage, health or gastronomy

have boosted and diversified the supply of tourism products. More specifically, wine tourism has emerged as a force, linked to cultural tourism, eco-tourism, and gastronomic tourism and consisting of a variety of activities that relate leisure and recreation to wine production and culture (Hall & Mitchell, 2000). Over the last decade, the interest of the research community in wine tourism has grown as fast as the industry has developed and diversified, notably in Europe but also in the "New World". In part, this interest derives from the concern for new sustainable economic activities supporting local development; in this sense, wine tourism can be a way to revitalize declining rural areas, a context in which to direct sales or a marketing opportunity at positioning the brand with a concrete image (Cavicchi & Santini, 2014).

Research in oenotourism has emphasized the representative consumer variables that affect the evaluation of the tourist experience, understood as an individual perception generated in the context of interactions and resource integration (Bjork & Sfandla, 2009). This is of great importance in wine tourism, where tourists demonstrate a higher degree of satisfaction and intention of recommending the experience when they have more control on what occurs during the reception of tourist services or when they actively participate in these services (Binkhorst & Dekker, 2009). In this sense, the value generated by the co-creation or the active participation in the experience is an integrated process between tourists, services providers and/or establishments (Mathis, Kim, Uysal, Sirgy, & Prebensen, 2016).

Founded with the support of the Ministry of Industry, Energy and Tourism and the Ministry of Agriculture, Food and Environment, the Spanish Association of Cities of Wine (*ACEVIN,* its acronym in Spanish) has developed the product "*Wine Routes of Spain*". This consists of a selection of 27 routes located in winemaking territories, aiming to create a concept of tourism based on wine culture across all of Spain. This product offers various activities such as tours around villages with a rich cultural, natural, archaeological and artistic heritage that share the common denominator of wine.

Architecture is paired with wine in different ways across the *Wine Routes of Spain*: from the vernacular buildings devoted to wine production and storage to the most modern installations driven by ground-breaking architecture, the work of prestigious architects such as Frank O. Gehry (Bodegas Marqués de Riscal)**,** Iñaki Aspiazu (Bodegas Baigorri), Santiago Calatrava (Bodega Ysios), Norman Foster (Bodegas Portia) or Richard Rogers (Bodega Protos).

Other expressions of culture and heritage are also present on the *Wine Routes of Spain*, which pass by cultural sites of notable value: the Roman site of Las Médulas (El Bierzo); the city of San Cristóbal de La Laguna (Tacoronte-Acentejo); the Cathedral of Jerez (Jerez de la Frontera); the Mosque-Cathedral of Cordoba (Montilla-Moriles); the Cultural Park of Vero (Somontano); the Don Quixote villages (La Mancha) or the numerous archaeological remains and medieval constructions in Navarra, Penedès, Rivera de Duero or Utiel-Requena.

Finally, the *Wine Routes of Spain* are located within areas of rich environmental and ecological heritage. In addition to the unique environment generated by vine cultivation, some of the routes pass by valuable natural environments such as the

Table 10.1 Partners of the wine routes of Spain

Partners of the routes	
Wineries	602
Accommodation	376
Restaurants	308
Thematic leisure	106
Museums and centres of interpretation	86
Tourism offices	84
Wine bars	79
Shops	65
Wine cellars (ENOTECAS)	53
Agencies for reception of visitors	35
Transport business	14
Services of wine therapy	12
Agrofood industries	12
Other services	11
Digital business	10
Tourist guides	9
Centres in vineyard for visits	6
Services of tasting	3
Total	1,871

Number and type
Source: ACEVIN (2018)

Table 10.2 Organizations member of the wine routes of Spain

Municipalities	543
Boards of regulation (origin denomination)	28
Other organizations	47
Total	618

Source: ACEVIN (2018)

Natural Park of the Mountains and Canyons of Guara (Somontano); the River Vero (Somontano); the Natural Park of Moncayo (Campo de Borja); the Duero River valley (Ribera de Duero).

Under the framework of these three aspects of heritage, the *Wine Routes of Spain* offer a varied set of services that can be described in the following dataset (Tables 10.1, 10.2 and 10.3):

All these data demonstrate the quantitative importance of the *Wine Routes of Spain* product, the analysis of which should also consider its qualitative importance. More than 600 wineries utilize this context for promotion and direct selling and as a marketing opportunity in order to position their brand with a specific image, as suggested by Cavicchi and Santini (2014). The magnitude of the services complementary to winemaking activities is also remarkable if we consider that they are all developed in rural environments, outside the scope of traditional Spanish tourist destinations, contributing to the sustainable development and maintenance of population in rural areas.

Table 10.3 Accommodation; number and type

Category	Number	Seating
Hotels 5*	8	952
Hotels 4*	51	4049
Hotels 3*	40	2296
Hotels 2*	31	903
Hotels 1*	11	180
Guess houses	12	308
Apartments	33	449
Rural houses	166	1066
Hostels	3	46
Camping	4	427
Other seating	17	116
Total	376	10,792

Source: ACEVIN (2018)

10.5 The Bullas Wine Route

10.5.1 The Context of the Bullas Wine Route[1]

The Bullas Wine Route is structured around the relatively recently established Bullas Denomination of Origin. It covers the municipalities of Bullas, Calasparra, Caravaca de la Cruz, Cehegín, Lorca, Moratalla, Mula, Pliego, Ricote, Cieza and Totana, all of which are in the province of Murcia. They were awarded the certificate of denomination of origin in 1994 and belong to the *Wine Routes of Spain* consortium.

Located in the Southeast of Spain, between the Mediterranean Sea and the mountains of the interior of Andalusia, the area has very hot summers. However, the climate is colder than in the province's other Denomination of Origin, as it has sudden icy winds coming down from the mountains. Rain is scarce but torrential. Under these conditions, vineyard cultivation is a traditional and ancient activity in the area, well adapted to its soils, altitude (ranging from 400 to 810 m) and scarcity of water. The more traditional and predominant system of cultivation is non-irrigated and the most typical grape variety is the red *Monastrell*, indigenous to this denomination of origin, and characterized by its intense blue-purple colour which constitutes the symbol of identity of these wines.

Due to the natural conditions and the limited farming area, wine production in this Denomination of Origin is limited in the context of Spanish total production (0.11%). The majority is bottled and destined to the national market. Only 24% of the production is exported. However, the uniqueness of the *Monastrell* grape adds

[1] The information in this section comes from the *Regulatory Board of the Denomination of Origin of Bullas*, the *Ministry of Agriculture, Fishing, Food and Environment* and the *Mancomunidad de la Valle del Ricote.*

an element of differentiation, which allows production to be included in the exclusive segment.

The village of Bullas (11,500 inhabitants) is located 56 km northwest of the city of Murcia (a medium-size city, capital of the province with the same name). The first human settlement in Bullas dates back 4000 years. There are also remains of Roman settlements in archaeological farming villas such as *Fuente Mula, Fuenblanquilla, La Loma* or *Los Cantos*. A number of marble statues found at the last of these archaeological sites, one of which was called “Boy Bacchus” or “The Grape Boy”, evidence the relationship of this territory with wine production since the Roman era. The architectural remains permitted the documentation of a 1500 m^2 rectangular *praetorium*, belonging to a rural villa built around a central patio. The analysis of the archaeological remains dates the villa’s foundation to the period of the Claudius and Nero administrations (first and second centuries of the Christian era). In addition, Bullas is 20 km from Caravaca de la Cruz, a Templar city that is one of the World’s five holy cities.

The natural heritage complements this wealth of cultural attractions with natural sites such as “El Carrascalejo”, scattered with vineyards, ideal for hiking due to its signposted north-west green route; the natural waterfall of “El Usero”, an excellent place for swimming; and “Molino de Abajo” with interesting archaeological remains of a Roman Villa. In addition, the Bullas area is near the Ricote Valley, characterized by the gorges, vertical walls, ravines and gullies shaped by the Segura Riverbed, where numerous tourist routes, eco-routes and adventure tourism activities can be experienced.

The Bullas Wine Route comprises seven wineries, the Museum-house of Don Pepe Marsilla and the Museum of Wine. This acts as a centre for services and activities related to the tourist and cultural promotion of Bullas and its surrounding production area. The Museum includes a didactic exhibition on the processes involved in wine production, separating the traditional methods from current ones. It is located in an old winery dating from the nineteenth century (the Melgares de Aguilar family’s winery) and preserves most of its original elements covering an area of more than 1400 m^2. This winery can produce some 350,000 l of wine in its 112 clay barrels, being one of the biggest wineries in the region.

The Museum-house of Don Pepe Marsilla is an ethnographic museum in a nineteenth century house where visitors learn about the atmosphere and way of life in this rural area in the late nineteenth century. Another interesting place to visit is the “Bodega de la Balsa”, which is an old cellar currently housing the headquarters of the Regulatory Board of the Bullas Denomination of Origin.

The route also includes the following wineries: Bodegas del Rosario; Bodegas Madroñal; Bodega Molino y Lagares; Bodega Monastrell; Bodega San Isidro; Bodega Balcona. All of these can be visited and other activities can be experienced including wine tasting; wine tasting with comments from a sommelier; sale of wine and other products; events celebration; or visits to vineyards.

According to data from ACEVIN (2018) the Bullas Wine Route received 21,612 visitors, of whom a majority of 17,383 were interested in museums and 4229 in wineries. This trend is contrary to that of the total sample of Spanish wine routes,

where 65% of visitors were interested in wineries. The majority of visitors were Spanish (15,102), spending an average of €12.10, a long way from the €40.54 that visitors spend in Ribera de Duero wineries. November was the month with the largest number of visits.

10.5.2 The Bullas Wine Route

In order to complete the previous information, an in-depth interview was conducted with Francisco Carreño (Vice-president of the Bullas Denomination of Origin) and Francisco Puerta (Manager of Bodegas del Rosario, the most important winery in the Denomination of Origin). The following paragraphs summarize and discuss the information they provided.

The Bullas Wine Route is linked to the Bullas Denomination of Origin from a territorial point of view as all the route's villages, museums and wineries are included in the Denomination of Origin; they are also linked from an administrative point of view. For these places, the wine route constitutes an opportunity for profit and commodification of the rural heritage and the wine culture in the Bullas area, allowing rural actors to innovate and enter the tourism industry, as suggested by Hjalager (1996). This is highly important for establishing population, avoiding depopulation of rural areas and generating virtuous circles between cultural heritage, social capital and sustainable development.

The increase in the mean level of income makes potential clients appreciate this type of luxury goods and services, valuing not only the quality of wines but also the environmental and historic assets. Thus, following Silva (2014), new urban environments perceive this rural setting as unique, genuine and authentic; Carrasco (2005, 2007) explains how increased income increase moves societies towards post materialist values, allowing them to attach more importance to aspects related to sustainability and the ethical aspect of consumption, defining them as luxury goods as did Francisco Carreño.

The Bullas Wine Route, as a product, has a cultural nature (in line with Miller, 2009) where creativity has an important role to play in order to increase and enhance services: a wide range of aspects has still to be developed, such as the exploitation of the area as a land of frontiers (between Muslims and Christians in the Kingdom of Granada); wider integration with the Roman culture; appreciation of the natural local ecosystem as compared to the nearby desert ecosystem in Almería, etc. The value of the services on offer in the route stems from their cultural value (symbolic meaning) more than the cost of production.

The convergence between wine routes and wineries is evident and it is difficult to determine the benefits each provides for the other. However, it is undeniable that the route offers the wineries a unique vehicle for marketing and direct sales (as indicated by Riviezzo et al., 2017), and a bonus in intangibles as an image that, in a medium/long term, could have an effect on income. This is important for a denomination of origin like Bullas, with a reduced size in the global market and that sells most of its production in bottled form.

The Bullas Wine Route serves to create an image of quality (following Johnson & Bruwer, 2007) helping the “Bullas Wine” brand to consolidate vineyards in the area. At the same time, the variety of grapes and wines help to maintain the diversity and biodiversity of the rich and diverse territory that is Spain. The Monastrell grapes and the historic assets give a distinctive quality to the Bullas wine and its route, distinguishing this route from others. Customers frequently have experience of other routes.

One of the strengths of the route, besides the above-mentioned natural, historic and cultural wealth, is the strong relationship between the people and the land. Many of the viticulturists only work part-time, but none wants to sell their vineyards. It is also worth noting the proximity of the route to the city centres of Murcia and Cartagena, which are well connected by road, complementing the product with their city-based tourist attractions. Belonging to the “Spanish Wine Routes” network is also a major strength.

The main threat to the route comes from the substitution of vineyards for almond trees. However, other opportunities are emerging such as: complementing agricultural activities with tourism activities; preparing the winemaker to offer accommodation services; widening the range of services (horse rides, hiking and trekking tours, etc.); connecting the Bullas Wine Route to the pilgrimage of the nearby city of Caravaca de la Cruz and the “Horses of Wine” fair; developing tourist and cultural activities around the idea of “land of frontiers”; connecting the route to outdoor activities of nature and adventure in the neighbouring Ricote Valley, etc.

Finally, the main weakness of the route lies in the lack of hospitality and the traditional, conservative character of individuals in the primary sector, who view all the changes with scepticism. In addition, it is necessary to take into account that the sun and beach tourism model (typical of the nearby coastal area) provides few advantages to the route as it cannot be oriented to mass tourism. The natural and cultural environment must be preserved, integrating the activities on the route into a sustainable development model across three pivotal points: economic activities, preservation and participation. The local and regional administration has an important role in the coordination, stimulation and integration of activities on the Bullas Wine Route into a sustainable development strategy.

10.6 Conclusions

The global crisis has forced local actors to find new paths for economic growth. The rural world presents particular dynamics and specific problems that demand place-making imaginative solutions. The cultural and creative industry can be a source of innovative and creative possibilities to be applied in the rural world, opening up a source of hybrid models connecting economic, social, ecological and cultural factors to construct new sustainable development models, allowing the commodification of cultural and natural heritage. Recent literature has highlighted the direct and indirect role played by cultural and creative industries in economic growth.

Creativity, innovation, knowledge spillovers and the virtuous circle of learnt innovation and work demonstrate the bidirectional positive relationship between economic growth and cultural and creative industries.

Cultural and creative industries are characterized by certain traits, which, while not being exclusive only to these industries, merge to form a unique combination of cultural and creative goods and services. Consumers demand this kind of goods not only for their material value but also for their symbolic value. In this context, we present the "Wine Routes" product as a cultural and creative derivative of the wine industry, which, by leveraging local cultural, natural and historic characteristics, is capable of creating wealth and contributing to the preservation of the natural and cultural heritage. The case study of the *Bullas Wine Route* provides an in-depth illustration of this approach.

Located in the southeast of Spain, this route integrates museums and interpreting centres, wineries, restaurants, and offers different services (guided visits, tasting, etc.), developed in municipalities belonging to the Denomination of Origin of Bullas, whose wines are characterized by the Monastrell grape. It forms a unique and creative product, around which all the services of the route are developed.

The wine route generates virtuous circles in the Bullas area between cultural heritage, social capital and sustainable development, working to avoid the depopulation of this rural area in the province of Murcia. Utilizing the archaeological remains, the cultural, ethnographic and natural capital, the route constitutes a cultural and creative product that complements the traditional wine production. It can be analyzed as a luxury service, perceived by visitors from the neighbouring urban environment as unique, genuine and authentic.

In addition, the route offers wineries the opportunity to develop a vehicle for marketing and direct selling, and a bonus in intangibles through the construction of a quality image. This is positive for the consolidation of vineyards, and the Monastrell grape, helping to maintain the biodiversity. Nevertheless, more creativity must be implemented in order to increase and enhance the services, creating a greater symbolic meaning for clients. As a cautionary measure, the expansion and development of the services must protect the natural and cultural environments, integrating them into sustainable development for the area.

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Chapter 11
Wine Industry in Baja California, Mexico: A Gender Perspective

Alicia León-Pozo, Lino Meraz-Ruiz, and Diana E. Woolfolk-Ruiz

Abstract The aim of this chapter is to analyze cases of women's participation in a cultural industry. Our focus is the wine industry of Baja California, where more than 90% of Mexican wine is produced. This is a qualitative study, descriptive in scope, that makes use of in-depth interviews focused on women who collaborate in the Baja California wine industry. This study allowed us to characterize the inclusion of women in this sector, and was accomplished by analyzing their profile, motivations, and achievements, and the challenges that have shaped their experiences within this cultural industry. This study also addresses the lack of research regarding female entrepreneurship within the Baja California wine industry. For researchers and professionals, this study will contribute to knowledge of female participation in this industry, and for wine practitioners, it offers information about women's performance in this sector. The study calls for openness on the part of government and wine industry executives toward women's participation in the development of the region.

Keywords Women entrepreneurs · Economic development · Wine industry · Gender · innovation

11.1 Wine in Baja California, a Cultural and Creative Industry Under Consolidation

This last decade has seen the emergence of a considerable number of studies on industries and the creative economy. This body of research is derived from the acknowledgement of the vital role these factors play in economic development,

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social integration, and the revival of urban areas in decay (Casani, Rodríguez-Pomeda, & Sánchez, 2012; Kozina & Bole, 2017).

These factors, which are essential for regional development, and which creative industries have encouraged systemically or through an organic development trajectory, are based on components offering high added value—given the difficulty of replicating them in the short term—such as cultural heritage, human talent, intellectual property, and the ability to collaborate in ecosystems (Buitrago & Duque, 2013).

In other words, a creative economy is formed when one moves from a specific sectorial focus on creative products (culture) to creative occupations as inputs in the general economy, and creative products as intermediate inputs in other sectors (Araya & Peters, 2010; UNESCO, 2013).

Although the origin of the concept can be traced back to work by Schumpeter (1942) with the concept of creative destruction, the concept of creative industry first appears in 1973, when the local government of New England developed a state survey on the topic, followed by a study on the impact of art in 1978. However, it was not until the nineties that the concept began to gather momentum, and policies explicitly supporting creative industries were recognized and enacted at an executive level in Australia and England (Araya & Peters, 2010; Garnham, 2006; Moore, 2014).

The term has been fueled by other concepts like *cultural industries*, defined as industries that combine creation, production, and marketing of creative content that is intangible and of a cultural nature. This content is usually protected by copyright and may take the form of a good or service. Cultural industries include printing, publication, and multimedia, audiovisual, photo and film production, as well as craftwork and design (Lebrún, 2007).

In Latin America, early efforts were made by the Inter-American Development Bank (IDB) in the report "Cultural Industries in Latin America and the Caribbean: Challenges and Opportunities" (Quartesan, Romis, & Lanzafame, 2007). This document makes an effort to give an account of the economic contribution, highlights the contribution made by cultural identity, and endeavors to classify industries that at that time were considered most relevant. The greatest challenges cited by the report are education and training, integration into regional markets, international trade, coordination between sectors, product distribution, and investment mechanisms, and one aspect that is particularly emphasized is public policy and the role of the state.

Another necessary reference to understand the phenomenon of creative industries in Latin America is the document entitled "The Orange Economy" (Buitrago & Duque, 2013), which was also funded by the IDB and integrates new elements into the discussion, acknowledging a symbiosis between technology, culture, and the economy as a facilitator of the creative economy. The report mentions key aspects such as the demographic bonus, intangible and natural capital, and the true economic contribution of the sector, in which Brazil and Mexico come top. It also acknowledges substantial challenges such as the effective recognition of intellectual

property rights, high levels of informal workers, inadequate classification systems, inconsistent political engagement, and internal and external resistance.

Both of these reference documents for the Latin American context mention tourism services as a relevant sector for creative industries in regions, meaning that the region's historical and cultural heritage, combined with natural surroundings, produces appropriate conditions to foster tourism. Mexico is the best example of this trend, with the tourism sector being one of the highest contributors to GDP.

There are forms of tourism that can be combined with other sectors to offer higher added value. This has occurred with wine and culinary tourism in Baja California, which, thanks to a combination of global recognition of the quality of its food and wine, its infrastructure, and a wide range of products, has become an option for entrepreneurs seeking to capitalize on investments in a fast-growing trend (Ruiz, Martínez, Verján, & Valderrama, 2011; Reyes Orta, Olague, Lobo Rodríguez, & Cruz Estrada, 2016; Ruiz, 2017; Valderrama, Verján, & Velázquez, 2010).

It is therefore logical to consider these wine and culinary tourism companies cultural and creative industries, given how they relate to the historical and cultural context, but also to new service sectors (architecture, design, and entertainment services, among others), which have surged due to their location and offering in a sector considered strategic in the Baja California region, and which have positioned Baja California as the leading wine-producing region in Mexico.

Baja California is a peninsula surrounded by the Pacific Ocean and the Sea of Cortés, and to the north, the state of California, United States of America. One of the most representative businesses is tourism; the region welcomes 160,000 visitors a year and boasts 27 hotels and 42 restaurants offering traditional cuisine, in addition to five convenience stores and six tour operators. Consequently, wine tourism in the region is a strategy for economic development, strengthened by the consolidation of wine routes, especially those in Baja California (Tijuana-Rosarito tourism corridor and the wine routes of Valle de Guadalupe, the old wine route, and the Ojos Negros route). This has given rise to the development of micro, small, and medium-sized companies (Quiñónez, Bringas, & Barrios, 2012; Trejo-Pech, López-Reyna, House, & Sarmiento-Pérez, 2010). "Many of these wineries have been created with the support of government and l'Escuelita [*sic*] by the Agronomist Hugo d'Acosta Enrique López [*sic*], who, with the support of his brother Alejandro, created this incubator" (Meraz, 2017).

In an interview, Gabriel Díaz (personal communication, 2017), director of the wine museum, reports that the museum has 120 registered wine producers, which results in an on-site sample of between 350 and 400 brands. It receives 70,000 visitors during high season (between March and September), from other states in Mexico (30%), the cities of Mexicali and Tecate (25%), Tijuana (10%), Ensenada and Rosarito (10%), and the remaining 10% from abroad, mostly the state of California, USA. These visitors go to see the largest and best-known producers, but there is also a large cluster of micro-wineries in the region, which due to their location, low production volume, and the fact they are fairly new, go unnoticed.

The wine tourism business in Baja California is at an early stage and has received national and international recognition, notably due to the quality of wines and wine

experiences, which serve to complement the cruises and beaches. This sector's competitiveness has played a key role in the region's development, hence the importance of measuring the factors that impact its growth.

Additionally, this area offers visitors artisan bread, olive oil, jams, and a wide range of cheeses, among other traditional products. Culinary options range from classic inexpensive cuisine to the finest dishes in open country surrounded by the endemic, distinctive landscape of the valley. There is also a wide range of accommodation options offering high-quality service and comfort, most of which are surrounded by nature and allow visitors to come into contact with the traditional roots of the grapevine and vineyard. The road network provides easy access for tourists, with public transport available for locals, and connects the main road from Ensenada to Tecate with the toll-free road to the city of Tijuana. The roads are signposted and leaflets are available to guide visitors (Valderrama et al., 2010).

11.2 The Gender Perspective in the Wine Industry in Baja California

Gender equality is an essential development objective, given that international law recognizes that, as a driver of human development, this is every person's right. However, achieving equal participation by women remains a challenge, particularly in decision-making. In response, the United Nations Development Programme (2007) has carried out a joint human rights-focused initiative on gender equality named "Leave No-One Behind," which strengthens women's participation and equal decision-making in public administration.

Equal participation by women, as a gender perspective, also implies the existence of a fairer and more democratic development and the eradication of discriminatory treatment against any group of persons, meaning that societies should create equal opportunities so that both men and women may successfully fulfill their role in the family and social life cycle (Panisello & Pastor, 2015). Indeed, inequalities go beyond the different sexes' reproductive functions; this has led to the marginalization of women and a lower value placed on women's work and household responsibilities, among other situations (Marx, 2010).

Gender as a research phenomenon has contributed significantly to the paradigm of contemporary feminism. Its analysis has been categorized from an analytical, transdisciplinary, historical, contextual, and sectorial perspective (Ogato, 2013). In 1955, John Money proposed the term "gender role" to describe different behavior attributed to men and women (De Barbieri, 1992). Gomariz (1992) believed that, as a result of these references, it was possible to analyze theoretical knowledge on sex and gender, also known as "gender studies." This epistemological understanding upholds a reality in power relations between the sexes. In Latin America, this topic has gradually gained in importance and has been slowly incorporated into the legal system and precedent through public policy, which has made it socially relevant and

enabled the right to equality (García, 2016). It also stems from women's interest in pursuing their own activities individually, providing financial autonomy (Caro, 2013). Mexico ranks 68th out of 132 countries for gender equality; considerable progress can be noted, but much remains to be done. Indeed, in 2010 it was reported that out of 112 million inhabitants, 57 million were women and 55 million men, hence the importance of understanding what is happening between these social groups. It is worth adding that, as far as research is concerned, Mexico remains the country with the lowest proportion of female researchers; 22.4% of members of the Mexican Academy of Sciences are women (Estrada, Mendieta, & González, 2016).

Thus, on the understanding that gender has emerged from both an objective and subjective reality in which individuals recreate meaning they derive from language, history, and culture (Góngora & Leyva, 2005), it is fitting to address certain issues such as eradicating forms of discrimination against women and girls, eliminating forms of violence against women, recognizing the value of women's work at home and professionally, ensuring women's full and effective participation, establishing governmental strategies to grant women the right to equal conditions, strengthening laws to promote equal opportunities, and empowering all women (United Nations Children's Fund, 2011).

Similarly, in addition to being a significant economic force, entrepreneurship constitutes a mechanism for the empowerment of women. Women entrepreneurs are a growing sector in the economy, and one to which both the academy and organizations have turned their attention (Rodríguez & Rodríguez, 2013). Thus, entrepreneurship is seen as an essential component of economic development, and fundamental for a successful transition in the economy (Fogel & Zapalska, 2001).

In North America, women often decide to set up their own businesses as a result of discrimination in the workplace (Buttner, 1999; Capowski, 1992), although it is also true that some women do achieve success despite the obstacles they come up against (Aycan, 2004). Globally, many women are starting their own businesses, but their motivations differ from men's (Lituchy & Reavley, 2004; Reavley & Lituchy, 2008). However, the percentages remain small; for example, only 36.8% of ventures in the United States were undertaken by women (Simon, 2015). In Mexico, there are few studies on the challenges women face in developing and maintaining a business.

There is no doubt that some women achieve professional success in different occupations and industries, but this is not the case for most (Punnett et al., 2007). The percentage of women entrepreneurs remains low (Simon, 2015), and there is no clarity on the extent of women's success or how to determine it.

Terjesen and Lloyd (2015) analyzed the conditions that encouraged high-potential female entrepreneurship in 77 countries, and found that women entrepreneurs play a substantial role in the growth of their economies. If a country fails to support an entrepreneurial mindset, particularly among women, the result will be lower rates of innovation, fewer jobs, and a drop in its own economic well-being.

According to studies conducted by the World Bank (2016), there is strong evidence that female entrepreneurship has a positive impact on social development and prosperity, as women entrepreneurs contribute substantially to economic growth

and poverty alleviation across the world, despite the obstacles they face such as a lack of capital, social restrictions, family responsibilities, and gender inequity.

Having taken these considerations into account, and with the aim of responding to these challenges, this chapter analyzes the career paths of women in a cultural industry, specifically the wine industry in Baja California, where over 90% of Mexican wine is produced (Meraz & Ruiz, 2016). A gender perspective in the wine industry is a relevant topic in Mexico, given that this sector has a positive impact on the region's economic and social development, particularly as it is a rural area that enjoys a strong wine and culinary tradition of international renown, which has been established by men but also women from different generations who have worked and continue to work in the wine-growing valleys of Baja California.

In order to have an impact on gender differences in the wine industry, it is necessary to create positions that develop into opportunities for those working in the industry. The patriarchal order assigns women the responsibility of reproductive labor (within the home) and men the figure of breadwinners (away from the home). This stigmatized figure has been changing, which has been reflected in an increase in female participation, female-headed households, and women holding managerial and executive positions (Ely & Meyerson, 2010; Mazei et al., 2015). The same is true with wine consumers. Nowadays, consumers (not just men but also women) value quality more and wish to gain a deeper understanding of the virtues and properties of wine (Gender in the Global Research Landscape, 2017).

Despite equal opportunities in recent years, a certain inequality is still perceived with respect to work in the wine industry. For example, in Argentina, there is a marked difference for female workers who are paid less on account of their sex (Martín & Dalla, 2012). In the same vein, it is reported that the Mendoza wine industry is represented by young male professionals in senior and intermediate-level positions, putting another sector—such as young women—at a disadvantage (Dulcich, 2016). In this sense, it is worthwhile mentioning that it is necessary to include a gender policy that focuses both on gender inequalities and political, institutional, and corporate processes, which doubtlessly entails transforming and reorganizing institutions to enhance their development (Inter-American Commission of Women, 2012).

As for Mexico, the wine industry there has been exposed in recent years to a cultural evolution process due to market acceptance of wine consumption, which meant that wine came to replace other drinks, both alcoholic (such as beer and tequila) and non-alcoholic (carbonated drinks and artificially flavored drinks). This was complemented by several causes at a national level: an increase in wine production in various parts of the country, which has come with a diversification of the tourism industry (Espejel, Ferrer, Leyva, & Santos, 2014), the adoption of a wine-drinking culture (Ruiz, 2014), and an increase in quality and international awards (Sánchez & Mungaray, 2010), among others.

In general, the wine industry in Mexico—and specifically in Baja California—features a series of challenges but also achievements by actors working as producers or enologists in the many wineries. This is a result of motivation and innovation acquired through years of experience making wine a high-quality product targeted

at different national and international market segments that demand Mexican wine (Covarrubias & Thach, 2015). It should be added that, despite progress, there remain deficiencies and constraints: the lack of infrastructure for production processes (winemaking), the high cost of materials like bottles and cork, limited funding from the government, a total lack of oversight by a regulatory council safeguarding the interests of producers (Trejo-Pech, Arellano-Sada, Coelho, & Weldon, 2012), among others.

It is vital to stress that there is a strong preference for red wine due to the health benefits this type of wine is said to provide. As a result, market tendencies are geared toward personalized, naturally occurring products that are handcrafted (and therefore limited in production) and do not harm the environment. There is therefore a tendency toward signature wines, which establish a close relationship with consumers' lifestyles. In this respect, female enologists have indeed differentiated themselves, which has provided prestige and distinction, but at the same time, the enormous challenge of facing up to the masculism that is rife in the echelons of power in enology and winemaking and pervades the wine industry (Atkin, Nowak, & Garcia, 2007), particularly in Latin America.

It is in this context that, today, wine is part of the day-to-day life of a significant proportion of the population, both men and women, and consequently many wineries are developing products to appeal to the female market. One successful option has been to offer light wines with a low alcohol content; furthermore, the industry must understand women's buying habits—in other words, which kinds of information are most suitable to access this market. It is said that extrinsic qualities, such as packaging, encourage women to make a purchase (Orth, 2002). But if retailers understood forms of consumption, particularly among women, this would inform decisions on pricing policies and wine distribution and marketing. Even so, it should be noted that men account for the largest share of the market and wine selection, and are even likelier to see themselves as wine connoisseurs than their female counterparts (Barber, 2009).

In this way, it can be noted that one of the most recommended steps to eliminate sexism in wine-making and enology is to develop a culture of tolerance and competition in which women are permitted to play a significant role in selecting wine and as enologists, which is beginning to be reflected in an ever greater number of female owners of wineries or wine production companies (Atkin & Sutanonpaiboon, 2007), in particular in Baja California. This is closely linked to what is happening on the international scene, where well-being, religion, health, sex, fertility, and status are important aspects that create a connection to wine (Chang, Thach, & Olsen, 2016; Charters, 2006).

With all this in mind, women who wish to gain knowledge and fulfill roles as wine promoters must face up to barriers and obstacles that, together, hinder the development of a stereotypically masculine culture. Overcoming these barriers will make it possible to stamp out existing inequality. On this basis, this study describes below the method used to conduct this research, which sought primarily to construct positive narratives about what women do; their contribution to their family, work, and society; and their motivations and needs, achievements, and difficulties.

11.3 Methodology

This chapter is an approach to women's participation in the wine industry in the Baja California region, and seeks to contribute to literature on women's role as entrepreneurs in this sector. Thus, the study focuses on female entrepreneurs who operate within the aforementioned area.

The study uses a qualitative focus and semi-structured interviews to collect data. These interviews were conducted in March and April 2018, and included four women who shared their experiences within the wine sector, as entrepreneurs or leaders of business ventures. This made it possible to describe their career path in the industry by analyzing their profile, motivation, and achievements, and the difficulties that have shaped their background.

As mentioned in the instrument selected, semi-structured interviews were conducted in five particular phases: *profile, motivation, achievements, difficulties,* and *innovation* (see Table 11.1).

Each category was divided into subcategories, which sought to gain a deeper insight into women's situation in the region's wine industry. Thus, the profile category identified the distinctive characteristics of these entrepreneurs and business ventures, with respect to age, level of education, number of years in the business venture, and number of employees in the company. The achievement category, on the other hand, seeks to describe subjects' perception of the success they achieved over their career, and the link between success and their gender. Just as achievements are identified, it is also necessary to highlight the difficulties and obstacles they have had to overcome in relation to the company's life cycle, but also their

Table 11.1 Dimensions of the study

Experience in the wine industry	Profile	Name, age, level of education, degree, marital status, number of children Company name Number of years since the business venture began Number of employees in company
	Motivation	Reason for starting the business venture Business idea Motivation in pursuing the venture
	Achievements	Reason for success Business environment External factors Relationship between gender and success
	Difficulties	Relationship between gender and difficulties Difficulties at the beginning Difficulties in the course of development Work-family balance
	Innovation	Creativity and originality Differentiation Process improvement

Source: Own work

position as women. The last category describes aspects associated with innovation, such as creativity, originality, and differentiation in the business venture, and how improvements are applied to processes.

11.4 Analysis and Discussion

To analyze and interpret the results, five dimensions were identified to address the main topics of the study, namely the entrepreneurs' profiles, motivation in undertaking their business venture, the difficulties they have faced both personally and professionally, and finally, aspects related to innovation within their business.

Profile.

The profile category sought to describe the main characteristics of the entrepreneurs' profiles, and provide an initial insight into the business venture undertaken by each (Table 11.2).

It can be seen that the profiles identified are diverse, with ages ranging from 34 to 55 and both single and married women. All have bachelor's degrees as a minimum, with specialization courses or graduate programs in enology, agricultural production or gastronomy.

Their businesses are located in the Valle de Guadalupe, Valle de Santo Tomás, San Antonio de las Minas, and Ensenada. Most are small businesses with under five employees, but two have approximately 140 and 300 employees; the latter is the oldest winery in the region, with the remaining wineries ranging between 5 and 18 years old.

Table 11.2 Overview of the entrepreneurs

Interview 01	50 years of age, single. Her education includes a BSc. in Biology, M.Sc. in Industrial Management, and M.Sc. in Agricultural Production. Her vineyard is located in the Valle de Guadalupe, is about 18 years old and has two employees
Interview 02	55 years of age, also single. Her education includes a B.Sc. in Biology and M.Sc. in Enology. Her vineyard is located in San Antonio de las Minas, is 13 years old and has just one employee
Interview 03	58 years old, married. B.Sc. in Gastronomy. Her vineyard is in the Valle de Santo Tomas and has approximately 300 employees. She has been involved in the business venture as an enologist for 34 years
Interview 04	34 years of age, married. Electronic engineer. She studied a specialization course in enology. Her winery is in El Sauzal, in the city of Ensenada, and has four employees. She started her business in 2013, but worked in the family winery before then
Interview 05	40 years of age, single. Agricultural engineer and B.Sc. in Enology. Her highest level of education is a Ph.D. in Enology. The vineyard she works at is in the Valle de Guadalupe and has been running for 31 years

Source: Own work

11.4.1 Motivation

In all cases, the entrepreneurs' motivation in developing these businesses arose gradually, whether due to the influence of teachers or experience in the sector. One characteristic that all entrepreneurs shared was continuing education in the area of interest, in this case enology, in addition to a passion for their project and the work involved in it, as mentioned in interview 02:

> I'm passionate about it in many ways: one is the science and technology aspect, which is closely linked to my training in microbiology and other areas, and another is the emotional and sensorial aspect – so you have the emotional part and the intellectual part together in the same project.

It is noteworthy that the entrepreneurs' academic backgrounds include degrees associated with science or engineering. Similarly, mentoring stands out as a means to access an industry ordinarily dominated by male figures (Barber, 2009). It can be seen that these two factors played a significant role in the entrepreneurs' careers, and specifically in their decision to enter and remain in the industry.

Business ideas developed organically in each entrepreneur's career, whether they started out in similar industries, such as the food industry, or in the family business. However, they all share the same drive to learn more about wine-making through graduate studies. In some cases, efforts to support the industry led to the development of business ventures through courses to promote grapevine cultivation in the region's valleys. These efforts have resulted in an exponential increase in the number of business ventures in the industry, which in turn has had an impact on the region's wine culture and led to an increase in wine consumption. Entrepreneurs who started out in a family business have sought to undertake their own ventures as a new generation, and differentiate them from the family business.

Once within the industry, the entrepreneurs showed a great passion for the work, for the industry in general, and for their role in what is seen as the vocation and history of the region, embedded both in the region's economic development and cultural landscape, as mentioned in interview 05:

> (...) wine is culture and tradition; it is associated with our Mediterranean diet and day-to-day lifestyle. Wine is made to please the senses and emotions and to spend time together. What more reasons do you need when it's made for everyone to enjoy?

This explains why the objective of these businesses is not simply to create a quality product, but develop a different concept with an impact that goes beyond turnover, as illustrated by interview 03:

> (...) my idea is that if I can get people interested in wine, a product that is delicious and affordable for everyone, I'm fighting an uphill battle.

The success that each business venture has achieved in the market contributes to entrepreneurs' motivation to sustain this success.

11.4.2 Achievements

The success experienced by businesses, for the most part, is described as the result of highly rewarding work, as mentioned in interviews 01 and 03, respectively:

> (...) when you do something you enjoy, everything becomes easier" and "(…) there's no catch, when you enjoy what you do, life flies by and you don't even realize it (…).

And although Mexico is not recognized as a wine-producing country, particularly due to its low output when compared with other major producers of wine, it has received acclaim for the individual efforts of certain wineries, as is the case with the business ventures of this study, which in turn helps to highlight the success of the region's vineyards.

One other aspect associated with achievements is experience gained over time, whether by working in other business ventures or in courses and training sessions attended. In this sense, participants mention their experiences traveling to other wine regions and international fairs or contests, where exposure to different varieties of wine also had an impact on their own business ventures, as mentioned in interviews 04 and 05, respectively:

> (…) you no longer just focus on what there is here; I mean, you get to see (…) the different sectors and you can do any number of things.

> Every year it's different, there are always more new things to learn. Climate change is wreaking havoc in wine-making… I come from the world of research and for me, continuous improvement is fundamental.

This success would be impossible without the perseverance and steadfastness of women entrepreneurs, and the experience-based capacity they developed by making high-quality albeit simple wines with the aim of appealing to a greater number of consumers. By the same token, constant adaptation to a changing environment and external conditions has been the rule to stay in the market. In this sense, constant continuing education has played a key role in this capacity for adaptation, which suggests that a significant amount of time should be devoted to these activities, as mentioned in interview 02:

> (...) this is a factor that distracts me from time I need to devote to the project.

Married entrepreneurs must find time not only for continuing education but also for family, so support from family members in their business activities is essential to achieve their aims, as suggested in interview 03:

> (...) support from family too, because I sometimes have to spend long hours in the winery or I have to travel or attend training sessions.

It is therefore clear that although women have successfully established themselves professionally, they still shoulder the traditional responsibilities expected of women (Ely & Meyerson, 2010; Mazei et al., 2015).

In the same line of thought, family support has been a significant factor in understanding the industry and processes, and the necessary resources to develop their

own business ventures. It is also possible that specific female attributes have an impact on entrepreneurs' professional success; in this respect, interviews 03 and 05 mention:

> (...) I can't bear to think that people who attend wine tastings might end up frightened by technical names, and instead of bringing them closer we scare them away (…) people should feel comfortable about asking.

> (...) women's senses – especially smell – are more developed than men's. It has been scientifically proven that regardless of age, geographical origin, and status, women always have better perceptions of wine.

Whereas in interview 01:

> (...) I feel women are more impassioned (…) we do things with more affection, more dedication, we're more meticulous (…) even when it comes to labeling – which is the way the bottle is dressed – we're more creative.

In this way, the Mexican wine industry has undergone huge growth, as has the demand for domestic products rather than imported ones. Entrepreneurs who have been in the industry longer remember that, at the beginning, there were few women and it was considered a job for men. This trend did not only apply to people's choice of occupation but also included wine consumption. In contrast, women who are newer to the business disagree, and believe that the region has witnessed increased participation from women. Nonetheless, one common claim made in the interviews is that gender has no bearing on one's ability to make good wine.

11.4.3 Difficulties

As mentioned in the previous section, gender has not been a hindrance in the professional development of most of the women interviewed. However, those who have been in the industry longer did witness resistance to women's entry into the industry, as suggested by interview 03:

> (...) you've got three faults: you're Mexican, you have no qualifications [as an enologist] and you're a woman.

Although women continue to make headway in this industry, they face this and other hurdles, such as unequal pay. Similarly, age was identified as a difficulty, and participants mentioned how this could be seen as a defect.

Thus, it can be seen that the challenges in developing a business venture are varied, and answers vary considerably depending on entrepreneurs' time of life. For some, success brings greater scrutiny from peers, which creates an atmosphere of tension between the companies of the region. Another aspect is funding, since this kind of project implies a large investment, so investment by external actors is often required, bringing with it a new set of challenges. This difficulty is faced not only when businesses are launched, but also when they seek to expand. Differentiation is

mentioned as a significant challenge. This involves not just offering a product that differs from the competition, but also commercializing it and achieving market acceptance.

For larger companies, the challenge is to continue growing while ensuring quality is maintained and standards are met, as suggested in interview 05:

> (...) We mostly go by the grape quality standards determined by the International Organization of Vine and Wine, so the procedures we use to control and measure this quality are very thorough and rigorous for all the processes at our winery.

On the other hand, marketing is an essential aspect, and is difficult for those without proper training to develop themselves, as mentioned in interview 01:

> (...) you're not taught how to promote what you're doing, how to sell it to the market, how to convince customers that yours is the best or get them to take a look at your label.

Similarly, identifying distribution channels is a considerable challenge, especially considering the fact that some distributors demand exclusive rights, which potentially limits the scope of business ventures.

For women who have started a family, the problems of achieving a work-family balance are heightened; this kind of project is highly time-consuming, so it becomes necessary to set priorities. However, this is not always viewed in a negative light, as shown by interview 05: "(…) It's like any job, you need to balance your professional and personal life. So far it's all gone fine, in fact I'm pregnant right now. You just have to organize your time." However, in family businesses, this is not such a pressing issue.

11.4.4 Innovation

As far as processes associated with innovation are concerned, product creativity and originality are two essential components. It was found that these factors are mostly considered in the production process, in the wine recipe, which distinguishes it from the competition, as suggested in interview 01:

> in the production process, because it's at that point that the wine starts to take on a personality; it's the extra touch you give to your wine;

And in interview 04:

> definitely during the process, that's when it has to be.

Answers vary when it comes to identifying the most difficult aspect to mimic. In some cases, it was finding the right outlets for distribution and marketing, especially when one's expertise is more oriented toward the production process. Others believed it was the recipe—finding the right mix of ingredients to produce the desired wine.

Finally, the innovations developed are mostly in the wine-making process and are due in particular to the entrepreneurs' willingness to improve continuously and

achieve differentiation from their competitors. Technology also plays a fundamental role in innovating the wine-making process, and therefore the quality of the product. Another aspect mentioned, besides the production process, is the label design. Labels are expected to be original and appeal to consumers, which is consistent with a more contemporary view of innovation, as innovation is not just found in production processes but also in marketing and brand management.

11.5 Conclusions

As part of the conclusions, it has been confirmed that the wine industry in Baja California is a strategic sector that has established itself at a national level and seeks to improve its outreach and positioning internationally, and in which women are still only beginning to participate. It is still considered, therefore, a male-dominated industry. Nonetheless, the female entrepreneurs in this study acknowledge, first and foremost, that this male dominance has not been an obstacle in their career, and secondly, that attributes inherent to the female gender constitute qualities associated with creative and sensorial capacity, which are an advantage in any sector, but even more so in a creative and cultural industry such as the wine industry.

As for the characteristics of participants, particularly noteworthy are their level of education and unwavering interest in gaining knowledge, and their background in sciences and engineering, structuring the way they think and act and facilitating innovation processes.

It was noted that the entrepreneurs' involvement in the industry developed organically over their careers, whether due to prior participation in family-run wine companies or other similar industries.

Like in other cultural and creative industries like craft beer, innovation was found to be greatest in the production process, where a combination of many variables is the main innovation strategy in the sector. Nonetheless, it was also acknowledged that the marketing and commercialization phase is one link in the innovation chain where significant creative processes can achieve differentiation between competitors. These are processes in which women provide a significant contribution by virtue of their aforementioned creative and sensory skills.

With regard to the family-work balance, the entrepreneurs did not identify any differences between the wine industry and other industries. Although all industries pose challenges that women have had to overcome, the situation is even less complicated for women who work in a family business.

The main difficulties identified by women entrepreneurs involve increasing their presence in international markets, which does not appear to a problem associated with product quality, but rather visibility and recognition. Similarly, funding to grow their business ventures is also a considerable challenge.

Thus, insofar as public policies are established to support entrepreneurship, it is possible to speak of equal opportunity. Currently, these policies focus primarily on creating new companies where women participate in marginalized areas and in

traditional lines of work with little investment. Consequently, it is necessary to discuss entrepreneurship from a gender perspective and support projects that create added value, in addition to promoting emerging industries.

Finally, and to sum up, this chapter upholds the idea that women's participation in the wine industry in Baja California has the potential to enhance innovation processes and quality, and above all, broaden the spectrum of opportunities to incorporate further participation by women in regional development, as argued by Terjesen and Lloyd (2015). With no female participation, the sector is depriving itself of diversity and inclusion, both of which are key factors in highly creative cultural environments, and fundamental in emerging innovation ecosystems.

Study limitations include the size of the sample, which could be addressed in future studies, along with a greater emphasis on innovation and collaboration variables, which would enable a deeper understanding of the relationships between the different actors within cultural and creative industries.

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Index

A
Academic training, 102
Affiliation
  centers, authorship and authors by country, 26
Airbnb, 64
Aiserve – Japan Creative Development Network, 88
American Heart Association, 138
Ancient Tea Horse Road, 66
Artistic practice, 51, 52
Artists, 51–60
Arts, 9

B
Beijing Film Academy, 65
Bibliometric study, 16, 21, 22
Binational borderism, 49
Border borderism, 49
Borderisms, 48, 51
Boutique hotel, 65
Boy Bacchus, 190
Bullas Denomination of Origin, 191
Bullas Wine Route
  archaeological farming villas, 190
  creativity, 191
  denomination of origin, 191
  economic activities, preservation and participation, 192
  image of quality, 192
  luxury goods and services, 191
  municipalities, 189
  national market, 189
  natural heritage, 190
  opportunities, 192
  vineyard cultivation, 189
  wineries, 190
Business entrepreneurship, 97
Business management, 166

C
CaliBaja, 157
CareKit, 140
CAS educational model, 105, 107, 108
Chefs, 102, 104, 106, 110–113, 116, 117
China Central Television (CCTV), 65
Civil society, 50, 53–55, 60
Collaboration networks and innovation, 157
Commercialisation, 30
Competence, 102, 103, 106–108
Consumers demand, 193
Cooking and pâtisserie techniques, 107
Craft beer
  actors, 173
  business model, 168
  chambers/associations, 172
  collaboration, 168
  collaborative nature, 161
  competitors, 170
  cultural and creative industries, 155
  differentiation, 167, 168, 175
  diversity, 166
  financing for companies, 170
  framework, 163
  industry, 10
  innovation, 158, 164
  intellectual property, 169
  knowledge shared, 169

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Craft beer (*cont.*)
knowledge specialization, 165
methodology, 162
research instrument, 164
respondents, 165, 171
ties/relationships, 174
Creative Arts Industries
affiliations, 25, 27
authors, 24, 25
authorship analysis, 35
cultural and artistic activities, 16
documents, 23, 24
employment, 35
journals, 27, 28, 35
keywords, 29
lack of homogeneity, 16
Law of Lokta place, 34
literature review
classification, 19, 21
culture industries, 17, 18
interpretation, 17
medium producers, 35
methods, 21, 22
Relative Quality Index, 35
research lines, 29, 31
scientific production, 34
Creative culinary process, 103
Creative experiences, 96
Creative faculty, 51
Creative industries and cultural, 4
Creative Industries Network, 20
Creative initiatives, 83, 86, 87, 94
Creative potential, 45, 50, 51
Creative process, 103, 104
Creative tourism, 9, 82–86, 96
Creative Tourism Network, 83, 87, 97
Creative Tourism New Zealand, 86
Creativity
cultural-creativity-innovation relations, 2
culture (*see* Culture)
entrepreneurship, 5
standardization, 7
and technological advances, 3
CREATOUR Project, 82
Culinary arts, 102–106, 109–110
Culinary Art School academic model, 107, 108
Culinary Art School (CAS), 104
Culinary competence, 108, 110, 111, 116
Cultural and creative industries (CCI)
arts, 9
bibliometric study, 8
consumer searches, 3
craft beer industry, 10
development of destinations, 9
economical, 3
gamification, 10
gastronomy, 9
handicrafts, 5
and innovation relation, 4
innovative, social and sustainable entrepreneurship, 9
issues, 3
mobile applications industry, 10
in music, 3
non-traditional payment systems, 3
paradoxes, 6–8
symbolic nature, 12
symbol-intensive organizations, 4
and technology advances, 3
transborder practices, 9
UK Government Department for Culture, 4
viability and competitive advantage, 5, 6
wine industry in Baja California, 11
wine tourism and vacation, 11
Cultural industries, 2, 3, 198
Cultural tourism massification model, 86
Culture
and creativity, 2, 7
habits, 7
industries, 17–19
and innovation relation, 4
intelligence and management, 5
Mediterranean, 11
trajectory, 5
Culture-themed hotels, 64

D
Department of Culture, Media and Sport (DCMS), 18
Destinations, 82, 85, 86, 88, 89, 91, 95–97
Digital Health Innovation Plan, 125
Disease management, 125

E
Ecosystem, 76, 78
Ecosystem structure, 77
Educational innovation, 113–116
Educational model, 103, 104
E-Health, 123, 124
Electronic health record (EHR), 130
Entrepreneurs
achievements, 207, 208
collaborative networks, 162
components, 64
difficulties, 208, 209

innovation, 209–210
methodology, 68
motivation, 206
overview, 205
profile, 205
Tibetan culture, 65
2010 European Competitiveness Report, 141
European Structural and Investment Funds (ESIF), 83
Exchange valuable resources, 176
Exergames, 143

F
FDA Mobile Medical Applications, 129
Federal Economic Competition Commission (COFECE), 157
Food and Drug Administration (FDA), 125, 129
French culinary tradition, 103

G
GameMyHealth, 10, 147–149
Gamification, 10
cardio-metabolic risk factors, 139
cardiovascular/metabolic diseases, 138
contexts, 146
creative industries
competitive and growing economy, 141
digital environments, 141
economic activities, 141
economic transformations and disruptions, 142
evolution phases, 142
social entrepreneurship, 142, 143
user communities, 141
worksite health promotion, 143–146
critical factors and controllers, 147
defined, 146
healthy lifestyles, 139
movement breaks, 139
physical activity, 138
sedentary behaviours, 138
unhealthy lifestyles, 138
user alignment, 147
Gastronomy industry, 111–113
Gender equality, 200
Gender studies, 200
Geneplore model, 104
Geopolitical tensions, 67
Global financial crisis, 182
The Grape Boy, 190

H
Human creativity, 141

I
Idea conversion, 159
Idea diffusion, 159
Idea generation, 159
Independent art space, 56
In-depth learning, 105
Innovation, 104, 105
Innovation in gastronomy, 9
Innovation value chain model, 160, 175
Innovative entrepreneurship, *see* Entrepreneurs
Inter-American Development Bank (IDB), 198

K
Key Performance Indicators (KPI), 77
Knowledge
journals and articles by area, 29
journals and articles by category, 30

L
Learning-by-doing, 102, 105, 106, 117
Learning communities, 115
Lost Horizon, 64
Luxury hotel industry, 64, 66, 67
Luxury lodges, 66

M
Macroeconomic data, 69
Mercantile approach, 86
Mexico, 105, 106, 108, 113
mHealth applications, *see* Mobile Health applications
Minimum viable product, 72
Mobile applications (APPs), 123, 139, 143, 147, 149
Mobile applications industry, 10
Mobile Health applications, 139, 147
creative industry, 129–131
diagnosis monitoring, 125
e-Health, 123–125
exploratory analysis, 131, 132
global economy, 122
healthy life, 128
innovation, 122
intellectual property, 122
internal structure and organization, 122
labour market, 122
patients, 126, 128, 129

Mobile Health applications (*cont.*)
professionals, 126, 128
systematic literature review, 126, 127
users' behaviour, 125
wellness management, 125
Modus operandi, 64
Multifaceted innovation, 84
Multiple Viable Product development, 78

N
National economy, 186
National Institute for the Fine Arts (INBA), 56
Networking, 115
Non-border borderism, 48

O
Oenotourism, 187
The Orange Economy, 198
Oslo Manual, 159

P
Partners of the wine routes, 188
Personal health records (PHR), 130
Phenomenography, 105
Portraits of Mountains, 65
Portugal
activities, 92
ADDICT, 89
array of services, 88
Cerdeira Village Art & Craft, 87, 91
destinations, 90
features, 95
institutions, 90
vs. international institutions, 93, 94
issues, 94
localisation, 91
Loulé Criativo, 87, 93, 94
seized, 95
semi-structured interviews, 88
tangible and intangible dimensions, 89
websites, 89, 90
Productive institutions, 27
Productive journals, 28
Professional cuisine, 106
Professionalization, 46, 52–55, 58
Pure land of the soul, 66

R
Reacciona Tijuana, 53, 54
Regional context, 106, 107

S
Schumpeterian conceptualization, 159
Scientific production, 16, 21, 28
Scopus, 22, 28, 29, 35
Scopus® database, 28
Self-expression, 85
Self-management, 149
Smartphones, 123
Social change, 52, 60
Social entrepreneurship, 9, 142, 143
Social fabric, 52
Social innovation, 82
Social integration, 198
Social pertinence, 83
Social responsibility, 108
Socio-economic system, 162
Songtsam Group, 66
Songtsam Group of Lodges
extended supply chain and creation, 75, 76
human relation challenges, 73, 74
KPI, 69
macroeconomic data, 69
Tibetan communities, 74, 75
vision, business model, capital requirement and product definition, 70–73
Songtsam lodges locations, 71
Students' professional internships, 108, 110
Students' professional training, 114
Supply chain, 76
Sustainability sphere, 19–21
Sustainable development, 182, 191–193
Sustainable entrepreneurship, 9
See also Entrepreneurs

T
Teaching-learning process, 106
Telemedicine, 125
Terroir, 185
Tibetan communities, 65, 74, 75, 78
Tijuana, 105, 106
art education and citizenship, 54
artistic practice, 52–53
binational borderism, 49
binational context, 46, 48
border, 48
border borderism, 49
characteristics, 43, 44
city's economic and sociocultural dynamics, 60
new visual arts spaces, 55, 56, 58, 59
non-border borderism, 48
paradoxes of moment in time, 45, 46

political, economic and sociocultural power of art, 59
Reacciona, 53, 54
speed of change, 50
strategic location in world, 44, 45
transborder borderism, 49
younger artists, 60
Tijuana creative faculty and potential, 51, 52
Times Higher Education (THE), 26
Tourism experiences, 85
Tourism industry, 85
Traditional techniques, 113, 114
Transborder borderism, 49

U
United Nations Conference on Trade and Development Report (UNCTAD), 82
United Nations Development Programme, 200
Urban territories, 84

V
Videogame console, 143
Visual arts, 3, 4, 9, 21, 43, 55, 56, 58
Vocational education, 102, 107

W
Wearable technologies, 139, 145, 147
Wine Capital of Mexico, 156
Wine industry, 7, 11
Wine industry of Baja California
breadwinners, 202
cultural and creative industry
concepts, 198
creative economy, 198
culinary tourism, 199
economic contribution, 198
economic development, 197, 199
intellectual property rights, 198–199
national and international recognition, 199
public transport, 200
regional development, 198
symbiosis, 198
tourism services, 199
cultural evolution process, 202
deficiencies and constraints, 203
dimensions, 204
discrimination, 201
enology, 203
entrepreneurship, 201
equal participation, 200
extrinsic qualities, 203
family-work balance, 210
financial autonomy, 201
gender, 200
gender equality, 200, 201
male-dominated industry, 210
marketing and commercialization phase, 210
market tendencies, 203
methodology, 204, 205
public policies, 210
social development and prosperity, 201
stereotypically masculine culture, 203
young male professionals, 202
Wine Routes of Spain, 183, 187, 188
Wine sector, 186
Wine tourism sustainability, 186
Wine vacation and tourism
cultural and creative industries
economic development, 183–185
wine sector and routes, 185, 186
cultural heritage, 182
hybrid relational model, 182
place-making processes, 182
rural actors, 182
user-led innovation processes, 182
Women entrepreneurs, 201
Workplace blindness, 110, 112
Workplace pedagogy, 102, 110
Worksite health promotion, 143–146

Y
Yunnan Province, 65