

The innovation journey of new-to-tourism entrepreneurs

Rodriguez-Sanchez, Isabel^a, Williams, Allan^b, Brotons, Matilde^c

^a (corresponding author) *School of Hospitality and Tourism, Faculty of Arts and Social Studies, University of Surrey, Guildford, GU2 7XH, United Kingdom, Tel. +34 630448861; E-mail: isabel.rodriquez@surrey.ac.uk;*

^b *School of Hospitality and Tourism, Faculty of Arts and Social Studies, University of Surrey, Guildford, GU2 7XH, United Kingdom, Phone: +441483 68 6308; E-mail: allan.williams@surrey.ac.uk;*

^c *Institute of Tourism Research, University of Alicante, Edificio de Institutos; Campus de San Vicente del Raspeig, Ap. 99 E-03080, Spain; E-mail: matilde.brotons@ua.es*

The innovation journey of new-to-tourism entrepreneurs

This study addresses the neglect of an overall analysis of the generative process of innovation in tourism studies. A conceptual framework draws together the fragmented literature on the innovation process which is visualized as a series of non-linear tasks from idea generation to diffusion. The conceptual framework is explored through a systematic analysis of the tourism innovation journey of 24 new-to-tourism entrepreneurs establishing start-ups in Spain. The analysis draws on the innovators' narrations about their distinctive journeys to provide a more holistic picture of the innovation process. Drilling down into the sub-processes within each major task reveals the complexity of an innovation journey that is highly dynamic, uncertain, experimental and market-driven. A model of the innovation process is proposed based on the findings.

Keywords: innovation process; innovation journey; new-to-tourism entrepreneur; start-up; innovation task; sub-process

Introduction

The innovation process, or how innovations are developed and implemented over time (Schroeder, Van de Ven, Scudder, & Polley, 1986), has tended to be and still largely is (Garud, Tuertscher, & Van de Ven, 2013) a ‘black box’, whose complex internal workings are poorly understood. This knowledge gap is especially acute in tourism. Despite the growing research on tourism innovation (see Gomezelj, 2016 for a systematic review), the existing literature has focused mostly on the inputs into (investment, knowledge, actors, etc.) and especially the outputs from (nature and types of innovation, impact on performance, etc.) the ‘black box’. While all these areas are important, the aim of this research is to focus on the innovation process itself, providing an overview perspective which is lacking in tourism with the exception of the recent case study by Nordin and Hjalager (2017) of the innovation process in the Ice Hotel in Sweden. Research on other sectors suggests that this process, or innovation journey, tends to be non-linear, and constituted of many divergent, parallel and convergent paths to the market (Garud et al., 2013; Van de Ven, Polley, Garud, & Venkataraman, 1999). Moreover, the innovation process in services, and specifically in tourism, is especially open and dynamic, with customer interaction being integral (Hjalager, 2010; Ottenbacher, Shaw, & Lockwood, 2006; Sørensen, 2011; Toivonen & Tuominen, 2009).

Our approach to the innovation journey is informed by Hindle’s (2009) argument that innovation is a dual process, constituted of both an inventive process and an entrepreneurial process. During the innovation journey, entrepreneurs engage in a sequence of events that transform a new idea into an implemented reality (Van de Ven et al., 1999). According to Kanter (1988), these broadly correspond to the unfolding innovation process: idea generation, coalition building, idea realization and transfer or

diffusion. While there is considerable generic, and some tourism, research on many of these tasks (Camison & Monfort-Mir, 2012; Ganglmair & Wooliscroft, 2016; Hjalager et al., 2008; Ottenbacher & Harrington, 2007), the contribution of this paper lies in providing an overview of the innovation journey. It aims to do so by analyzing the sequence of events or tasks, and associated sub-processes or activities, which conform to the entrepreneurs' innovation journey.

The key tasks and sub-processes are likely to differ between start-up and established firms, while the type of entrepreneur can also determine the journey (Pavitt, 2006). Emerging tourism research suggests there is a close relationship between types of entrepreneurs and types of innovation: for example, the niche market innovations of lifestyle entrepreneurs (Ateljevic & Doorne, 2000; Shaw & Williams, 2004), or the boundary spanning innovation of networked and mobile entrepreneurs (Lowe, Williams, Shaw, & Cudworth, 2012). This paper focuses on the innovation journey of a specific type of entrepreneur, which has particular resonance in a sector with relatively low barriers to entry (Hall & Williams, 2008): new-to-tourism entrepreneurs establishing start-up firms.

The paper initially reviews the existing tourism and generic literature about the characteristics of, and main tasks in, the innovation journey. It aims to bring together disparate aspects of the innovation process contemplated in different strands of the literature (both innovation and entrepreneurial) into a single framework. The paper then explains the methodology and outlines the main features of the types of innovators and innovations studied, which are mainly technology-based and product/service innovations. Finally, the main tasks and sub-processes in the innovation process are analysed based on the entrepreneurs' narrations of their journeys. What sequence of activities follow the entrepreneurs from idea generation to diffusion of an actual

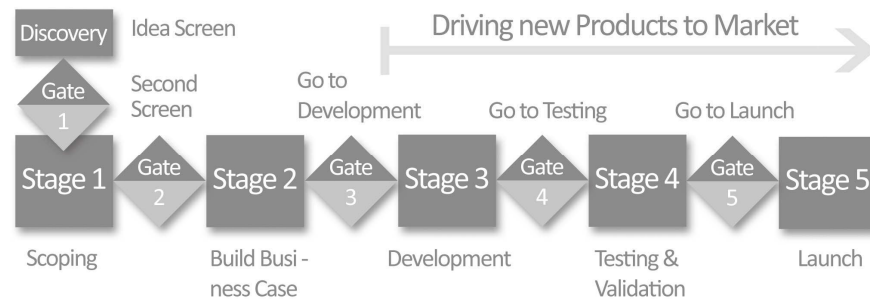
innovation? What characterizes the process of innovation? Who are the key individuals involved? What problems arise and how the entrepreneurs react to them are some of the research questions addressed in the analysis. The final section discusses the conclusions.

Understanding the innovation journey

Most of the earlier research, which dates back to the 1980s and 1990s, based on manufacturing and the study of successful intrapreneurs within major corporations, viewed the innovation process as a predictable sequence of linearly executed stages, such as invention-development-testing-launch (Cooper, 1994; Van de Ven et al., 1999). Some authors, such as Rogers (1983), added a subsequent diffusion stage. This linear model has been widely used as a roadmap for launching new products to market, such as Cooper's (1994, 2008, 2011) Stage-Gate process, based on linearly executed stages with gates or checkpoints where the activities are verified before moving to the next stage (Figure 1). However, especially from the 1980s, other scholars have characterized the innovation process as inherently dynamic (Kline & Rosenberg, 1986), uncertain (Kanter, 1983), random and slightly chaotic (Quinn, 1985; Tushman & Anderson, 1986) with unpredictable delays and setbacks. According to Schroeder et al. (1986), stage models were too simplistic to explain complex innovation processes. In response to this critique, Cooper (2014, 2016) has revised his linear model, making it more agile, dynamic and flexible. However, most innovation researchers considered the stage perspective was useful at least for clarifying the key variables operating on innovation (Amabile, 1988). Moreover, Kanter (1988) and Cooper (2014, 2016) agreed that the structural and social conditions for innovation can be better understood by dividing the process into major *tasks* or *stages* which might occur in a sequence but can also overlap. The remainder of the literature review considers the sub-processes within each of the

major tasks: idea generation; coalition building; idea realization and innovation production; transfer and diffusion.

Figure 1. Stage-Gate®* product innovation process



Source: Cooper (1994, 2008) *Stage-Gate® is a registered trademark of Stage-Gate Inc.

Source: www.stage-gate.com

Idea generation

Innovation begins with entrepreneurs who sense a new opportunity. This creative process involves ‘kaleidoscope thinking’ to rearrange existing ‘pieces’ to create a new possibility (Kanter, 1986) or a new means-end framework (Shane, 2003). There are of course many levels of newness in response to opportunities, and these vary from incremental to radical (Schumpeter, 1934). Opportunity recognition has been subject to substantial research in the entrepreneurial literature (Gaglio & Taub, 1992; Shane, 2003; Stevenson & Jarillo, 1999 among many others). Two nested phases have been identified (Ardichvili, Cardozo, & Ray, 2003; McMullen & Shepherd, 2006): discovery and evaluation.

Discovery is facilitated by several factors (Ardichvili et al., 2003): 1) alertness or propensity to notice problems or unmet needs; 2) prior knowledge which creates a ‘knowledge corridor’ (Ronstadt, 1988) for a given entrepreneur to recognize certain opportunities; 3) accidental discovery rather than a systematic search process; 4)

interaction with an extensive network of people; and 5) personality traits. Kanter (1988) also identifies structural conditions that facilitate the ability to see new opportunities. Close connection with sources of need, such as having first-hand experience of ‘real world’ needs via personal market participation, is particularly important. So also is cross-fertilisation derived from cross-disciplinary contact with those outside the field, taking advantage of ‘boundary spanners’ who benefit from broader access to potentially different knowledge (Leenders & Dolfsma, 2016). Individuals whose networks bridge the structural holes between groups have particular advantages in detecting and developing opportunities (Burt, 1992, 2004).

The process of opportunity recognition may not occur through a discrete linear process; instead, there may be a *simmering* effect as various ideas are examined, at least briefly, and sometimes repeatedly, before one is selected (Bhave, 1994). After recognizing the opportunity, *evaluation* may come immediately, but is also undertaken as a cyclical and iterative task at different points in the process of opportunity development (Harvey & Kou, 2013); that is, there is constant re-evaluation. The aims of evaluation are to clarify the initial idea and prepare it to share with others, and to make improvements and check for inconsistencies thereby reducing the risk of project failure (Perry-Smith & Mannucci, 2017). Evaluation may involve talking to informed individuals, preliminary market testing and financial viability analysis (Gaglio & Taub, 1992). Previous experience is often fundamental in this process.

Coalition building

According to Kanter (1988), this task involves power acquisition by engaging potential allies. The success of an innovation depends on the amount and kind of power behind it, while the effectiveness of entrepreneur’s ‘political activity’ can determine its fate.

Comparative studies of innovations in different sectors have revealed the importance of backers and supporters, sponsors, friends and allies (Schroeder et al., 1986) or champions (Howell & Boies, 2004). These might function as ‘social glue’ or bonding capital (Putnam, 2000) to sustain the project and can also be important network partners to bridge holes in the information flows between groups, or what Burt (1992) terms structural holes. The sources of power can consist of knowledge, finance, time and space resources, or support in the form of backing or approval (Renzulli & Aldrich, 2005). These can significantly reduce uncertainty (Arregle et al., 2015; Williams & Baláž, 2015) and provide the intrinsic and extrinsic motivation necessary to initiate and sustain the innovation process (Amabile, 1988). Ideas that are inherently better at attracting support tend to be triable, reversible, tangible, and familiar or compatible, and to be perceived as legitimate and competent (Perry-Smith & Mannucci, 2017).

Idea realization

Kanter considers that this task involves turning the idea into something tangible, such as a prototype. There are also critical organizational challenges. In start-ups, this task not only gives rise to the innovation but also the entire business.

Before proceeding with the *innovation production*, there may be further evaluation, with potential customers, experts or partners progressively drawn into the coalition, in order to verify, or seek new, insights into the product definition. This underlines the non-linear pathway, and the problems of dividing the innovation process into distinctive stages. The evaluation might involve experimentation through pilot testing, as an effective way to test the feasibility of the business concept and to enrol relevant social groups such as customers (Garud et al., 2013; Thomke, 2003). Thanks to advances in computer simulation and new tools that allow this to be done quickly and

cheaply, a full proposition (a model, a prototype) can be introduced to the customer (Thomke, 2003) who can provide information about its value and the need for product adaptation, and may even become an active co-developer (Coviello & Joseph, 2012; Cui & Wu, 2016). Flexibility and responsiveness is required throughout the entire process but especially in this task since innovations commonly encounter obstacles that require replanning and redirection (Cooper, 2016).

The concurrent process of *organizational emergence* involves various issues, but especially *assembling a working team* and *raising capital*. The first issue, building a pool of competent labor (Mowery & Rosenberg, 1979), involves a division of labor amongst those who envisioned the new venture; in most cases, teams of founders adopt different roles based on their prior experience, skills and personality traits. Internal gaps in the competences of the team may also have to be filled by accessing outside resources (accountants, lawyers, industry experts, employees with complementary knowledge, etc.). Social networks can play a significant role in securing this missing expertise (Aldrich & Ruef, 2006), and can provide bridges to sectors where a nascent entrepreneur currently has no direct ties (Granovetter, 1973; Ozdemir, Moran, Zhong, & Bliemel, 2016). The second crucial issue is *capital mobilization*. Most founders begin with limited capital and rely on their personal savings and assets, together with other capital sources such as the 3Fs: family, friends and fools or professionals (Kotha & George, 2012). Small tourism and hospitality firms are known to be reliant on these sources (Thomas, Shaw, & Page, 2011). Such reliance might be a choice, or the only option, since formal market actors such as banks and venture capital tend to see start-ups as higher risk clients (Cassar, 2004). Governments may also support the innovation venture by providing loans or grants. Funding constraints have forced many entrepreneurs to find creative ways to reduce their overall costs, improve cash flow, or

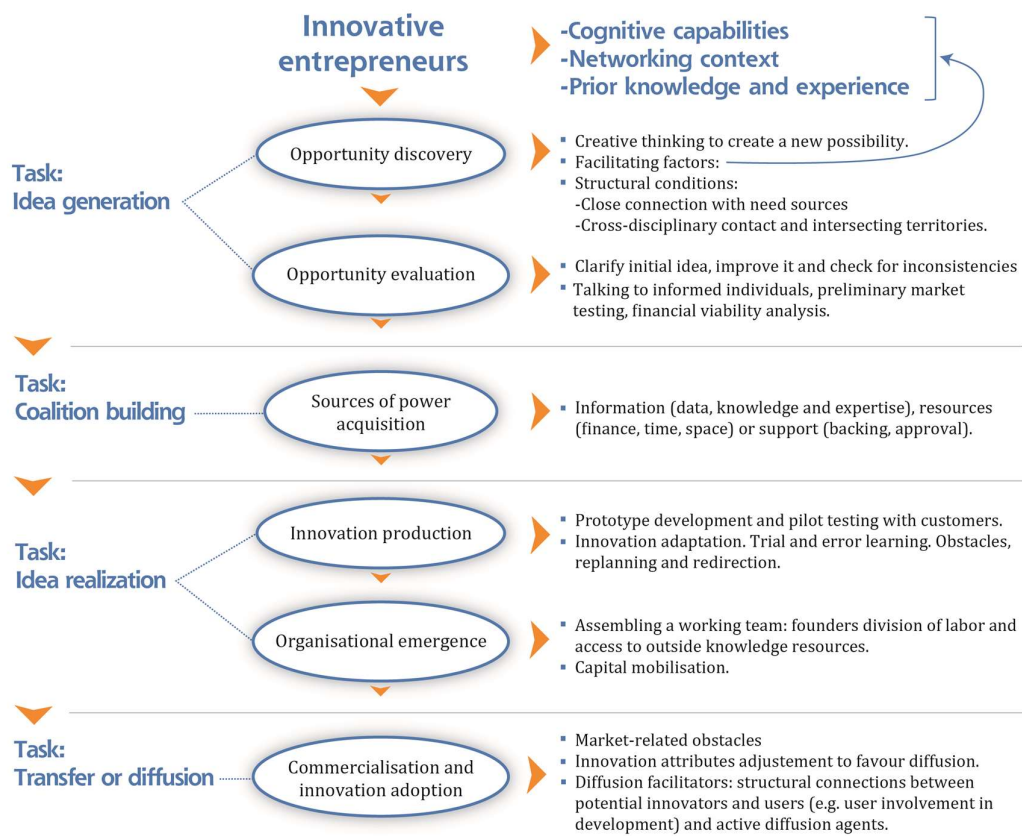
use financial sources internal to the company (Ebben & Johnson, 2006; Van Auken & Neely, 1996; Winborg, 2009). Up to 32 methods of such *financial bootstrapping* have been identified by Winborg and Landström (2001), including: owners working for below the market salary level, withholding salaries, cross-subsidizing from other businesses, or joint utilization of resources with other firms.

Transfer or diffusion

The innovation process culminates with the commercialization or the adoption of the innovation by users. However, not all innovations will achieve a critical mass of adopters (Garud et al., 2013). Rogers (1983) considers that five attributes of innovations determine their rate of adoption and likely success: 1) relative advantage or the degree to which an innovation is perceived as being better than the idea it supersedes; 2) compatibility or consistency with existing values, past experiences and needs of potential adopters (Hargadon & Douglas, 2001); 3) trialability; 4) observability of results; and 5) complexity or the degree to which an innovation is difficult to understand and use. These characteristics are not fixed but are subject to re-evaluation by the entrepreneurs. As Coviello and Joseph (2012) observed, innovators were more successful when customers had participated throughout the innovation process in multiple roles (e.g. information source, approvers, co-developers) and when the innovation was subject to a continuous process of redevelopment and re-invention (Eveland, Rogers, & Klepper, 1977). Active agents of diffusion, or bridging structures inside or outside the firms (sector associations, professionals, etc.), can also help to diffuse the innovation. However, the process of diffusion may require other people, activities, patterns and structures to change (Kanter, 1988), and this can lead to customer resistance (Kleijnen, Lee, & Wetzels, 2009; Ram & Sheth, 1989).

In summary, the literature review has sought to present a concise but comprehensive process overview, examining the nature of each major task and the different forms the journey might take depending on the choice of options or decisions taken. As previously noted and as this study attempts to corroborate, the time-order of the tasks and sub-processes described is non-linear (Figure 2).

Figure 2. Major tasks in the innovation journey and underlying sub-processes: a synthesis.



Source: authors' own elaboration based on Kanter's (1988) division of tasks

Methods

Identifying innovative entrepreneurs is challenging in the absence of comprehensive secondary data sources. Therefore, it was decided to focus on a particular group of

innovators, namely those firms participating in Spain's public programme (Emprendetur) in 2012 and 2013: this scheme grants loans to young entrepreneurs (aged under 40) who are (co)owners of innovative tourism start-ups which have been legally constituted for a maximum period of 2 years before applying. The selection served to reduce some sources of variation in the sample by focusing on innovators starting a new tourism-related business, and who were at a similar stage of the innovation process: successful entrepreneurial emergence with first sales or innovations about to be introduced in the market. This means that the observation of the journey is completed to the stage of early diffusion, which is typically a period of several years. In common with virtually all published studies of innovation, the paper is not able to explore the long term performance or survival of the innovation and the firm. Of the 23 listed start-ups/innovations in the Emprendetur programme in this period, seven were excluded due to lack of public contact information, suggesting the innovations had never progressed beyond the initial stages, indicating a potential mortality rate of about one third in these initial years. It was not possible to contact these seven firms in order to identify the reasons for their apparent demise. The final sample was therefore constituted of 16 start-ups/innovations.

Desk research about the firms and their founders (individual or multiple, see Table 1) established the situational context: the types of innovation, and the founders' identities, positions and backgrounds. Active founders, developers of their own creative ideas, were purposively selected. This task involved analysis of the firms' web sites, and the use of the business network LinkedIn where most entrepreneurs provided public information about their education and career. This also established the relationship between the types of entrepreneur and types of innovations. Finally, a data base was created with the education and prior experience of 28 founder entrepreneurs, which was

subsequently validated through personal contact with these individuals (Table 1). Given the complexity of the innovation journey, a qualitative approach was adopted. The narratives of 24 entrepreneurs from a potential list of 28 were gathered through in-depth semi-structured interviews, via Skype, given their geographical dispersion. When possible, multiple actors (founders) of the same process were approached to provide complementary perspectives and to observe the degree of coherence in their discourses (Table 1).

The interviews were designed to understand the entrepreneurs' experiences in relation to the main tasks identified by Kanter, ranging from idea generation to diffusion, with an expectation that these would not be sequential or at least not in a simple linear manner. The questions asked were related to multiple issues derived from the literature review: idea emergence, motivation to invest in tourism, resources and funding, networking and ties with the tourism sector, critical moments and obstacles, perception about the degree of novelty of their innovations, and early innovation performance. Eventually, 16 innovation journeys were retrospectively remapped based on the accounts of the 24 founder entrepreneurs who were willing to narrate their stories, including sensitive aspects of funding, mistakes and strategic issues: more than one interview was undertaken in six of the nine firms with multiple co-founders. The interviews, undertaken between July and September 2014, lasted an hour on average. All appropriate ethical research conducts were followed, including obtaining the voluntary informed consent of participants. The interview process ceased when saturation of the revealed themes was reached.

The interview recordings were transcribed and the discourses were subject to thematic analysis, defined by Braun & Clarke (2006) as a method to identify, analyse and reporting patterns (themes) within data. The six-step procedure suggested by these

authors was adopted. First, the data analysis started with the authors' familiarisation with the data while transcribing, reading and re-reading. The second step involved data coding with codes subsequently being collated in order to identify potential themes and subthemes (step three). For example, within the task of idea generation, the theme of idea evaluation was formed from the sub themes of preliminary market testing, networks, and benchmarking (Table 3). The themes illustrate the key sub-processes or sub-activities within the innovation process. The fourth step included reviewing and refining the themes and subthemes, while ensuring they formed a coherent pattern. The fifth stage involved defining and naming the themes. Finally, in order to report the analysis, extracts from the transcriptions were selected to support the validated themes and subthemes.

The rigour of the research and trustworthiness of the observations and interpretations was reviewed throughout the process. For example, the descriptive accuracy of each interview was checked during, and after, the transcription process. Internal checking and auditing was employed throughout the analysis, including memos of the coding and its modifications. At a later stage, the accuracy of the data interpretation was ensured through confirmation of the results by the internal team and by a common co-creation of meaning and understanding (Angen, 2000).

The context: types of entrepreneurs and types of innovations

None of the entrepreneurs had relevant tourism educational and professional backgrounds and, instead, came mainly from engineering, telecommunications, computing and industry manufacturing (19 of the original list of 24). A substantial number had followed their undergraduate engineering degrees with postgraduate courses, some of which were specifically designed to develop the skills and knowledge

to pursue entrepreneurial opportunities: for example, business management, innovation and entrepreneurship. Their previous experiences were mostly related to technology development and/or project management mostly in consultancy firms (Table 1).

Unsurprisingly, these entrepreneurs were mainly involved in technology-based product/service innovations (Table 2) designed to improve the management of varied tourism-related activities, especially in relation to marketing, firm-user interaction and revenue management. Another group of technological platforms provided innovative forms of learning, travelling, hotel-customer price negotiation and collecting 'big data' on tourists. Finally, two innovations were linked to more sustainable forms of mobility and parking but both have a substantial technological component. As Table 2 indicates, most tourism firms were e-businesses with a business-to-business (B2B) orientation and only 6 sold directly to the tourism user (B2C).

Two important themes emerged from the questions formulated to understand the characteristics of the innovations and entrepreneurs: the entrepreneurs' perceptions of the *degree of newness* of their innovations, and their *motivation to innovate in tourism*. Regarding the *degree of newness* of the innovations, most interviewees considered these were improvements and revisions of existing products which provided enhanced value, performance and, or unique features for their customers. Novel technologies, already in the market, were adapted to the needs of tourism, and specific niche subsectors such as ski resorts, restaurants, small and medium hotels. It is difficult to assess the extent to which their adaptation to tourism represented incremental or radical innovations, and whether they were new to the territory (the region or Spain), sector or to the world. However, only four entrepreneurs actually considered their innovations highly innovative or breakthrough, and only one was protected by a patent.

Regarding the theme of *motivation to innovate in the tourism sector*, the analysis revealed that tourism was seen by many entrepreneurs as a strong and strategic economic sector that performed relatively well in a period of economic crisis. Risk and uncertainty were perceived to be lower than in other sectors. This is exemplified by one entrepreneur:

Leisure is something indispensable and no matter how difficult things are, people will always try to have it. If this sector goes wrong others would be worse and that gives you a certain security.

Also, tourism was perceived as being a technologically-laggard sector, especially in some niche subsectors such as ski resorts, and bars and restaurants. For another group of entrepreneurs, tourism had not been their initial intended sector but after examining multiple options across several sectors, the tourism-related idea was considered the most promising and potentially value generating. Finally, some entrepreneurs referred to the appeal of tourism as providing opportunities for highly motivated work in a hobby-related field such as travelling or skiing. While the first and second main reasons are structural, the last two are individual-scale: a dominant personal motivation to be an entrepreneur and a life style orientation respectively.

The entrepreneurs responded in three main ways to the risks associated with entering a new sector without previous experience. First, some entrepreneurs mentioned that their own experience as consumers (tourists) had allowed them to detect an opportunity, representing a form of learning via observation (Hall & Williams, 2008). This is in line with previous studies which have demonstrated low barriers to entry in tourism (Hollick & Braun, 2005; Szivas, 2001) and that many new businesses emerged from consumer experiences (Morrison, Rimmington, & Williams, 1999; Williams, Shaw, & Greenwood, 1989). Other individuals had purposefully engaged in

autodidactic learning or acquired knowledge progressively during the process (Williams & Baláž, 2015). Finally, some entrepreneurs refer to having obtained industry information by engaging with other professionals or partners from tourism.

In summary, having gained insight about the types of innovations and the specific backgrounds, goals, values and motivations of entrepreneurs, we now explore the innovation journey itself.

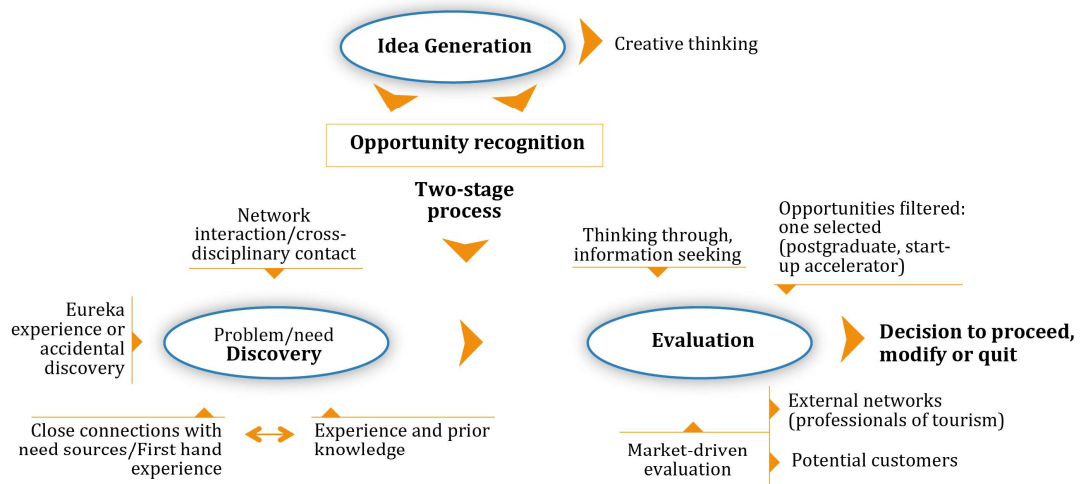
Analysis of the innovation journey

This section addresses the themes and sub themes that emerged from the analysis of the entrepreneurs' narratives and which provide insights into the key sub-processes or sub-activities in each task of the innovation journey. Some key observations are formulated in order to summarize the essence of each task.

Themes under the task of idea generation

The analysis revealed two dominant themes related to the start of the innovation process, and these are in consonance with the dual process observed in the literature review: opportunity discovery and idea evaluation. Each of these major themes has associated sub-themes (Figure 3).

Figure 3. The dual process of discovery and evaluation and its different forms



Source: authors' own elaboration

Theme: Opportunity discovery

As for the first theme, *discovery*, all the innovators demonstrated alertness to problems or needs that they could solve and, or had identified as suboptimal use of resources. Most new opportunities were recognised through first-hand experience of that need, whether in a tourist setting (e.g. an empty restaurant, while travelling, etc.) or in their respective working environments where they detected possible improvements and different approaches for tourism firms.

Once they were aware of the need, windows of opportunity opened to create a new product linked to the knowledge corridor constituted of their prior experience, which was mostly technology-based. The next extract, which involves a team of four entrepreneurs, is illustrative of this combination of factors and highlights the creative, sometimes accidental and informal, conditions of idea generation:

After the postgraduate class we went to have some beers and the bar was empty. The place was pleasant and they served good food. We wondered what was the problem, why it was empty. We thought: “It’s because they don’t have a marketing tool to attract the right people...” Also, the bar tender did not come to take the order and we joked about creating an App to order from our mobiles. It all started like that...

Only two entrepreneurs referred to different discovery conditions, such as contact with a family member working in a hotel who had brought the opportunity to their attention. Finally, only one entrepreneur referred to an accidental discovery or Eureka moment of recognition (Gaglio & Taub, 1992) under the influence of specific environment stimuli:

On the 19th of August, at 5 pm, I went downstairs to smoke a cigarette and the door of a parking place with a lot of advertisements of places to park caught my attention. And in that moment, in three and a half minutes, I conceived a whole business model based on private parking, how to do it and the technology I needed. I went upstairs, did some calculations and realized I could earn money with it.

While discovery might happen individually as in the prior example, in this sample it had mostly been a team process. The confluence of separate ideas and knowledge corridors of multiple individuals was a source of creativity. In general, the more that individuals played with ideas and twisted the kaleidoscope of reality (Kanter, 1986), the greater the creativity in the innovation process. However, the analysis also reveals the importance of the context in this creative part of the process.

Theme: Idea evaluation

After the discovery, many entrepreneurs mentioned a process of *evaluation* of the still imprecisely-defined innovative idea. Multiple sub-themes could be identified under the need to acquire initial reassurance. The first is the validation of ideas through preliminary market testing to determine whether potential customers liked the project

and their willingness to pay. In fact, one half of the interviewees recognised the positive evaluation of their ideas as being a, or the, critical moment in the innovation journey. At this initial stage, the positive feedback gave the entrepreneurs confidence that their ideas' represented real business opportunities. This provided encouragement to proceed with the journey and reduced the perceived risks of creating a new venture and being newcomers to tourism. The second sub-theme is validation through networking or coalition building under different circumstances. Some entrepreneurs solved the initial barrier of a lack of tourism industry knowledge, or direct ties to facilitate testing, through coalition building with individuals in their network who worked in tourism.

We had a contact from the ski sector that gave us confidence about the possible success of the project and also the opportunity to have a meeting with managers in a ski resort who also liked and validated the idea. Prior to this, we had only intuitively thought that our technology knowledge could be applied to this sector. [...]We were missing a key element: someone who knew the sector, with contacts, who could help us to cover that field of knowledge we lacked.

Another form of validation was attending professional encounters (e.g. hospitality and catering, and ski, exhibitions) where the entrepreneurs searched for sources of power such as information, support (idea approval and legitimacy) and potential resources (customers willing to buy the product), representing different forms of coalition building. In these cases, both tasks - idea generation and coalition building - overlapped and, in fact, different coalition sources were used as a form of evaluation, and to provide customer and market-place inputs into the project, soon after its inception. The following quote is illustrative of coalition building as a form of idea validation:

I went to the national congress of hospitality and catering eager to enter into the restaurants owners' world, explain our idea, and check whether what seemed a

good idea to us made sense to them. You tell your friends the idea and they like it but they don't belong to the sector. So, I went to the congress...I spent three days surrounded by restaurant owners and the proposal was quite successful. There, I met the president of the Spanish Federation of Hotels and Restaurants who liked the idea.

The evaluation for a group of nine entrepreneurs took place while being enrolled in various formative programmes for start-ups, accelerators or postgraduates. In these cases, their academic mentors were the coalition supporters who helped to evaluate their ideas.

Finally 'Thinking through', and seeking information to benchmark the idea and check on the existence of competitor products, was another method of evaluation.

The evidence from the interviews indicates the following two summary observations. First, innovation starts with a creative recombination of ideas between domains of knowledge, and by the interactions of individuals with their context. Ideas are both necessity and technology-driven. Secondly, rapid coalition building with market and industry stakeholders to evaluate the idea is key to starting the journey with reduced uncertainty.

Themes under the task of idea realization

Three relevant themes emerged in the process of translating the idea into something tangible: *rapid evaluation with customers, team organisation and funding and resources.*

Theme: Rapid evaluation with customers

If an idea passes the first critical evaluation, it evolves into a worthwhile opportunity, but before proceeding with the tangible innovation, the entrepreneurs undertook formal opportunity evaluations involving preliminary financial and market assessments. Rather than undertaking conventional feasibility studies, almost all the

entrepreneurs evaluated their ideas through feedback from potential customers.

One relevant subtheme that emerged is the entrepreneurs' strategy of building a prototype for customers to use as a rapid practical evaluation of their ideas, thereby obtaining early feedback on product design, development and satisfaction. As one entrepreneur explained:

It all started quickly with the prototype development, there was not an exhaustive analysis, we did the analysis on the way...the idea started practically in four months... Nowadays to create a digital product is very cheap and easy, and the info collected allows you to make future decisions.

This extract again highlights the rapidity of the process and the narrow time frame between idea conception and execution, which challenges the conceptual separation between planning and execution (Moorman & Miner, 1998). It also contrasts with the accurate product definition required before moving into development of classical models such as the Stage Gate (Cooper, 1994, 2011). Some entrepreneurs explicitly highlighted their preference for developing the innovation with minimum effort and development time. This resonates with the notion of the *Minimum Viable Product (MVP)*, a term coined by the popular entrepreneurship book *The Lean Startup* (Ries, 2011) that supports the idea of early interaction with customers and that most entrepreneurs implicitly seemed to follow.

Offering the prototype as a free trial was also a useful strategy to observe customer response, level of interest and intention to purchase. Positive feedback from customers after the trial was acknowledged as another critical moment of reassurance about the existence of a real market opportunity. The interest of an important number of clients in the free trials, or even early sales in a few cases, provided some entrepreneurs with confirmation about the feasibility of the idea.

Piloting can also offer other benefits. One group of entrepreneurs, while developing the prototype, mobilized an important ally and potential agent of diffusion. The president of the Spanish Federation of Hotels and Restaurants was incorporated into the coalition to provide expertise about market needs, and became an integral part of the design process, providing advice and sector knowledge.

The importance of piloting was underlined by one entrepreneur who regretted not having followed a strategy of interacting early on with potential customers and instead having dedicated too much time and money to the product definition and development of a product they thought – rather than knew – that customers would like.

All these cases suggested the existence of two additional sub-themes which capture the essence of the process. The first is dynamism since the innovation process is characterized by a rapid application of ideas, with innovation being shaped by the specific needs of customers who were engaged in the early stages of the process. The second is flexibility or the capacity to modify plans as a result of a positive learning. This entrepreneur explains that ‘pivoting’ is common in start-ups:

You want to do A, B and C but after trying you might realize that A and B do not work... but C does. Then, you only have to focus on C. In fact, the project has changed several times but this is very common in this technological industry which changes continuously. Having had to pivot to another model, all the short/medium term forecasts have dramatically changed. As a consequence, everything has been delayed.

The journey then requires improvisation, quick responses and a willingness to refine the general strategy. All interviewees agreed on this point, especially taking into account that – almost by definition - there are few if any referents to follow when innovating. This resonates with Ries’ (2011) observation about the need for making

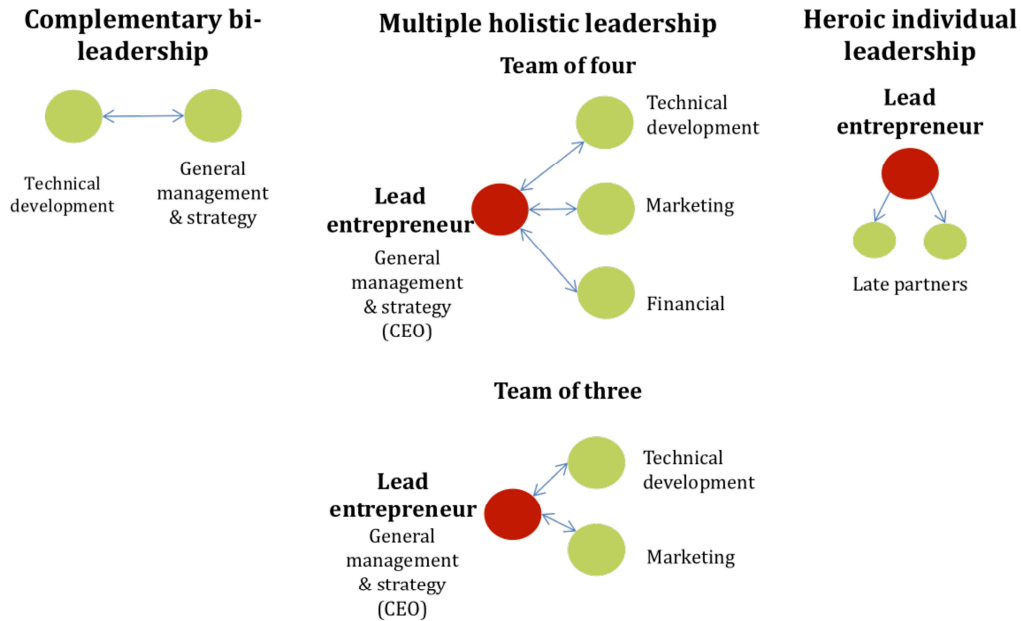
quick decisions when conditions change, whether to persevere with or change the original strategy, in order to utilise resources and time effectively.

Theme: Team organisation

In relation to how the individuals organize themselves to develop the innovation, most entrepreneurs have produced and developed their ideas in teams based on familiarity stemming from shared experiences of work, previous education and friendship. Only one third of the sample considered they had been the ‘unique individual’ who had the initial idea although most of these also recruited partners subsequently. This downplays the myth of the individual entrepreneurial hero (Schumpeter, 1934; Tushman & Anderson, 1986), and concurs with previous studies which have highlighted that teams perform better in respect of breakthrough inventions and innovation outcomes (Singh & Fleming, 2010). Collective capacity to innovate generates strong synergies in terms of: mix of skills, motivational support (in what can be a very lonely and stressful journey), increased commitment and energy (Morrison et al. 1999). Initially, the small teams of founders organized themselves as cross-functional teams, assuming different roles depending on their backgrounds, experiences (either with technology or entrepreneurship), attitudes and personalities. Accordingly, different forms of organization and divisions of labor can be identified (see Figure 4). The most common is *complementary bi-leadership* where two founders share the leadership and adopt the complementary roles of technology development and firm management and strategy. In *multiple holistic leadership* the division of labor amongst three to four members covers all the main functional areas (general management, product development, marketing and finance). Finally, in *heroic individual leadership*, of which there were only two cases, entrepreneurs start developing the innovation alone but later tend to incorporate complementary partners while still providing strong

leadership. All the interviewees agreed on the idea that teams with more individuals providing more and diverse knowledge and skills, and with a clear functional diversity, was key facilitating the development of the innovation.

Figure 4. Division of labor adopted during the innovation journey



Source: authors

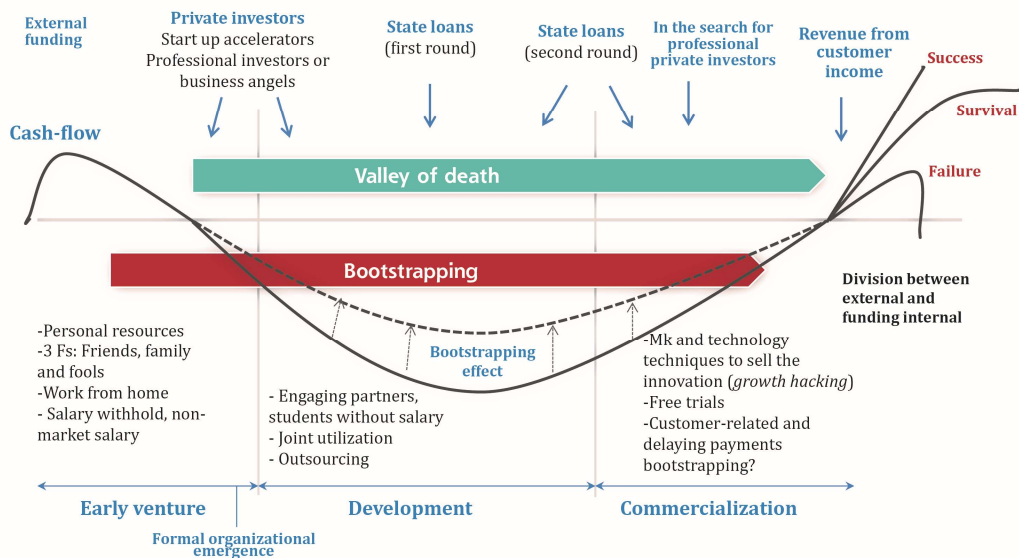
Theme: funding and resources

One of the biggest threats the entrepreneurs encountered to successful completion of the task of development was the lack of resources, or traversing the Valley of Death.

All the entrepreneurs recall traversing the 'Valley of Death', the gap between set-up costs and revenue generation, as being the most critical part of the journey when they faced decisive challenges in relation to resources (both financial and human). The lack of finance was mentioned by every single interviewee as a recurrent barrier along

the journey and as having consequences for other internal barriers, especially relating to acquiring people, knowledge and skills. Initially, they all had modest resources (personal savings complemented by the ‘three Fs’) and only a minority had funding from external sources other than the Emprendetur programme loans. *Cash-flow* or liquidity problems were only occasionally alleviated by government loans, some limited early sales in a few cases, or a wide range of bootstrapping techniques utilized at key moments of the journey (Figure 5).

Figure 5. Sources of funding as the organisation develops



Source: authors

Bootstrapping, was a dominant sub-theme that emerged from the analysis of the interviews. In the early stages, the predominant types of bootstrapping focused on saving on infrastructure costs, such as running the business from home, or reliance on the founder’s personal resources, such as foregoing salary or working in another business to generate income to sustain the project. These are techniques that, in the

main, do not require the mobilization of social networks. However, as the company develops, the need for additional and different knowledge (e.g. technological, marketing, etc.) emerges, and social networks play a more prominent role in enabling access to bootstrap these resources (Jones & Jayawarna, 2010). Different bootstrapping methods are utilized to bring human capital into the company, with varying cost implications: for example, engaging students at no or low cost, sharing employees with other companies, and offering partnerships to individuals in lieu of salary. As one entrepreneur explained:

Since we did not have money to pay a salary we offered partnerships to two really good professionals with a lot of experience in innovation and technology and we incorporated them as part-time technological partners. When they finish their work hours in another company they work in our project. However, this makes the project less dynamic than we would like and has caused delays.

Therefore, while bootstrapping may be a necessary response to financial constraints, it can be detrimental to firm performance (Ebben, 2009) and can even increase transaction costs (Williamson, 1981). Some techniques involve strategic issues and the efficient use of resources and these are positively related to firm performance, while others are reactions to cash flow problems and have limited or even negative impacts on longer terms business outcomes (Jones & Jayawarna, 2010).

Paradoxically, the absence of funding serves to compress time and there is a need to learn, react and get the product out to the market more quickly, which can be detrimental for innovation and creativity (Amabile, 1988; Kanter, 1986). As stated by this entrepreneur:

You need time to test things and find the right formula and time means money. If you don't have time to mature the idea and you ran out of money before then you

are blocked, and become more worried about how to continue rather than thinking about the original idea.

A final sub-theme was government support. In addition to internal resources, state support through loans has been critical to alleviating the difficulties of the transition from invention to product development and commercialization. In general, external credit has a positive impact on the entrepreneurs' confidence and motivation. Specifically, it facilitated more rapid innovation development especially because it allowed the acquisition of external specialized knowledge. Other forms of governmental support, acknowledged by a number of entrepreneurs, are the provision of co-working space, participation in sponsored business incubators, and informal assessment and networking among the participants in the *Emprendetur* programme.

In summary, the evidence from the analysis suggests the following. First, that in startups, especially those dealing with technology-based innovations, the execution of the idea follows an agile, accelerated and flexible process to minimize the innovation risks. Second, the innovative product/service is not completely defined from the beginning but gains definition during early experimenting, often with the customer. Third, functionally diverse teams facilitate the innovation process. Fourth, the development of the innovation is a temporally complex sub-process with activities being undertaken concurrently rather than sequentially to accelerate the process, for example, idea validation, idea realization and coalition building. Fifth, traversing the Valley of Death is one of the biggest risks every innovation faces, and bootstrapping is a common resource-related strategy to manage this risk. Sixth, in the cultural and institutional setting of this particular group of entrepreneurs, the governmental loan scheme played a key role in reducing the risks of innovation.

Themes under the task of Transfer and diffusion

Two dominant themes emerged in relation to the task of communicating the relative advantages of the innovations to the market, which both focus on the challenges encountered: *diffusion obstacles* and *strategies to overcome obstacles* which we present together because their close intersection.

Some key obstacles were evident in the analysis. First, technology adoption barriers have been encountered, especially by those working with more conservative, technology-laggard sectors such as restaurants (Chen & Elston, 2013) and ski stations. Bars and restaurants were described as being ‘traditional and conservative, literally afraid of technology and innovation’. One entrepreneur discovered that trying to sell his firm’s marketing tool as being innovative actually intimidated the customer who perceived it as something new not previously validated by others, and thus without precedents to follow. Observing the customers’ fear to embrace something that they considered to have questionable legitimacy, the entrepreneur had to change the message and present the product as non-innovative, as being something they were already doing but with a different technology. They tried to ‘normalize’ the innovation to make it less uncertain and more compatible with the customers’ experience and values. Similarly, another entrepreneur had ‘to educate’ the customers, emphasizing the innovation’s low complexity and compatibility with their current practices.

Another key to overcoming this obstacle was making the customers an integral part of the design, incorporating their input and feedback through product testing. However, even when customer feedback is incorporated into the design, problems can still arise when it comes to the final use of the technology. One entrepreneur explained that there is a gap between what the user intends to do and what is finally done in practice, and that adapting the project to the user’s real behavior was the biggest challenge. This gap illustrates how difficult it is to anticipate how the innovation will

perform in the real world. It is impossible to eliminate uncertainty even though risks can be managed (Williams & Baláž, 2015). Even the better planned projects can not guarantee customer acceptance but, as one entrepreneur insisted, co-production with the customers at this stage is vital:

Asking the customers about how they were using the product. Meeting them, solving problems when they did not know how to use the technology. Going to see how they actually use it, how they would like to use it, and then giving them what they want.

This emphasizes the importance of continuous improvements and testing the final product face to face with the customers, that is, customizing the innovation as part of the diffusion task.

Nevertheless, overcoming the tension between the innovation and existing practices is challenging. The more radical the degree of change brought about by the innovation, the more likely it is to conflict with current habits, and to encounter substantial resistance (Kleijnen et al., 2009; Oreg, 2003). The entrepreneur who implemented the hotel parking-related innovation (see Table 2) explained:

We offer people parking spaces, something people are used to doing in a totally different manner. Now, instead of looking through your window for a free space, you have to look at your mobile App and this change of habit takes time.

The ski entrepreneurs encountered the additional obstacle of barriers to new entrants to a sector (mountain tourism) which they described as ‘closed-minded where everyone knows each other and it is important to have references and other customers from inside to demonstrate you are reliable’. Their challenge was to obtain the initial trust of the first customer willing to adopt in the absence of precedents to follow amongst other potential users (Rogers, 1983). Their strategy was to offer free trials and

thus be able to say that they already had a functioning product in another ski station. This strategy to bridge uncertainty and secure legitimacy took advantage of the trialability attributes of the innovation, and worked on enhancing the observability of the results of the first adopters.

Finally, most entrepreneurs refer to the challenge of transforming innovation acceptance (customers like the innovation, and recognize the creativity and originality which lie behind it) into effective acquisition. As one entrepreneur stated: ‘Everyone likes the innovation, but acquiring it... that is a different story’.

Some strategies have already been referred to such as free trials to expose the customer to the product; other entrepreneurs progressively added value enhancing the functional capabilities of the innovation and made the adopters aware of its relative advantage and utility so that it ended up being considered essential:

The ski resort users not only thank the resort for offering this service but they now openly demand it. From being a tool for information, it has evolved to being a tool for making decisions whether or not to go skiing.

In summary, the evidence suggest the following summary observations. First, ‘normalizing’ the innovation and inserting it appropriately in the understanding of customers, and patterns of use in a specific environment, can favor innovation adoption. Secondly, trials and prototypes are valued as forms of experimenting and enhance the observability of the innovation.

Themes under the task of Coalition building

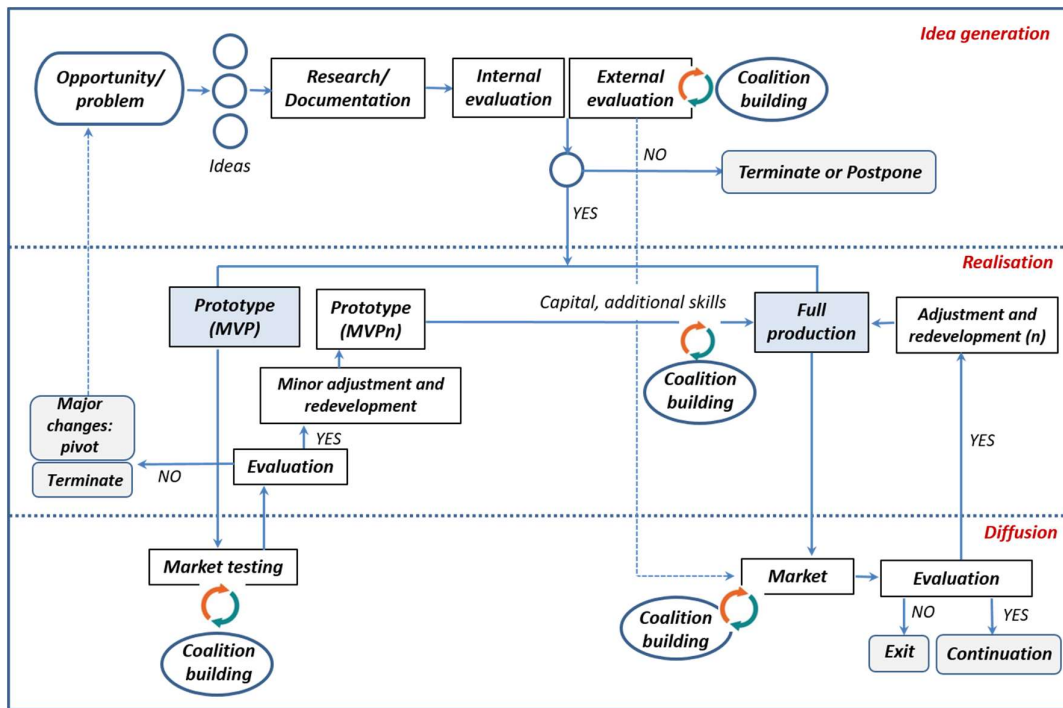
The interviews revealed the importance of the theme information and support networks to reduce the risks of innovation. These networks involved customers approving the ideas at an early stage or being actively involved in idea realization, acting as critical evaluators after engaging in the trials, and using their expertise to

sharpen and focus the early product definition. The networks were mostly established during the fragile stage of idea realization, with other key stakeholders (mainly the government and, to a lesser extent, private investors) contributing funds and other resources, to support taking the innovation to the market, and giving legitimacy to the project. The coalition structure has also been enriched through networking with individuals with complementary knowledge to that already possessed by their teams. During the diffusion, the coalition efforts continued with customers providing information to refine the final product.

Contrary to Kanter (1989), who considered coalition building as the second task of the innovation process, this analysis has revealed that coalition building is a transversal and continuous task throughout the journey.

In summary, the analysis has facilitated a better understanding of a complex journey with multiple agents involved in iterative and concurrent activities. Based on this analysis, Figure 6 is proposed as a model that captures more accurately the essence of the innovation process.

Figure 6. The innovation journey model



Source: authors' own elaboration

Discussion and conclusions

Despite the importance attached to innovation as a driver of competitiveness and performance, there are virtually no systematic studies of the entire process of tourism innovation. Rather there is mostly a largely fragmented and mostly suggestive tourism literature on different aspects of this process. This paper has sought to look into the grey box by presenting an overview and empirical analysis of the innovation journey of a specific type of entrepreneur: those who followed a distinctive start-up process. This also contributed to the study of an important, but relatively understudied type of entrepreneur – ‘the new to entrepreneur’ – and more generally to the still emerging field of research on different types of tourism entrepreneurship (Li, 2008). Its key contribution has been to knit together the analysis of different tasks into a systematic

account of the tourism innovation journey. Each innovation biography contributed to constructing a more holistic analysis of the journey, which has been summarised in some major observations at the end of our accounts of particular tasks. Drilling down into the sub-processes within each major task revealed the complex set of events which constituted the journey, and the considerable diversity of journeys even within a relatively homogeneous sample of new-to-tourism entrepreneurs.

At the same time, a number of commonalities in the innovation journey have emerged from these narrations. First, there is considerable propensity to generate tourism innovation via imported knowledge from other fields, especially technology (Hall & Williams, 2008; Jacob, Tintoré, Aguiló, Bravo, & Mulet, 2003; Orfila-Sintes, Crespí-Cladera, & Martínez-Ros, 2005; Rodríguez, Williams, & Hall, 2014; Stamboulis & Skayannis, 2003). The fact that none of the entrepreneurs who obtained grants had backgrounds in tourism – even though the scheme was open to all potential entrepreneurs - challenges traditional generic literature assumptions about the importance of working in a sector as a source of ideas (Vesper, 1996). Instead, being outsiders to tourism can provide new perspectives and a greater awareness of new possibilities, and be a source of creativity. However, the innovation process also requires knowledge of tourism and this has compelled the entrepreneurs, at different points, to seek out individuals with tourism knowledge so as to address these structural holes (Burt, 2000). This notion of innovation by ‘in-migration’ questions the entrepreneurial and innovative capacity within the tourism sector (also acknowledged by Hjalager, 2002; Ioannides & Petersen, 2003; Nordin & Hjalager, 2017, among others), and merits future research in context of the complex sourcing of knowledge via mobility identified by Lowe et al. (2012).

The study empirically provides confirmation that the process does not follow the linear stages of existing traditional models which describe innovation in already established manufacturing firms (e.g. Stage Model of Cooper or Kanter's model). The startup process analysed has more agile dynamics in which a product/service (not necessarily fully developed) is quickly and constantly evaluated and adapted to the market (Figure 6). Knowledge is not incorporated through deep formal initial research but progressively through experimentation. This Doing, Using and Interacting experienced-based mode of learning (Jensen, Johnson, Lorenz, & Lundvall, 2007) has also been noted by Nordin and Hjalager (2017) in their Icehotel innovation case study and seems to be appropriate to the tourism sector. The fact that the service has a technological component favors and facilitates this experimentation with the customer and the integration of this into the process. User-driven and agile innovation approaches or methods which have gained progressive importance (e.g. Lean Startup) are inspiring new practices which require rethinking existing frameworks especially when dealing with more innovative projects (Cooper, 2016). In order to accelerate the process, many activities overlap rather than forming a neat, orderly sequence. This is especially evident in the constant evaluation and coalition building over time with different key stakeholders. Evaluation is critical to guiding this process, with learning and flexible modification of the existing path.

While we have shone a light on the intermeshing of tasks and sub-processes within the innovation journey, each of these requires further examination individually, and in terms of their inter-relationships. The tasks and sub-processes have to be sufficiently flexible and adaptable to the needs of each journey. There is no optimal 'one size fits all' process model.

Another key characteristic of the process, its uncertainty, highlights the importance of risk management along the process and according to the characteristics of the tourism domain (Williams & Balaz, 2015). Some examples have been provided of risk management strategies, for example, information-related strategies in the coalition building (e.g. acquiring knowledge about customers' needs or knowledge of the tourism sector in order to shift the knowledge and uncertainty border) or funding-related strategies such as bootstrapping. Finally, strategies have also been adopted by the entrepreneurs in order to minimize the customers' perception of the risks associated with acquiring the innovation.

Even though anticipating and managing risks is important, the journey is fraught with a series of real and dynamic obstacles. The barriers to innovation are fluid and evolving but the financial ones have been particularly persistent and intense and, in turn, have influenced other barriers such as a lack of skilled personnel or time. These barriers are mutually reinforcing (Mohnen & Rosa, 2000), have constrained creativity and have dampened motivation (Amabile, 1988), and have delayed the innovation journey. Even when the journey has seemed to approach its immediate objective, other market related barriers (functional and psychological) have been observed in the diffusion task linked to the perceived attributes of the innovations. Some innovation characteristics –indeed, even the very idea of being innovative – face customer resistance (Hargadon & Douglas, 2001), requiring different strategies (communication, product and market strategies) to make the innovations more acceptable, compatible and familiar (Ram & Sheth, 1989).

The narrations also revealed that the innovation journey is a collective achievement (Leenders & Dolfsma, 2016) that relies not only on the action and knowledge of cross-functional teams within the firms (Somech & Drach-Zahery, 2013)

but also on the teams' ability to benefit from external ties in critical moments.

Multilevel social networks (governments, potential customers, industry professionals, individuals with complementary skills, etc.) bring and pool essential knowledge, funding and support. The exchange of knowledge with these actors, and the positive learning which results from engaging with the obstacles, make the innovation process knowledge-intensive (Corbett, Neck & DeTienne, 2007). Most entrepreneurs would and could do things differently, and the journey would be faster although not necessarily more ordered, if they had to start again.

The narratives also indicated conditions which favour negotiating the innovation journey. First, those with prior experience (especially entrepreneurial) have brought crucial organizational knowledge to the new venture, and have been able to react quickly to setbacks and new challenges. However, in line with our earlier observation about the collective nature of the innovation journey, a second positive factor has been starting the journey with an effective cross-functional team, providing multiple holistic leadership. Moreover the intersection of the knowledge corridors of more than one individual can be critical. Entrepreneurial teams present a larger pool of labour and richer set of skills than possessed by a single founder (Somech & Drach-Zahery, 2013). Incorporating outside members to fill voids in key functions provides a positive impulse to innovation, as evidenced also in the importance of the early establishment of partnerships and alliances with individuals who could fill gaps in their knowledge of the tourism sector. In summary, the entrepreneurs who performed better were those capable of building, maintaining and exploiting effective intra and cross organizational networks (Leenders & Dolfsma, 2016).

Second, it has been important to dedicate time to rapidly developing an understanding of marketplace needs, customizing the idea to these and, as observed by

Coviello and Joseph (2012), making the customer an integral part of the process. This is in line with what previous studies in tourism have stated about successful tourism innovation requiring close customer contact both in the idea generation and implementation phases (Hjalager & Nordin, 2011; Ottenbacher et al., 2006; Sørensen, 2011). Finally, because it is difficult to anticipate the difficulties of the journey, the innovation is more likely to progress when the entrepreneurs are flexible (e.g. to customer needs), able to improvise and resourceful in using their networks to acquire resources especially when crossing the valley of death (e.g. by bootstrapping). Moreover, the journey will not proceed without resilient entrepreneurs (Ayala & Manzano, 2014) strongly committed (Hindle, 2009) and motivated (Amabile, 1988) to persevere despite frustrations and setbacks.

The observation of the journey also provides insights that can inform the work of policy making and implementation bodies, and ultimately can contribute to more effective tourism innovation practices. The fact that the process is non-linear should be acknowledged by the policy makers (Jensen, et al., 2007) adapting their policy instruments to new forms of user-driven, experimental, informal and accelerated forms of R&D and innovation in tourism. Moreover, when providing support, it is necessary to follow the innovation beyond the initial start-up through to the tasks of diffusion or growth. Governmental tourism bodies are usually in a privilege position to provide ties with relevant established tourism industry players. This might involve favoring networking between already established firms and entrepreneurs (in B2B cases) to 1) test the innovations in the real market; 2) acquisition of startups innovations; 3) co-initiation of innovation processes. A different mix of policy instruments will be necessary at different points (mentoring, funding, networking, etc.), and perhaps in relation to different tasks (e.g. to incorporate human resources into the R&D process

and other key organizational areas such as marketing, management and internationalization). Also, the agility of the process implies the need for governments to be agile and adapt themselves to this reality (e.g. speed up decision making and execution of funding, alleviate bureaucracy, etc.). Furthermore, since funding is such a crucial aspect, the government plays a key role in providing incentives for the private capital to invest in innovative startups through tax benefits and other types of incentives. However, there are not fixed policy recipes since every cultural, institutional and political context would require its own ad-hoc measures.

Finally, the heterogeneity and the contingent nature of the innovation process mean that caution is required in respect of generalization and extrapolation of the findings: the results are context-dependent, and the sample selection involves specific types of entrepreneurs and innovations, and is tied to the development of a start-up. The innovation process is culturally determined (Garud et al., 2013) and might differ in other tourism innovation journeys (e.g. less technological forms of innovation, more complex and higher risk projects) by other types of entrepreneurs in different cultural, political and institutional contexts, and these need to be analyzed. Moreover since this research has focused on the early task of innovation diffusion, future research should follow the processes in a longitudinal study which explores the firms' development patterns (survival, growth, closure) and both the short and long term outcomes of the innovations. A better understanding of the diffusion phenomena is needed (Peres, Muller, & Mahajan, 2010) capturing the idiosyncrasies of the tourism market (e.g. modelling the process, new customer consumption trends and communication patterns, etc.). This remains a notable gap in the tourism innovation literature and there are lessons to be learnt from future studies of the factors influencing innovation/firm survival or closure that could inform both practice and policy. Longitudinal case studies

of the entire journey are especially important, not only to overcome methodological issues relating to post rationalization, but also to capture both immediate and longer term responses to critical moments. Such insights can help to inform best practices and supportive policies.

References

- Aldrich, H., & Ruef, M. (2006). *Organizations evolving* (2nd ed.). London: Sage.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123-167. Retrieved from http://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Group_Performance/Amabile_A_Model_of_CreativityOrg.Beh_v10_pp123-167.pdf
- Angen, M. J. (2000). Pearls, pith and provocation. Evaluating interpretative enquiry: reviewing the validity debate and opening the dialogue. *Qualitative Health Research*, 10(3), 378-395. <http://doi.org/10.1177/104973230001000308>
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18, 105-123. [http://doi.org/10.1016/S0883-9026\(01\)00068-4](http://doi.org/10.1016/S0883-9026(01)00068-4)
- Arregle, J. L., Batjargal, B., Hitt, M. A., Webb, J. W., Miller, T., & Tsui, A. S. (2015). Family ties in entrepreneurs' social networks and new venture growth. *Entrepreneurship Theory and Practice*, 39(2), 313-344. <http://doi.org/10.1111/etap.12044>
- Ateljevic, I., & Doorne, S. (2000). Staying within the fence: lifestyle entrepreneurship in tourism. *Journal of Sustainable Tourism*, 8(5), 378-392. <http://doi.org/10.1080/09669580008667374>
- Ayala, J. C., & Manzano, G. (2014). The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis. *Journal of Economic Psychology*, 42, 126-135. <http://doi.org/10.1016/j.joep.2014.02.004>
- Bhave, M. (1994). A process model of entrepreneurial venture creation. *Journal of Business Venturing*, 9(3), 223-242. [http://doi.org/10.1016/0883-9026\(94\)90031-0](http://doi.org/10.1016/0883-9026(94)90031-0)

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
<http://doi.org/10.1191/1478088706qp063oa>
- Burt, R. (1992). *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.
- Burt, R. (2000). The network structure of social capital. *Research in Organisational Behaviour*, 22, 345–423. [http://doi.org/10.1016/S0191-3085\(00\)22009-1](http://doi.org/10.1016/S0191-3085(00)22009-1)
- Burt, R. (2004). Structural Holes and Good Ideas. *American Journal of Sociology*, 110(2), 349–399. <http://doi.org/10.1086/421787>
- Camisón, C., & Monfort-Mir, V. M. (2012). Measuring innovation in tourism from the Schumpeterian and the dynamic-capabilities perspectives. *Tourism management*, 33(4), 776-789. <http://doi.org/10.1016/j.tourman.2011.08.012>
- Cassar, G. (2004). The financing of business start-ups. *Journal of business venturing*, 19(2), 261-283. [http://doi.org/10.1016/S0883-9026\(03\)00029-6](http://doi.org/10.1016/S0883-9026(03)00029-6)
- Chen, S. C., & Elston, J. A. (2013). Entrepreneurial motives and characteristics: An analysis of small restaurant owners. *International Journal of Hospitality Management*, 35, 294-305. <http://doi.org/10.1016/j.ijhm.2013.07.002>
- Cooper, R. G. (1994). Third generation new product processes. *Journal of Product Innovation Management*, 11(1), 3-14. [http://doi.org/10.1016/0737-6782\(94\)90115-5](http://doi.org/10.1016/0737-6782(94)90115-5)
- Cooper, R. G. (2008). Perspective: The Stage-Gate[®] Idea-to-Launch Process—Update, What’s New, and NexGen Systems. *Journal of Product Innovation Management*, 25(3), 213–232. <http://doi.org/10.1111/j.1540-5885.2008.00296.x>
- Cooper, R. G. (2011). *Winning at new products: Creating value through innovation* (4th ed.). New York: Basic Books.
- Cooper, R. G. (2014). What’s next? After Stage-Gate. *Research Technology Management*, 57(1), 20-31. <http://doi.org/10.5437/08956308X5606963>
- Cooper, R. G. (2016). Agile–Stage-Gate Hybrids. *Research-Technology Management*, 59(1), 21-29. <http://dx.doi.org/10.1080/08956308.2016.1117317>
- Corbett, A. C., Neck, H. M., & DeTienne, D. R. (2007). How corporate entrepreneurs learn from fledgling innovation initiatives: Cognition and the development of a termination script. *Entrepreneurship Theory and Practice*, 31(6), 829-852.
<http://doi.org/10.1111/j.1540-6520.2007.00208.x>

- Coviello, N., & Joseph, R. (2012). Creating major innovations with customers: Insights from small and young technology firms. *Journal of Marketing*, 76(6), 87-104. <http://doi.org/10.1509/jm.10.0418>
- Cui, A. S., & Wu, F. (2016). Utilizing customer knowledge in innovation: antecedents and impact of customer involvement on new product performance. *Journal of the Academy of Marketing Science*, 44(4), 516-538. <http://doi.org/10.1007/s11747-015-0433-x>
- Ebben, J. J. (2009). Bootstrapping and the financial condition of small firms. *International Journal of Entrepreneurial Behavior & Research*, 15(4), 346-363. <http://doi.org/10.1108/13552550910967930>
- Ebben, J. J., & Johnson, A. (2006). Bootstrapping in small firms: An empirical analysis of change over time. *Journal of Business Venturing*, 21(6), 851-865. <http://doi.org/10.1016/j.jbusvent.2005.06.007>
- Eveland, J., Rogers, E., & Klepper, C. (1977). *The innovation process in public organizations: Some elements of a preliminary model* (Report to the US National Science Foundation RDA75-17952). Ann Arbor: Department of Journalism, University of Michigan.
- Gaglio, C., & Taub, P. (1992). Entrepreneurs and opportunity recognition. In N. Churchill, S. Birley, W. Bygrave, D. Muzyka, & W. Wetzel (Eds.), *Frontiers of Entrepreneurship Research* (pp. 136-147). Wellesley, MA: Babson College.
- Ganglmair, A., & Wooliscroft, B. (2016). Diffusion of innovation: The case of ethical tourism behavior. *Journal of Business Research*, 69(8), 2711-2720. <http://doi.org/10.1016/j.jbusres.2015.11.006>
- Garud, R., Tuertscher, P., & Van de Ven, A. H. (2013). Perspectives on innovation processes. *The Academy of Management Annals*, 7(1), 775-819. <http://doi.org/10.1080/19416520.2013.791066>
- Gomezelj, D. O. (2016). A systematic review of research on innovation in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 28(3), 516-558. <http://doi.org/10.1108/IJCHM-10-2014-0510>
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380. <http://doi.org/10.1086/225469>
- Hall, C., & Williams, A. (2008). *Tourism and innovation*. London: Routledge.

- Hargadon, A., & Douglas, Y. (2001). When Innovations Meet Institutions: Edison and the Design of the Electric Light. *Administrative Science Quarterly*, 46(3), 476-501. <http://doi.org/10.2307/3094872>
- Harvey, S., & Kou, C. (2013). Collective engagement in creative tasks. *Administrative Science Quarterly*, 58(3), 346-386. <http://doi.org/10.1177/0001839213498591>
- Hindle, K. (2009, February). *The relationship between innovation and entrepreneurship: easy definition, hard policy*. Paper presented at 6th AGSE International Entrepreneurship Research Exchange, Adelaide, South Australia. Retrieved from <http://www.kevinhindle.com/publications/J4.2009-AGSE-Hindle-Inn-Ent-Pol.pdf>
- Hjalager, A. M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*, 23, 465-474. [http://doi.org/10.1016/S0261-5177\(02\)00013-4](http://doi.org/10.1016/S0261-5177(02)00013-4)
- Hjalager, A. M. (2010). A review of innovation research on tourism. *Tourism Management*, 31, 1-12. <http://doi.org/10.1016/j.tourman.2009.08.012>
- Hjalager, A. M., Huijbens, E., Björk, P., Nordin, S., Flagestad, A., & Knútsson, Ö. (2008). *Innovation systems in Nordic tourism* (Report No 06015). Oslo: Norden, Nordic Innovation Centre. Retrieved from http://nordicinnovation.org/Global/_Publications/Reports/2008/Innovation%20systems%20in%20Nordic%20tourism.pdf
- Hjalager, A. M., & Nordin, S. (2011). User-driven innovation in tourism—A review of methodologies. *Journal of Quality Assurance in Hospitality & Tourism*, 12(4), 289-315. <http://doi.org/10.1080/1528008X.2011.541837>
- Hollick, M., & Braun, P. (2005). Lifestyle entrepreneurship: the unusual nature of the tourism entrepreneur. In *Proceedings of the Second Annual AGSE International Entrepreneurship Research Exchange*. Melbourne, Australia: Swinburne Press.
- Howell, J., & Boies, K. (2004). Champions of technological innovation: The influence of contextual knowledge, role orientation, idea generation, and idea promotion on champion emergence. *The leadership quarterly*, 15(1), 123-143. <http://doi.org/10.1016/j.leaqua.2003.12.008>
- Ioannides, D., & Petersen, T. (2003). Tourism ‘non-entrepreneurship’ in peripheral destinations: A case study of small and medium enterprises on Bonholm, Denmark. *Tourism Geographies*, 5(4), 408-435. <http://doi.org/10.1080/1461668032000129146>

- Jacob, M., Tintoré, J., Aguiló, E., Bravo, A., & Mulet, J. (2003). Innovation in the tourism sector: results from a pilot study in the Balearic Islands. *Tourism Economics*, 9(3), 279-295. <http://doi.org/10.1177/135481660300900303>
- Jensen, M. B., Johnson, B., Lorenz, E., & Lundvall, B. Å. (2007). Forms of knowledge and modes of innovation. *Research policy*, 36(5), 680-693. <http://doi.org/10.1016/j.respol.2007.01.006>
- Jones, O., & Jayawarna, D. (2010). Resourcing new businesses: social networks, bootstrapping and firm performance. *Venture Capital*, 12(2), 127-152. <http://doi.org/10.1080/13691061003658886>
- Kanter, R. M. (1983). *The Change Masters*. London: Unwin.
- Kanter, R. M. (1986). Creating the creative environment. *Management Review*, 75, 11-12.
- Kanter, R. M. (1988). When a thousand flowers bloom: structural, collective, and social conditions for innovation in organisations. In L. L. Cumming (Ed.), *Research in organizational behavior* (pp. 169–211). Greenwich, CT: JAI Press.
- Kleijnen, M., Lee, N., & Wetzels, M. (2009). An exploration of consumer resistance to innovation and its antecedents. *Journal of Economic Psychology*, 30(3), 344-357. <http://doi.org/10.1016/j.joep.2009.02.004>
- Kline, S. J., & Rosenberg, H. (1986). An overview of innovation. In R. Landau & R. Rosenberg (Eds.), *The positive Sum Game* (pp. 275-305). Washington DC: National Academy Press.
- Kotha, R., & George, G. (2012). Friends, family, or fools: Entrepreneur experience and its implications for equity distribution and resource mobilization. *Journal of Business Venturing*, 27(5), 525-543. <http://doi.org/10.1016/j.jbusvent.2012.02.001>
- Leenders, R. T., & Dolfsma, W. A. (2016). Social networks for innovation and new product development. *Journal of Product Innovation Management*, 33(2), 123-131. <http://doi.org/10.1111/jpim.12292>
- Li, L. (2008). A review of entrepreneurship research published in the hospitality and tourism management journals. *Tourism management*, 29(5), 1013-1022. <http://doi.org/10.1016/j.tourman.2008.01.003>
- Lowe, M., Williams, A., Shaw, G., & Cudworth, K. (2012). Self-organizing innovation networks, mobile knowledge carriers and diasporas: insights from a pioneering

- boutique hotel chain. *Journal of Economic Geography*, 12(5), 1113-1138.
<http://doi.org/10.1093/jeg/lbs021>
- McMullen, J., & Shepherd, D. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31(1), 132-152. <http://doi.org/10.5465/AMR.2006.19379628>
- Mohnen, P., & Rosa, J. (2002). Barriers to innovation in service industries in Canada. In M. Feldman & N. Massard (Eds.), *Institutions and Systems in the Geography of Innovation* (pp. 231-250). Boston: Kluwer Academic Publishers.
- Moorman, C., & Miner, A. (1998). The convergence of planning and execution: improvisation in new product development. *Journal of Marketing*, 62(3), 1-20.
<http://doi.org/10.2307/1251740>
- Morrison, A., Rimmington, M., & Williams, C. (1999). *Entrepreneurship in Hospitality, Tourism and Leisure Industries*. London: Butterworth-Heinemann.
- Mowery, D., & Rosenberg, N. (1979). The influence of market demand upon innovation: a critical review of some recent empirical studies. *Research Policy*, 8(2), 102-153. [http://doi.org/10.1016/0048-7333\(79\)90019-2](http://doi.org/10.1016/0048-7333(79)90019-2)
- Nordin, S., & Hjalager, A. (2017). Doing, Using, Interacting: Towards a New Understanding of Tourism Innovation Processes. In A. Királ'ová (Ed.), *Driving Tourism through Creative Destinations and Activities* (pp. 165-180). Hershey, PA: IGI Global.
- Oreg, S. (2003). Resistance to change: developing an individual differences measure. *Journal of applied psychology*, 88(4), 680-693.
<http://dx.doi.org/10.1037/0021-9010.88.4.680>
- Orfila-Sintes, F., Crespí-Cladera, R., & Martínez-Ros, E. (2005). Innovation activity in the hotel industry: Evidence from Balearic Islands. *Tourism Management*, 26(6), 851-865. <http://doi.org/10.1016/j.tourman.2004.05.005>
- Ottbacher, M., & Harrington, R. J. (2007). The innovation development process of Michelin-starred chefs. *International Journal of Contemporary Hospitality Management*, 19(6), 444-460. <http://dx.doi.org/10.1108/09596110710775110>
- Ottbacher, M., Shaw, V., & Lockwood, A. (2006). An Investigation of the Factors Affecting Innovation Performance in Chain and Independent Hotels. *Journal of Quality Assurance in Hospitality & Tourism*, 6(3-4), 113-128.
http://dx.doi.org/10.1300/J162v06n03_07

- Ozdemir, S. Z., Moran, P., Zhong, X. & Bliemel, M. J. (2016). Reaching and Acquiring Valuable Resources: The Entrepreneur's Use of Brokerage, Cohesion, and Embeddedness. *Entrepreneurship Theory and Practice*, 40(1), 49–79.
<http://doi.org/10.1111/etap.12103>
- Pavitt, K. (2006). Innovation processes. In J. Fagerberg, D. Mowery, & R. Nelson (Eds.), *The Oxford handbook of innovation* (pp. 86–114). Oxford: Oxford University Press.
- Peres, R., Muller, E., & Mahajan, V. (2010). Innovation diffusion and new product growth models: A critical review and research directions. *International Journal of Research in Marketing*, 27(2), 91-106.
<http://doi.org/10.1016/j.ijresmar.2009.12.012>
- Perry-Smith, J. E., & Mannucci, P. V. (2017). From creativity to innovation: The social network drivers of the four phases of the idea journey. *Academy of Management Review*, 42(1), 53-79. <http://doi.org/10.5465/amr.2014.0462>
- Putnam, R. D. (2000). *Bowling alone*. New York: Simon & Schuster.
- Quinn, J. (1985). Managing innovation: Controlled chaos. *Harvard Business Review*, 63(3), 73-84. <http://doi.org/10.2139/ssrn.1504499>
- Ram, S., & Sheth, J. N. (1989). Consumer resistance to innovations: the marketing problem and its solutions. *Journal of Consumer Marketing*, 6(2), 5-14.
<http://dx.doi.org/10.1108/EUM0000000002542>
- Renzulli, L. A., & Aldrich, H. (2005). Who can you turn to? Tie activation within core business discussion networks. *Social Forces*, 84(1), 323-341.
<http://doi.org/10.1353/sof.2005.0122>
- Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. New York: Crown Business.
- Rodríguez, I., Williams, A., & Hall, M. (2014). Tourism innovation policy: implementation and outcomes. *Annals of Tourism Research*, 49, 76-93.
<http://doi.org/10.1016/j.annals.2014.08.004>
- Rogers, E. (1983). *Diffusion of Innovations* (3rd ed.). New York: The Free Press.
- Ronstadt, R. (1988). The corridor principle. *Journal of Business Venturing*, 3(1), 31-40.
[https://doi.org/10.1016/0883-9026\(88\)90028-6](https://doi.org/10.1016/0883-9026(88)90028-6)
- Schroeder, R., Van de Ven, A., Scudder, G., & Polley, D. (1986). Managing innovation and change processes: findings from the Minnesota Innovation Research

- Programme. *Agribusiness*, 2(4), 501-523. Retrieved from <http://search.proquest.com/docview/223674673?pq-origsite=gscholar>
- Schumpeter, J. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual-opportunity Nexus*. Cheltenham: Edward Elgar.
- Shaw, G., & Williams, A. (2004). From Lifestyle Consumption to Lifestyle Production: Changing Patterns of Tourism Entrepreneurship. In R. Thomas (Ed.), *Small firms in tourism: International perspectives* (pp. 99-113). Oxford: Elsevier.
- Singh, J., & Fleming, L. (2010). Lone inventors as sources of breakthroughs: Myth or reality? *Management Science*, 56(1), 41-56. <http://doi.org/10.1287/mnsc.1090.1072>
- Somech, A., & Drach-Zahavy, A. (2013). Translating team creativity to innovation implementation: The role of team composition and climate for innovation. *Journal of Management*, 39(3), 684-708. <https://doi.org/10.1177/0149206310394187>
- Sørensen, F. (2011). Inducing user-driven innovation in tourism: an experimental approach. In J. Sundbo & M. Toivonen (Eds.), *User-Based Innovation in Services* (pp. 323-346). Chltenham, Uk: Edward Elgar.
- Stamboulis, Y., & Skayannis, P. (2003). Innovation strategies and technology for experience-based tourism. *Tourism management*, 24(1), 35-43. [http://dx.doi.org/10.1016/S0261-5177\(02\)00047-X](http://dx.doi.org/10.1016/S0261-5177(02)00047-X)
- Stevenson, H., & Jarillo, C. (1990). A paradigm of Entrepreneurship: Entrepreneurial Management. *Strategic Management Journal*, 11, 17-27. Retrieved form <http://www.jstor.org/stable/2486667>
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage.
- Szivas, E. (2001). Entrance into tourism entrepreneurship: a UK case study. *Tourism and hospitality research*, 3(2), 163-172. <https://doi.org/10.1177/146735840100300207>
- Thomas, R., Shaw, G., & Page, S. (2011). Understanding small firms in tourism: A perspective a research trends and challenges. *Tourism Management*, 32(5), 963-976. <http://dx.doi.org/10.1016/j.tourman.2011.02.003>

- Thomke, S. (2003). *Experimentation matters: unlocking the potential of new technologies for innovation*. Boston, M.A: Harvard Business School Press.
- Toivonen, M., & Tuominen, T. (2009). Emergence of innovations in services. *The Service Industries Journal*, 29(7), 887-902.
<http://dx.doi.org/10.1080/02642060902749492>
- Tushman, M., & Anderson, A. (1986). Technological discontinuities and organizational environment. *Administrative Science Quarterly*, 31(3), 436-465.
<http://doi.org/10.2307/2392832>
- Van Auken, H., & Neely, L. (1996). Evidence of Bootstrap Financing among Small Start-Up Firms. *Journal of Entrepreneurial and Small Business Finance*, 5(3), 235-249. Retrieved from
<https://search.proquest.com/docview/1704736065?accountid=17192>
- Van de Ven, A., Polley, D., Garud, R., & Venkataraman, S. (1999). *The innovation journey*. New York: Oxford University Press.
- Vesper, K. (1996). *New venture experience*. WA: Vector Books, Seattle.
- Williams, A., & Baláž, V. (2015). Tourism risk and uncertainty: theoretical reflections. *Journal of Travel Research*, 54(3) 271 –287.
<http://doi.org/10.1177/0047287514523334>
- Williams, A., Shaw, G., & Greenwood, J. (1989). From tourist to tourism entrepreneur, from consumption to production: evidence from Cornwall, England. *Environment and Planning*, 21(12), 1639 -1653. <http://doi.org/10.1068/a211639>
- Williamson, O. E. (1981). The economics of organization: the transaction cost approach. *American Journal of Sociology*, 87(3), 548-577.
<http://doi.org/10.1086/227496>
- Winborg, J. (2009). Use of financial bootstrapping in new businesses: a question of last resort? *Venture capital*, 11(1), 71-83.
<http://dx.doi.org/10.1080/13691060802351248>
- Winborg, J., & Landström, H. (2001). Financial bootstrapping in small businesses: Examining small business managers' resource acquisition behaviors. *Journal of Business Venturing*, 16(3), 235-254. [http://dx.doi.org/10.1016/S0883-9026\(99\)00055-5](http://dx.doi.org/10.1016/S0883-9026(99)00055-5)

Table 1. Characteristics of the interviewed founders by participating firm

| Firm | Founders | Founders Interviewed | Age | Educational level | | Previous experience (last 5 years) |
|------|----------|----------------------|-----|--|--|--|
| | | | | BSc or equivalent | MSc | |
| F1 | 2 | 2 | 36 | Computer Science | - Business Administration | General Manager in a software development company |
| | | | 32 | Computer Science | - E-Commerce - Business Administration | Director of business line solutions in a software developing company |
| F2 | 2 | 2 | 36 | Business Management | - Business and Finance - Business Administration | Chief Financial Officer in a company providing a social network digital platform for leisure |
| | | | 39 | Computer and Information Technology | - Software Engineering | Manager in an IT company specializing in the integration of systems and consulting services |
| F3 | 1 | 1 | 25 | Telecommunication Engineering | - Telecommunications - E-Business Management | Consultant and Service Innovation Researcher in a telecom corporation |
| F4 | 1 | 1 | 19 | - HND in Web Development - HND in Computing and Systems Development | | Website Developer in an incubator specialized in online services |
| F5 | 2 | 1 | 38 | Computer Science | - Software Management. | Software Manager in a telecom company |
| F6 | 4 | 4 | 35 | Computer Applications | - Business Administration - Digital Marketing | Senior Consultant and Project Manager in a telecom enterprise |
| | | | 33 | Computer Science | -Business Administration | Business developer and Chief Technology Officer in different retail trade companies |
| | | | 29 | Telecommunication Engineering | - Automation and Control - Business Administration | Senior Consultant and Systems Analyst in a consulting firm |
| | | | 38 | Computer Applications | - Business Administration | Project Manager in an international consultancy services firm |
| F7 | 2 | 2 | 35 | Telecommunication Engineering | - E-Business Management | Tourism Innovation Consultant and telecom Project Manager in a multinational consultancy firm |
| | | | 34 | Computer Science | - E-Business Management | Marketing Operations and Business Intelligence Management in a software development firm |
| F8 | 2 | 2 | 24 | Computer Science | - Business Management and Entrepreneurship - Product Management | Technology Advisor and computer programmer in a telecom corporation |
| | | | 24 | Computer Science | - Business Administration and Internet - Innovation and Entrepreneurship | Project Manager and technical research in e-health projects |
| F9 | 2 | 2 | 30 | Industrial Engineering | | Lecturer at Spanish University and member of a university research group working on an augmented reality project app for mobiles |
| | | | 36 | Computer Science | - Business Administration. (+ PhD in Silicon Technologies) | Director of innovation in a Technological and scientific park |
| F10 | 1 | 1 | 26 | - Industrial Design Engineering - Industrial Engineering | - Entrepreneurship | Business Manager in a consultancy company |
| F11 | 1 | 1 | 35 | Business Economics | - Tourism and Leisure Business Administration - Entrepreneurship | Senior Information Technology Auditor in a multinational professional services firm |
| F12 | 3 | 1 | 36 | Telecommunication Engineering | | R+I+D Project manager and Senior Consultant in a consultancy firm |
| F13 | 1 | 1 | 38 | General Certificate of Secondary Education | | Owner of a business offering stands for exhibitions |
| F14 | 1 | 1 | 39 | Accounting and Finance Marketing and Finance | - Management Information Systems | Director and Partner in consulting company |
| F15 | 1 | 1 | 36 | Mechanical Engineering | - Automotive Engineering | Chief Technology Officer and Planner in companies offering metallic structures |
| F16 | 2 | 1 | 28 | Industrial Engineering Mechanical Engineering | - Industrial Engineering - Entrepreneurship, Management and SMEs Internationalisation | Project Manager in a company specialised in the development of batteries for electric cars |

28

24

Source: LinkedIn - publicly available information contrasted and validated with the entrepreneurs

Table 2. Key features of the firms analysed and their innovations

| Firm (F) | Description |
|---|---|
| Technological tools/Apps | |
| F1 | Revenue management tool for hotels. It provides online real-time information on competitors' prices, availability and demand. |
| F2 | Technological App aiming to facilitate small-medium size hotels in real time interaction with their customers. |
| F3 | Website positioning tool to improve visibility through digital marketing in hotels. |
| F4 | Content marketing tool based on Big Data technologies for the hospitality firms to attract and retain customers. |
| F5 | Big data tool which combines social media, geopositioning and tourist resources data to offer customized products to tourists in a destination. |
| F6 | A mobile technology for restaurants and leisure activities to develop contextual marketing to reach specific demand targets. |
| F7 | Web and mobile App offering pre-fixed and flexible-menu meal vouchers to exchange in any of the restaurants affiliated to the network. |
| F8 | Mobile technology for restaurants and bars to facilitate direct marketing and communication with customers (booking, customer management, information about menus and offers, etc.) |
| F9 | Web platform and mobile application offering a wide range of services to the skiing and winter sports community: data recording of activities to share with the skiing community, positioning tools to locate family and friends, emergency services or a database of over 2.500 ski resorts with essential information to plan a ski trip. |
| Technological platforms offering innovative services | |
| F10 | Interface which allows the traveler to propose several hotels a desirable price to pay. The hotel that accepts the offer can maximize its occupancy rate and sells rooms otherwise empty. |
| F11 | Online travel agency offering exclusive journeys and original ways of travelling. |
| F12 | Online travel market based on a collaborative consumption philosophy and the key concept of "sherpas", local residents who know and enjoy their home cities and towns and are willing to offer visitors their knowledge, experience and culture to discover the best each destination has to offer. |
| F13 | A social network of travelers in the search for private users' free hospitality. |
| F14 | Tourism training and learning on-line platform based on new formats and pedagogic methodology (social learn), instructional design and we-learning. |
| Sustainable mobility-related services | |
| F15 | Patented system to monetize parking space in hotels in non-use hours. The hotels maximize use of this underutilized resource offering a new service to society and drivers save time through the App and cause less CO2 emissions. |
| F16 | Electric vehicles rent a car service committed with zero emissions transportation and offering unique EV driving experiences in tourism destinations. |

Own elaboration based on information provided by the entrepreneurs and firm web site analysis

Table 3. Themes and sub-themes identified in the analysis

| |
|--|
| <i>Characteristics of the innovations and entrepreneurs</i> |
| Degree of newness |
| Motivation to innovate in tourism |
| <i>Task of Idea generation</i> |
| Opportunity discovery |
| <i>Networks</i> |
| <i>Eureka moment</i> |
| <i>First-hand experience</i> |
| <i>Experience and prior knowledge</i> |
| Idea evaluation |
| <i>Preliminary market testing</i> |
| <i>Networks</i> |
| <i>Benchmarking</i> |
| <i>Task of Idea realisation</i> |
| Rapid evaluation with customers |
| <i>Prototype building</i> |
| <i>Dynamism</i> |
| <i>Flexibility</i> |
| Team organization |
| Funding and resources |
| <i>Bootstrapping</i> |
| <i>Government support</i> |
| <i>Task of Transfer and diffusion</i> |
| Diffusion obstacles |
| Overcoming obstacles |
| <i>Task of Coalition Building</i> |
| Networks with customers |
| Networks with funding stakeholders |
| Complementary knowledge networks |

Source: authors' own elaboration