Dynamic Capabilities Associated with a Firm's Growth in Developing Countries. A Comparative Study of Argentinean SMEs in the Software and Tourism Industries

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Abstract

Although recent evidence suggests that the development of dynamic capabilities (DC) is a key factor to gain and sustain competitive advantages to promote firm's growth, the question of how SMEs create, identify, and seize opportunities for growth have not been fully explored, particularly in developing countries with scarce resources. The aim of this study is to shed light on how SMEs develop capabilities to grow in the specific context of developing countries with resources constraints. To achieve a detailed description of the processes involved, this study applies a qualitative methodology based on a comparative case study of eight SMEs within the software and tourism industries in Argentine, which have been previously identified as dynamic sectors with high growth potential. Our findings suggest that SMEs develop DC mainly through an emerging process of iterative experimentation rather than through strategic planning. This process involves the coordination of organizational actions and resources, with managers playing a key role.

Keywords: firm's growth, dynamic capabilities, SMEs, developing countries.

INTRODUCTION

Recent evidence suggests that the development of dynamic capabilities (DC) is a key factor to gain and sustain competitive advantages to promote firm growth (Teece, Pisano & Shuen, 1997; Teece, 2000, 2012; Helfat et al., 2007; Sapienza et al., 2006; Zollo & Winter, 2002; Eisenhardt & Martin,

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2000). Additionally, many authors concluded that firms develop DC from an early stage (Zahra et.al, 2006) and that DC play a key role in the creation and evolution of startups (Sapienza et al., 2006). Since the introduction of this topic, intense debates have arisen in relation to the theoretical foundations of DC: the nature and the types of DC; the context in which DC are applied; and the relation between DC and competitive advantages (Carattoli, D´Annunzio & Dupleix, 2014).

Particularly, earlier research on DC has primarily focused on large and established companies and has failed to address how SMEs develop DC to identify and seize opportunities to grow (Weiermair & Peters, 2002; Peters & Pikkemaat, 2006; Hall &Williams, 2008; Hall, 2009; Hjalager, 2010). SMEs are important factors for economic and social development in both developed and developing countries (Charles, 2009). Successful SMEs generate employment, require less capital and management skills, and enable developing countries to participate in the global economy. Although some authors have addressed the topic of SMEs' performance and competiveness in developing countries, they focused on the impact of environmental factors rather than on the role of firm-level factors. As a consequence, there is little information on how competiveness of SMEs is created by factors other than the environment (Charles, 2009).

This paper provides empirical evidence on the development of DC in SMEs. The next sections present the theoretical framework of DC and a brief description of the context under analysis. Then, the methodological aspects are described followed by the empirical analysis.

Finally, we show the discussion section and conclusions.

LITERATURE REVIEW

The concept of DC

The framework of DC extends the resource-based view (RBV) examining the influences of dynamic environments (Helfat & Peteraf, 2003). Specifically, Teece, Pisano, and Shuen (1997) proposed the concept of DC to describe how leading firms integrated, built, and reconfigured internal and external competencies to gain and maintain competitive advantages in rapidly changing environments. Since then, several researchers argue that dynamic capabilities are essential for increasing competitive advantages (Helfat & Peteraf, 2009; Teece, 2007; Zahra et al., 2006; Zollo & Winter, 2002; Zott, 2003) and for turning resources into improved performance (Wu, 2007).

As defined by Teece et al. (1990, 1997), DC are meta-processes that differ from ordinary capabilities, best practices, and competences in many aspects.

These last concepts focus on the performance of a particular task and refer to "doing things right". Instead, DC refer to "doing the right things" (Teece, 2014). Specifically, DC focus on decisions about sensing opportunities, preparing the organization to seize opportunities, and creating adequate conditions to change and make adjustments in response to new environments.

Specifically, Teece (2007) proposed a DC framework and microfoundations of the capabilities required to sustain superior performance in open markets with high levels of innovation and resources globally allocated. In this regard, DC foster the firm to create, deploy, and protect the assets that support superior long-term performance. Firms with strong dynamic capabilities are intensely entrepreneurial: they not only adapt to dynamic business ecosystems, but also shape them through innovation and collaboration with other companies and institutions. This framework contributed to better understand the foundations of long-run success and help managers formulate strategic decisions. As a consequence, the DC framework explains firm competitiveness more effectively than the RBV (Teece et al., 1997; Eisenhardt & Martin, 2000; Makadok, 2001; Zahra, Sapienza, & Davidsson, 2006; Zollo &Winter, 2002). Since Teece's research, many scholars have addressed different issues of DC. The majority of this research discusses DC in general terms and only a few studies are focused on defining where capabilities come from or what kinds of processes contribute to building them. However, some academics have recently addressed DC from new perspectives to improve the analysis and provide more empirical results.

With regard to the factors that influence DC, Sher and Lee (2004) studied both manufacturing and service firms and showed that internal and external knowledge management significantly affects DC; Prieto et al. (2009) concluded that autonomy and support are significant drivers of DC in firms focused on R&D and innovation. Another empirical contribution was made by Liao, Kickul, and Ma (2009) who demonstrated that resource stock is positively related to the integrative capability in Internet-based firms. More recently, strategic orientations (Zhou & Li, 2010) and network embeddedness (Zheng, Zhang, Wu & Du, 2011) were identified as important drivers of DC in firms from a variety of manufacturing industries.

Many authors also identified that DC are directly related to the organizational learning culture (Hung, Yang, Lien, McLean & Kuo, 2010) and embedded learning (Lee, Lin, Chen, & Shyr, 2011). With regard to the tourism sector, Nieves and Haller (2014) recently investigated the possible antecedents of DC in the hotel industry and empirically showed that prior knowledge and skills at the individual and collective level are the basis for developing DC. They also concluded that firms with qualified employees are

more likely to perceive the need for change and respond to it by reconfiguring the resource base.

Furthermore, many scholars have disaggregated the concept of DC. Ethiraj et al. (2005) found that client-specific capabilities and project management capabilities are fundamental for global firms in the software industry. Recently, Feiler & Teece (2014) provided arguments on how DC are developed, and described ten DC demonstrating that they do not simply emerge or represent what firms do well. They are rather identified and built through the effort of leaders and managers to configure, orchestrate, and sustain activities to gain and maintain competitive advantage in rapidly changing and highly complex business environments.

To conclude, it is important to highlight that DC are context-specific and therefore, they should be conceptualized and empirically tested considering specific characteristics of each sector. Moreover, it is important to analyze the role of entrepreneurs and managers in the development of DC, considering their qualifications, prior experience, and managerial skills.

DYNAMIC CAPABILITIES AND THE PHASES OF STRATEGY DEVELOPMENT AND EXECUTION

For analytical purposes, Teece (2007) suggested that dynamic capabilities may be disaggregated into three capacities: (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and reconfiguring assets (Teece, 2007). The author also describes the nature of dynamic capabilities, highlighting the microfoundations underlying the three DC. Microfoundations involve skills, processes, procedures, organizational structures, rules, etc.

Capability to sense opportunities

This capability involves activities such as scanning, creating, learning, and interpreting. Teece (2007: 1322) states that "when opportunities are first glimpsed, entrepreneurs and managers must figure out how to interpret new events, which technologies to pursue, and which market segments to target". To achieve that, firms need to generate information and make it flow along the entire organization to enable people to make sense of it. If firms do not engage in these activities, they fail may miss important market opportunities (Teece, 2007).

Besides, the ability to recognize opportunities depends on the individuals' capabilities and knowledge and on the organizational knowledge and learning skills, in general. Furthermore, the ability to get information from professional and social contacts and to understand that information

are fundamental to deal with the evolution of technologies, to anticipate customer needs, and to face market changes in general. All these tasks involve scanning and monitoring internal and external factors; learning; interpretation, and creative activity from managers.

Capability to seize opportunities

Firm growth includes not only identifying technological and market opportunities but also seizing them: once opportunities are identified, they are supposed to turn into new products, processes or services. To achieve this, firms need to maintain and improve technological competences and resources and make necessary investment (Teece, 2007).

Consequently, in order to achieve superior performance, firms formulate an overall strategy to make decisions regarding critical issues, such as when, where, in what, and how much to invest. Besides, firms select or create a particular business model to define commercial and financial priorities (Teece, 2007). "Deciding how to capture value helps define the architecture and design of the business model" (Teece, 2007, p. 1330). In general, critical decisions are related to technological aspects, target market, funding, and other strategic issues.

Additionally, the design of a business strategy requires creativity, information, and skills to integrate know-how from the outside (from other organizations) and from inside the firm (Teece, 2007). Different perspectives from the outside may help firms to identify new opportunities and to create competitive advantages. On the contrary, firms may identify opportunities but are not able to seize them successfully.

Capability to manage threats and orchestrate resources

A key ability to gain long-term competitive advantages involves recombining and reconfiguring resources and organizational structures in order to face market and technological change. Teece claims that individuals are likely to create opportunities based on knowledge, creative activities, and the ability to understand customers 'needs. Thus, apart from their experience, mangers need to develop managerial skills to lead the firm efficiently.

Teece also highlights the importance of integrating external and internal know-how, which is likely to be achieved by networking activities. Furthermore, within each firm, "the old" and "the new" must be complemented. Finally, firms require effective communicational and informational mechanisms to keep managers permanently informed.

The role of DC in firm growth

Firms' growth is a central concern in the strategic management literature. Most investigations have focused on the identification of internal and external factors that influence growth. Particularly, Entrepreneurship scholars have made significant efforts to explain how and why firms originate, develop, survive, and grow (Schumpeter, 1934; Penrose, 1959; Gartner, 1985; Davidsson, 2004; Zhara et. al., 2006; Dutta & Thornhill, 2008; Stenholm & Toivonen, 2009).

Although academics have adopted different explanatory approaches to address the question of why some firms perform better than others, many of them have offered evidence of the importance of DC for firms' growth. In fact, the literature is now unanimous in considering that the theoretical framework of DC explains how firms adjust their resources and activities to achieve and maintain sustainable competitive advantages (Ambrosini & Bowman, 2009; Augier & Teece, 2008; Cavusgil, Seggie, & Talai, 2007). Competitive advantages are firms' attributes that allow them to outperform the competition. Thus, studying how firms compete and survive in the external environment is essential to understand the internal processes that take place within each firm.

Different theories explain the sources of competitive advantages. Most of this research has focused either on firms' opportunities and threats (Porter, 1980, 1985), firms' weaknesses and strengths (Hofer & Schendel, 1978; Penrose, 1959; Stinchcombe, 1965). In particular, Teece proposes the theoretical framework of DC and claims these are high level capabilities that allow firms to recombine and reconfigure resources and organizational structures to remain flexible and face change (Teece et. al, 1997). Furthermore, DC help to avoid that critical organizational practices become excessively rigid. Thus, given that the present study focuses on SMEs in which foundersentrepreneurs play a central role in the development of DC, Teece provides a wide framework to identify which managerial skills are essential to engage in the evolving process of growth in SMEs.

Context of the study

In this paper we focus on analyzing the dynamic capabilities related to business growth in small and medium enterprises in a developing country such as Argentina. The cases were selected considering two of the most dynamic sectors in the national economy, and specifically in the economy of the central region of Buenos Aires provinces. These two sectors are software and IT services, and tourism.

In Argentina, the Software and Information Services (SSI) has been expanding in both local and international markets, essentially based on entrepreneurial processes that exploit new technological opportunities, and the ability and creativity of their human resources. Indeed, human resources are the country's main competitive advantage in comparison with other economies. Recently, the Argentinean SSI industry has shown a significant growth according to international standard indicators, such as sales growth, employment and exports.

According to the annual report of the Chamber of Enterprises in the Software and Computer Services of Argentina (CESSI), between 2003 and 2013 the number of companies in this industry increased by 132%. In 2014, there were 4300 registered firms, of which 70% were small firms with up to fifty employees (CESSI, 2015). Moreover, with an annual birth rate of 20%, the SSI sector in Argentine has become the second most dynamic economic sector since 2003.

The main feature of this industry is the potential to add value and generate qualified employment. In particular, there is a continuous increase in the export of services, and there is a great demand for qualified human resources. This sector employs over 51,000 people and 50% of these jobs are concentrated in SMEs with less than 25 employees. The Argentinean SSI industry offers a wide range of products such as customized software; consulting; support services; implementation of applications; development of computer solutions; and products for business management and security tools. Recently, the development of the SSI industry has become a national strategic priority.

Furthermore, the growing economic importance of the SSI sector has led to the development of clusters. Although this sector is highly concentrated in Buenos Aires City, many other significant concentrations of technological and managerial capabilities are located in several cities of the country such as Rosario, Cordoba, Mendoza and Bariloche. At the same time, other smaller cities have been involved in different initiatives to develop the SSI sector. For example, Tandil, a city located in the center of Buenos Aires Province. In 2003, a Technological Center was established with a strong support from the local University (UNICEN), from where most of the computing engineers emerge. Thus, the city has become a very important provider of SSI services in the national industry.

Currently, Tandil hosts more than 100 SSI companies which have created more than 1500 jobs since its initiation. Previous studies (D´Annunzio et al., 2008) concluded that the local SSI sector operates in a very dynamic and competitive market. SSI firms face continuous changes both in technology and in the international market demands. Besides, this sector is largely composed

by startups or relatively young firms that operate locally and incorporate young people, mainly university graduates. Although there are some large firms, the SSI sector is mainly composed of small and medium enterprises.

In Argentina, the tourism sector has experience a strong growing tendency in terms of the flow of tourists and the level of employment. Thus, according to the National Ministry of Tourism, the arrival of non-resident tourists to Argentina grew between 2003 and 2013 from 2,995,272 to 7,543,975, representing a growth of about 86% of the touristic flow. Furthermore, in that same period accommodation rose by 40.5% and employment levels experienced an increase of about 25.2% from 882,125 in 2004 to 1,104,439 in 2013. According to the Argentinean Confederation of Medium-sized enterprises, the tourism activity accounts for about 8% of the GDP in Argentina. Besides, the tourism sector generates about 7, 3% of the total employment in the country. Considering all the participants within the tourism activity, SMEs are preponderant: currently, there are more than 200.000 companies operating in the tourism sector, 95% of which are micro, small, and medium-sized enterprises (CAME, 2013).

Thus, many cities around the country have developed a wide range of touristic activities and for many regional economies tourism is the main source of income. Tandil is a good example of that. Tandil is certainly recognized as one of the main touristic destinations in Buenos Aires Province and in the whole country as well. The tourism sector has experienced a sustained upward trend in terms of the flow of tourists and employment levels as well. Furthermore, Tandil is geographically located in the middle of the Province and its landscape is appropriate to develop the tourist activity. Indeed, the hills and natural environment made Tandil an incomparable place in Argentina. This city has capacity to host about 5660 visitors, 25% of which is provided by cottage resorts, as the ones considered in this study, according the classification proposed by the local government (hotels and cottage resorts have different treatments).

RESEARCH METHODS

Most studies on DC are conceptual and there is little empirical research on DC in SMEs. The main reason for this is the difficulty of operationalizing the concept of DC (Ambrosini & Bowman, 2009; Teece, 2012). Thus, it is important to increase the number of empirical studies on DC and to apply qualitative methodologies in order to provide detailed descriptions of all the processes involved in the development of DC (Danneels, 2011; Teece, 2012).

In the present study we analyze different business cases in order to better understand the origins of DC. Particularly, we apply an exploratory strategy orientated towards the identification of the factors that influence the development of DC, the difficulties encountered in the process, and the role of entrepreneurs in the firms' performances. Based on this, the research was designed according to the multiple cases methodology, which was originally proposed by Yin (1989), and according to the process of inducing theory described by Eisenhardt (1989). This methodology is useful to obtain a detailed evaluation of each case individually (Bryman & Bell, 2007) and to better understand a phenomenon within its specific setting (Saunders et al, 2009). Additionally, Backman (1998) highlights that qualitative research strategies focus on individuals and how they interpret their reality based on their background. In this case, this is important to understand the whole process of DC and provide a convincing interpretation of facts.

This analysis includes eight firms from Tandil, a centrally located city in Buenos Aires Province (Argentine). In order to provide significant results (Patton, 1990) all the cases were selected from representative sectors in the regional economy: four cases from the software industry and four from the tourism sector. To select the cases, we considered certain criteria. Firms should be located in Tandil, Buenos Aires, a city that hosts one of the most important IT Centers in the country (Argentine) and it is a popular destination for tourists from around the country throughout the year. Besides, firms should be classified as young SMEs, according to the age and the number of employees and/or turnover. Lastly, firms should have been operating for at least three years, so that the development of dynamic capabilities could be studied as a process over time.

Based on these criteria and considering information from the researchers and from various entrepreneurial networks located in the city, eight companies were selected. Then, we contacted the owners of the firms to start the research process. Data was obtained through qualitative research techniques, including direct observation conducted by two members of the research group, and personal in-depth interviews conducted between August, 2013 and April, 2014. We also gathered information from different websites.

As Saunders et al. suggest, in exploratory research it is important to interview key informants (Saunders et al., 2009). In this case, we decided to contact the founders or the general managers of each firm. Depending on the firm, we interviewed the only founder or one or more of the founding team. All the interviews were held in the respondents' natural setting. Because of the exploratory purpose of this study, the perspectives and the interpretations provided in the stories told by the entrepreneurs were the main source of information.

To collect all the necessary information and to address every important aspect of DC, a guiding list of key questions and specific issues was prepared according to the theoretical framework. At the same time, we fostered interviewees to express openly to make the conversations more interesting and dynamic. The questions were mainly orientated towards defining the concept DC in SMEs; identifying the main DC to compete and position in the market; describing the main internal and external factors influencing the evolution of the firms; and determining the main managerial processes involved in the development of DC. Furthermore, to perform a detailed analysis, we asked each interviewee whether the conversations could be recorded or not.

At the beginning of each interview we asked the respondents to describe the main strategic actions taken in relation to the identification and assessment of business opportunities. This question encouraged the entrepreneurs to lead the conversation and tell their story in as much detail as possible. However, we involved in the conversation to ask additional questions and remind the respondents about the importance to fully address concepts, actions and interpretations. Due to this flexibility, we were able to organize and adapt questions if needed (Jovchelovitch & Bauer, 2000; Andersen, 2002).

Backman (1998) argues that one of the most difficult steps in qualitative research is the analysis of data. This is because case studies involve a big amount of subjectivity and opinion, and the vast majority of the results derive from personal interpretations rather than from statistical models such as in quantitative research.

In order to perform a careful analysis, all the interviews were recorded for later transcription. Then, all that information was integrated in a single document. The analysis involved an iterative process of interpreting and encoding data based on the researchers' individual perspectives and the theoretical framework applied in the study (Creswell, 2007); comparing interpretations; and discussing categorical concepts.

First, all the transcripts were analyzed separately in order to identify and classify the emerging categories in relation to the following aspects: Customers and Markets, Product and Services; Business Model; Key Resources, and Capabilities and Main Focus. For each of these items we then identified significant events or changes and determined "phases" or different stages in relation to the growth path of each company. This analysis is briefly presented in Tables 1 to 8.

Second, we conducted a comparative analysis across cases, based on Teece's framework of DC and its microfoundations. To organize results we assigned qualitative values to identify the differences between the cases in

relation to the growth path and the DC appropriately developed. To assess growth we considered two categories: gradual and accelerated growth, depending on the speed with which the company has been adding new staff over time. To assess the intensity of each DC, we applied a qualitative scale ranging from VERY WEAK to VERY STRONG. Additionally, we identified the key factors involved in the development of DC. Based on this analysis, we were able to compare and contrast the same phenomenon between the different cases and reach more precise conclusions in relation to both economic sectors. Tables 9 and 10 show the analysis described above.

Empirical analysis

In this section, we present a brief analysis of each case. First, we describe the firm and then show a table summarizing the firms' growth path. The table shows results with regard to customers and markets, products and services; business models; resources; capabilities, and main focus and it is divided into phases, according to significant events or changes that were identified as key factors in the evolution of the firms.

Firm A

A is a software consulting and development company that was founded in 2006 by two young Systems Engineers. Their company designs, implements and optimizes technological solutions and applications, and specializes in offshore software development, product testing and design, and database management. The main customers are located in the United States, Chile, Spain, Brazil, and Germany, and the minority is from Argentina. The firm started providing services with only two employees and now it has a staff of thirty people, including systems engineers and software designers. Table 1 summarizes the main aspects that explain the evolution of A, identifying specific capabilities associated to the growth of the firm.

In this case it was possible to identify four distinct stages in the company's growth path. Each stage is associated with milestones in the commercial expansion. The first stage included the beginning of the company, which was completely dependent on a single client from Chile.

In the second stage FIRM A attracted new customers, though through business intermediaries. By that moment, the Chilean customer had merged and started pushing FIRM A to become their exclusive development. However, an important US client encouraged FIRM A to remain an independent company.

Table 1. Capabilities related to the growth of Firm A

	Phase I: 2006 - 2007	Phase II: 2007 – 2009	Phase III: 2009-2011	Phase IV: 2011 - present
TO WHOM? Customers and Markets How customers and the target market have changed over time?	One single customer from Chile	Customers from the US and Germany contacted through entrepreneurs 'networking activities	First client contacted through direct commercial relations with the company in Germany	Positioning in the market of US startups. Beginning of the process of inter- nationalization of the company
WHAT? Products and services How has the supply changed over time?	Software development and maintenance for a single client	Software development for an enlarged customer base in different countries	Software development for an enlarged customer base in different countries	Text search technologies for Oracle. Database Management and Testing. Software for mobile applications
HOW? Business model How has the business model changed over time?	The business was focused on programming	Software development Diversified target markets	Software development Diversified target markets	Specialization in specific technologies Positioning in the main worldwide startups market (USA)
WITH WHAT? Key resources and capabilities What have been the key resources and capabilities at each stage?	Technical training and experience of entrepreneurs in large established technology companies	•	Creativity in business management to attract customers and training of entrepreneurs in business management (MBA)	Access to venture capital to foster growth. Business orientation. Development of innovative products. Ability to reconfigure the business model.
FOCUS What was the main concern in each phase?	Identification of business opportunities other than the Chilean client to enable both independence and survival of the company	Development of competitive advantages based on high quality standards of services to face the difficulty in maintaining cost advantages after the exchange rate devaluation	Effective and efficient management of ongoing projects and the attraction and retention of talent	

The third step in the growth process was taken when the entrepreneurs attracted their first customer through their own commercial strategies. This is important because the interviewees repeatedly emphasized how challenging it was to manage commercial relationships.

Since 2011, the entrepreneurs have defined new challenges and the firm entered a new phase, which aims at the specialization in no-massive technologies that require longer learning processes, and to the expansion towards a key target market: US. To this end, the entrepreneurs have decided to seek for short-term investors and to temporally settle in the US for networking. Thus, the company has been working on developing products for free text search; providing database management; testing services; and developing mobile technology. Particularly, the firm has focused on large volumes of information in real time (Big Data).

All these strategic changes also implied changes in the structure and management of the projects. At the beginning, the entrepreneurs had a complete lack of business experience and limited resources and their growth expectations were not ambitious. As they started working and gaining experience, particularly on business management, they increased their ambitions to grow. At the same time, their problems and drawbacks have also changed from one stage to the other. Initially, although it was relatively easy to find qualified human resources in the local market, entrepreneurs were concerned about finding customers and entering new markets. Under these circumstances, the entrepreneurs felt a low risk perception. However, after many changes in the firm's and market's conditions, they increased the risk perception and focus on two specific issues: project management and human resource management.

During the last years the firm has identified a key problem to grow: the difficulty in finding qualified and committed human resources. Furthermore, a common problem that most IT firms face is that they involve in temporary projects but they need to hire permanent human resources and retain them. Thus, skills for human resource management are a key factor of success in this kind of companies.

Firm B

B Argentina began operating in 2004 as a Research and Development Center of Internet Solutions for a Spanish technology group in the ICT sector. This group was founded in 1995 and currently it has a staff of more than 240 people working in Girona, Barcelona, Madrid, Buenos Aires, and Silicon Valley. The Spanish group consists of different companies that provide email security solutions, online business consulting, information technologies,

software development, and incubation of innovative technology solutions. *B Argentina* started providing services with two employees in 2004. Then, in 2010 the firm consisted of almost seventy employees and currently it has thirty-eight employees.

Table 2. Capabilities related to the growth of Firm B

	Phase I: 2004- 2007	Phase II: 2007-2011	Phase III: 2011 – present
TO WHOM? Customers and Mar- kets How customers and the target market have changed over time?	Developments made exclusively for the Spanish headquarter.	Marketing of softwa- re developments to other companies be- longing to the Spa- nish group.	Developments are extended to companies belonging to the Spanish group and also to spin off arising from business incubation within the group.
WHAT? Products and services How has the supply changed over time?	Provision of Consul- ting Services and So- ftware Maintenance	Software Consulting and Development of innovative products.	Software Consulting. Innovative product development and incubation of projects and generation of new startups
HOW? Business model How has the business model changed over time?	Software Develop- ment Center for the Spanish headquarter	Software Develop- ment Center for companies associa- ted with the Spanish group	Software Development Center for the Spanish headquarters and other companies associated to the group. Incubation of projects and generation of new startups
WITH WHAT? Key resources and ca- pabilities What have been the key resources and ca- pabilities at each sta- ge?	Technical training and entrepreneurs' experience. Networking with international contacts. Exploitation of opportunities.	•	Know-how in project management, develop- ment of startups, and product innovations.
FOCUS What was the main concern in each pha- se?	To reach a high quality standard of services and processes	Consolidation of working teams with experience in develo- ping products for the international market	Firm growth in a market where the firm is less competitive than it was at the beginning.

The growth of firm B has always depended on the evolution and growth of the Spanish group to which it belongs. It is also influenced by the creation of new businesses within the group, and the generation of international networks through the companies´ CEOs´ mobility. The firm´s business model limited its opportunity to formulate its own strategy and grow individually. All this had a significant impact on B´s possibility to develop and enhance essential

capabilities. As a consequence, the main weakness the entrepreneurs have showed is the difficulty in attracting their own customers.

Considering these conditions, three stages were identified in the growth path of the company. During the first stage all the software developments were made for the Spanish headquarter exclusively. In the second stage, the expansion of the parent company resulted in the expansion of B's development activities for other business units within the group. The third stage of B's evolution is related to the provision of services to many of the company's spinoffs.

At the beginning, the entrepreneurs were concerned about the quality of their products and processes. Thus, they invested and worked heavily in training to be able to certificate quality according to the standards of the ISO 9001 (International Organization for Standardization). Later, their main concern was the change in the business model: the firm started working for small projects requested by the parent company and then became a business incubator. Additionally, during the process, B gained a key competitive advantage: the know-how of developing and managing projects for startups, adding value not only in the development stage but also in the generation of product innovations.

Firm C

C is a company that develops agile software located in the United States and South America. The firm was founded in 2006 by two entrepreneurs and later another partner joined to the founding team. *C* develops near shore software and has a wide customer base. The firm provides high performance agile products that provide and customer services. The main supply of *C* includes consulting technology, Entertainment Digital Media, Cloud Computing, Java and Net, Software Architecture, Agile Software Development, Amazon Web Services and Project Management, among others.

The firm started operating with a group of 11 people and currently they are about 80 people and continuing to expand. Their most recent wave of growth is onshore in the United States and they are bringing up development teams and managers to work onsite with their clients, acting as a bridge to their delivery centers in South America.

C's path growth is divided into three stages depending on the business models developed along its evolution (Table 3). The company started operating at the middle of 2006 when the entrepreneurs identified that the media industry was changing towards digitization and automation. They decided to create a tool to process multimedia content and digital information automatically. The product was mainly offered to major television and cinema

studios. Initially, the business was self-financed with resources from "the three Fs" (family, friends and fools) but then the entrepreneurs gained access to a venture round of 1 million dollars. In that occasion, they had the opportunity to present the product to be evaluated by the owners of important business such as Disney, New Brothers, American Idol, Fox, and Sony.

Table 3. Capabilities related to the growth of Firm C

	Phase 1: 2006 – 2011	Phase II: 2011-2012	Phase III: 2012- present
TO WHOM? Customers and Markets How customers and the target market have changed over time?	Major companies in the movie and televi- sion industries, such as Sony and Disney	Large established firms in the international market.	Large established firms in the interna- tional market (Accenture, Coca Cola, All digital, Delu- xe, Discovery Commu- nications)
WHAT? Products and services How has the supply changed over time?	Digital tool for automatic processing of digital information	Cloud computing technologies	Technology consulting of Digital Media and Entertainment, Clo-ud Computing, Java and .Net, Software Architecture, Agile Software Development, Amazon Web Services and Project Management.
HOW? Business model How has the business model changed over time?	Postproduction distri- bution to movie stu- dios, television broad- casts, and advertising agencies	Supply of integrated technology services	Software develop- ment near shore and specialization in high quality services.
WITH WHAT? Key resources and ca- pabilities What have been the key resources and ca- pabilities at each sta- ge?	Entrepreneurs 'technical training and experience. Networking	Active learning generated from previous experience operating in the US market. Ability to reconfigure the business model.	Sound knowledge of the market ecosystem where the service is provided. Organizational culture International Ne- tworks
FOCUS What was the main concern in each pha- se?	The media industry was moving towards digitization and automation. To find a product that will generate attraction to large customers	Strengthen sales rates Redefine business	Growing shortage of qualified staff. The company gets invo- lved in this situation and decide to tra- in human resources in-company

However the evolution of the business was slower than expected and the entrepreneurs were not able to make it a profitable organization. Thus, they took a new step and sold the intellectual property to a US company. Then, the firm redefined the business model and started providing services for large established firms in the international market. During the first stage of this project, they focus on learning and formulating a viable strategy. Then, they took another step and expanded their services and consequently their capabilities. Currently, the firm is running a new business model based on a wide range of high quality services for large established firms in the international market such as Accenture, Coca Cola, All digital, Deluxe, Discovery Communications.

Firm D

D provides services for people who decide to get rid of things they do not longer want or use at their homes or workplaces and are determined to sell them. The firm's services include all the activities related to the different stages in the sales process. Users should only send a message describing the product. After that, *D* is in charge of picking the product to then advertise it online. Once the sale is agreed, *D* is in charge of the products 'packaging and distribution. Currently, this service is operating in San Francisco (California) and Austin (Texas). *D* works with leading investors within the industry, such as Techstars Ventures, MasterCard, Silicon Valley Bank, Cygnus Capital, NXTP Labs, Grooveshark's cofounder, Andres Barreto, and Uber's CTO and cofounder, Oscar Salazar.

At the beginning there were only two founder entrepreneurs and currently they are a group of sixteen people.

This startup was born in Austin, while the founder entrepreneurs were participating in a startup accelerator and development program at Techstars to present a project called Productgram, which was successfully accepted (Table 4). Then, the entrepreneurs spent a month analyzing the US market, along with professional advisors and mentors, and identified a surprising fact: each home kept about three thousand dollars in unused objects. They also found that those objects were not posted at traditional marketplaces such as eBay or Craigslist because of all the problems that consumers faced when trying to sell them. Selling those products not only includes listing the products online, but other activities such as pricing, packing, labeling, sending the package through UPS or Fedex, and charging.

Table 4. Capabilities related to the growth of Firm D

	Phase I: 2012-2014	Phase II: 2014-present
TO WHOM? Customers and Markets How customers and the target market have changed over time?	Contacts from Austin, US, generated through social t networks and social circles	Public in general. Consumers from Austin and San Francisco, US.
WHAT? Products and services How has the supply changed over time?	Application to sell different products through social networks and e-commerce platforms. ("Instagram for products").	App to sell useless devices and objects Value maximization Dealing with all the stages along the sales process.
HOW? Business model How has the business model changed over time?	Marketplace model: the company is responsible for marketing activities.	Service layer model Focus on critical logistics issues.
WITH WHAT? Key resources and capabilities What have been the key resources and capabilities at each stage?	Entrepreneurial team Participation in Business Accelerator programs: NXTP Labs and Techstars. Funding from a mutual fund, Signus VC, and from Andrés Barreto, Grooveshark's founder.	Enlarged working the team and development of partnerships with American companies that have innovative logistics capabilities. Active business development activities
FOCUS What was the main concern in each phase?	Develop, refine and test the business idea. Attract funding	Adequate fit between the products 'supply and demand to grow in the American market.

Based on this opportunity, the entrepreneurs decided to refocus their business idea and created D in 2012. D is a service layer above traditional marketplaces that provides all the mentioned services. The new project involved intense logistics activities that led the founding team to expand and develop partnerships with logistic leading American companies. The new venture also involved the development of new skills and managerial activities.

Due to the short age of this firm only two stages were identified. The first period is related to the beginning of the project. Then, they took an important step and expanded their services to new locations. In this second stage the entrepreneurs enlarged the working team and develop critical skills in logistics management.

Firm E

E is a cottage resort that provides adventure activities and nature sports. The firm has been operating for 25 years (Table 5). At the beginning, the entrepreneurs were the only people in charge of all the entrepreneurial and operational tasks and activities. Currently *E* has a staff of 40 people. The company also offers educational camp services, outdoor training, and outdoor experiential training. The majority of the customers are from private schools and companies, NGOs, and other public and private organizations. Most of the clients are from Buenos Aires city. During the first stages, *E* faced a strong seasonality in sales, exclusively concentrated in the period between September and December. Nowadays, the firm has achieved a more steady demand, providing different services throughout the year.

Table 5. Capabilities related to the growth of Firm E

	Phase I: 1989-1993	Phase II: 1993-2002	Phase III: 2002-present
TO WHOM? Customers and Markets How customers and the target market have changed over time?	Local organizations Sporadic and seasonal demand	Private schools from Buenos Aires Seasonal demand	Schools, organizations, and companies Demand throughout the year
WHAT? Products and services How has the supply changed over time?	Tours and excursions	Educational Camp services	Educational Camp services, outdoor training and summer camps
HOW? Business model How has the business model changed over time?	Independent services. Not based on horizontal or vertical integration. Own design and plan of the firm's value chain.	Customer loyalty	Business model based on technical and commercial synergies. Development of new business units
WITH WHAT? Key resources and capabilities What have been the key resources and capabilities at each stage?	Natural context and favorable environment to develop the activities	Commercial and marketing management. Infrastructure development	Strategic management New products and services development
FOCUS What was the main concern in each phase?	Design attractive products Attract new customers	Reach a more steady demand Reduce fixed costs.	Business professionalization HR management Training for future firm members from the own family

The key features of E's evolution are the high level of investment in infrastructure and the emphasis on building capabilities related to innovation in services and processes. During the first stage, the firm provided daily excursion services to different target customers. The services included food and lodging.

As their services attracted new clients, the entrepreneurs decided to invest in infrastructure (dining, accommodation, etc.) and took a step forward. They also designed a new business strategy based on close relationships with customers and high-quality services. The entrepreneurs focused on designing customized services, which allowed them to gain access to a new target customer: schools. Although challenging, this experience was a key factor in the evolution of the firm given that providing high quality services to that specific target, led to an intense process of learning within the whole firm.

The entrepreneurs' decision to certificate quality and implement the process according to the ISO 9001, implied a new leap in the growth trajectory of the company. They continued to innovate and decided to undertake a diversification strategy creating new services (especially outdoor training) for new target markets (companies). Nowadays, the firm is still one of the main touristic attractions in the city in spite of the emergence of new competitors.

Firm F

F is a cottage resort that comprises an urban area of 30,000 m². Currently, the infrastructure includes a reception area, a spa, a restaurant, an indoor pool, an outdoor pool, and 18 cottages suited for 2, 4, 6 and 8 people. The firm started operating in 1997 and currently it has 13 employees (Table 6).

The growth path of this firm is associated with the different services that were added in response to the increase in the number of competitors. F was one of the first cottage resorts to be established in the city. At the beginning, competence was low. However, as the tourism sector gained importance in the local and national market, F's entrepreneurs were forced to improve their original offerings in order not to lose customers.

Firm F started operating in 1997 with a single cottage. The following year four more cottages were built. In this first phase, accommodation was the only service provided. Then, the entrepreneurs decided to increase the number of cottages and built a craft shop and a restaurant. This second stage was the longest period with only a few improvements in services. One of the reasons for this was the financial crisis of 2001-2002. Given the difficulty to invest in new cottages and facilities, the entrepreneurs focused on attracting new customers and inspiring loyalty from their regular customers.

Table 6. Capabilities related to the growth of Firm F

	Phase I: 1997-2000	Phase II: 2000-2010	Phase III: 2010-2013	Phase IV: 2013 - present
TO WHOM? Customers and Markets How customers and the tar- get market have changed over time?	Middle-class cu- stomers main- ly from Buenos Aires	High and mid- dle-class custo- mers mainly from Buenos Aires	High and mid- dle-class custo- mers mainly co- uples from Bu- enos Aires	High and middle- class customers mainly couples from Buenos Aires, La Plata, Mar del Plata and other cities of the province.
WHAT? Products and services How has the supply changed over time?	Cottages for 2 and 4 people	Cottages, a craft shop and a re- staurant	Cottages, suites, restaurant, spa, multipurpose room	Cottages, suites, restaurant, spa, multipurpose room
HOW? Business model How has the busi- ness model chan- ged over time?	Not based on horizontal or vertical integration. Own design and plan of the firm's value chain.		The owners rent the business to a private firm that is in charge of the operational acti- vities. The owners keep the ownership and develop ma- nagerial activi- ties.	Independent to- uristic services. Not based on ho- rizontal or verti- cal integration. Own design and plan of the firm's value chain.
WITH WHAT? Key resources and capabilities What have been the key resources and capabilities at each stage?	Financial reso- urces Commercial ma- nagement	Financial reso- urces Capability to be innovative Institutional arti- culation	Commercial ma- nagement Ne- tworking	Capability to be innovative
FOCUS What was the main concern in each phase?	Positioning in the tourism market. Local develop- ment in the to- urism sector. Competition	Products innovation	Lack of personal motivation and interest in con- tinuing the busi- ness	Deciding and planning the fu- ture and continu- ity of the firm

After this period, a third phase started with the building of "suites" cottages. This qualitative innovation meant a breakthrough for the company over its local and national competitors. Besides, a spa, a new reception area, and a multipurpose room aim at hosting institutional and private events were built. Despite all these improvements, the entrepreneurs went through a difficult time during this phase. They had lost the initial motivation and

thought of selling or renting the cottage resort. Finally, they rented it to a private firm for a three-year period.

The forth phase began when the entrepreneurs decided to be in charge of the resort again. However, they had formulated a new strategy and a new business model in order to "enjoy" their business and not to lose motivation.

Firm G

G is a cottage resort that offers accommodation and recreation for tourists. The company started operating in 2003 with only one cottage and currently has six cottages suited for 25 people (Table 7). Although this firmed originally emerged as part of the entrepreneur's lifestyle, he has turned it into a real business and has identified many opportunities to grow. In particular, the entrepreneur has adapted the business model to diversify the target market, for example, providing rental services of the restaurant and catering facilities for private events.

This firm started operating without any employee, only the founder entrepreneur. Once the firm had regular activity, employees were incorporated, depending on the work load. Considering the seasonally characteristic of the tourism sector, the entrepreneur could not afford to hire all the employees permanently. Thus, the number of employees has changed according to the customers' needs. Currently, the firm has six employees.

The evolution of this firm may be divided into three phases. The first period involved building all the cottages and providing services with the maximum available capacity. Then, an internal financial crisis inhibited innovations and the entrepreneur was not able to build any new cottage. The financial issues have always been the biggest difficulties in running the business. The entrepreneur has faced many problems to access funding and to manage the pressure of tax obligations. These conditions make the business no longer profitable.

However, the founder never gave up and continued working to improve services while trying to reduce fixed costs. Indeed, the last phase started when the firm started a recovery process. The entrepreneur had designed a different strategic to make it a profitable business. Thus, he cancelled the restaurant service and decided to use that place as a multipurpose room for private events. This decision is not directly related to the visitors' demands but the entrepreneur found a new business opportunity and made the effort to seize it.

Table 7.	Capabilities	related t	to the	growth	of Firm	G

	Phase I: 2003-2005	Phase II: 2005-2011	Phase III: 2011 - present
TO WHOM? Customers and Markets How customers and the target market have changed over time?	Moderate level of occupation Middle and high-class customers mainly from Buenos Aires	Higher level of occupation Same type of customers, although varying according to the seasons.	Almost same level of demand Types of customers do not suffer major changes because the city remains being a relative high quality destination
WHAT? Products and services How has the supply changed over time?	Cottages for couples and families of up to six members.	Cottages and restaurant services	Cottages and multipurpose room. Restaurant services are cancelled.
HOW? Business model How has the business model changed over time?	The Enterprise was originally thought as a lifestyle. Lack of planning and design activities. Available means	Professionalization of services Implementation of a management software system Professional advice Regular staff training programs	Complementary services and activities are planned to add value to the extant services
WITH WHAT? Key resources and capabilities What have been the key resources and capabilities at each stage?	Financial resources to star operating	Employees and services professionalization Innovative capacity Institutional coordination	Ability to restructure the business model to face a major financial crisis, without reducing the level of services provided
FOCUS What was the main concern in each phase?	Positioning in the market	Innovation in products, processes, and management	Sustain profitability rates Services diversification and innovation Positioning in a more mature market

Firm H

H is a cottage resort that began operating in 1998 (Table 8). The entrepreneurs started working on their own with only one cottage and now the firm has 10 cottages and 6 employees. The resort has accommodation for 42 people. Although the business may be considered a family business that was originally created as part of the entrepreneurs' lifestyle, nowadays they have a business vision and seek grow opportunities and high profitability.

Table 8. Capabilities related to the growth of Firm H

	Step I: 1998-2001	Step II: 2001-2004	Step III: 2004-2010	Step IV: 2010-2015
TO WHOM? Customers and Markets How customers and the target market have changed over time?	Low level of occupation Middle-class customers from Buenos Aires The city is not strongly positioned as a touristic destination. Seasonal demand	Higher level of occupation Same type of customers. Seasonal demand The city starts penetrating the tourism market after the national crisis in 2001.	Higher level of occupation Middle-class and upper class customers from Buenos Aires and other nearby cities. Seasonal demand	Same level of occupation. Demand increases in summer times and holidays. Demand becomes steadier.
WHAT? Products and services How has the supply changed over time?	One single cottage	Three cottages	Seven cottages, outdoor pool, and reception area.	Ten cottages Accommodation for 42 people. Breakfast and cleaning services. Outdoor pool Indoor pool Spa Playroom
HOW? Business model How has the business model changed over time?	The Enterprise was originally thought as a lifestyle. Business idea not clearly defined	Business idea not clearly defined. Financial and operational planning activities.	The business plan becomes more strategic-orientated. Focus on customer satisfaction.	Customer satisfaction. Customer loyalty High quality standards in services. Advertising in social networks such as Trip advisor and Facebook.
WITH WHAT? Key resources and capabilities What have been the key resources and capabilities at each stage?	Financial resources to start operating	Financial resources to improve the services supply Focus on developing qualified human resources	Funding from different investors	Financial resources Human resources. Staff training programs Innovative capacity Professionalization
FOCUS What was the main concern in each phase?	Market positioning.	Market positioning	Achieve greater accommodation capacity Increase incomes to invest in the business Product innovation	Achieve greater accommodation capacity Product innovation Human resources management

The firm's growth involved a gradual process associated to the number of cottages and the services that were provided. Since the beginning, the entrepreneurs decided to incorporate one cottage per year approximately in order to improve services and be financially balanced. Besides, the entrepreneurs emphasized that providing high quality services is the key to survive in such a competitive market and that they have always focused on client satisfaction.

The first phase includes the beginning of the activity and the first access to customers. Then, we identified a new phase after the financial crisis of 2001, which influenced directly into the business. Due to the crisis, the entrepreneurs were forced to sell their home in order to get cash to cancel a loan. Besides, the crisis had a strong impact on the tourism activity in general. Fortunately, people that were not able to travel abroad, decided to travel to Tandil. Thus, Tandil became a touristic destination in demand.

After the crisis, in a third phase firm H incorporated new services. Specifically, the outdoor pool. In this period, the entrepreneurs focused on customers' needs and become more strategic- orientated. Although the entrepreneurs considered their business as a lifestyle, they realized that they had to reformulate the strategy and plan their growth trajectory. This change implied the start of a new phase and during the last five years the firm has incorporated an indoor pool, a spa, and a playroom. Furthermore, three new cottages have been built. Currently, the entrepreneurs focus on providing high quality services instead of expanding the accommodation capacity.

Empirical cross case analysis

As mentioned above, we conducted a comparative analysis across cases, based on Teece's framework of DC and its microfoundations. Besides, we compared growth paths across firms and economic sectors (Tables 9 and 10).

Table 9. Cross-case analysis for enterprise of software and informatics services

Empirical Themes and Illustrative Data				
Core Concept	Case A	Case B	Case C	Case D
Growth Path	Gradual	Gradual	Accelerated	Accelerated
Sensing	Moderate	Moderate	Strong	Very Strong
and individual ca- pacities to learn and to sense, filter,	Key factor: social and personal contacts and networking strategy "() individuals in the software industry are so connectedthat the most successful commercial strategy is networkingno advertising is required."	Key factor: Initial identification of business opportunity in a crisis context Restricted capacity to operate because of the dependence on the headquarter "Nowadays we are trying to penetrate new markets, and more specifically, to sell to the US market that is the only way to compete."	Entrepreneur's personal and professional contacts Networking "() many people have specific local knowledge And solutions and	Key factor: Participation and intensive mentoring from business accelerators programs. Market Research "In the business accelerator program (Techstars) mentors attacked our business idea and business model based on solid arguments () so we started analy zing the American market"
Seizing	Moderate	Moderate/Low	Strong	Strong
Enterprise structures, procedures, designs and incentives for seizing opportunities	Key factor: Technological training and specialization "() For us, the most important difficulty is the commercial deve- lopment of the busi- ness we have to be creativeGiven that we had no training or expe- rience in commercial activities, we decided to do the MBA .		Key factor: Organizational culture and knowledge mana- gement "We differentiate from our competitors in how we do things. We have much less processes, documents, and tradi- tional certifications. On the contrary, we en- courage people and things to keep as closer as possible. We foster members to tell stories, to share spaces, ideas, and opinions. We want to share idiosyncrasy and build a real organi- zational culturestra- tegies are almost the same the key is inter- personal relationships	and operational support "You can always go to the market and validate your product or servi- ce, even before having the final product or service ready for distribu- tion. You can talk to po tential customers, part- ners, and stakeholders and verify the business 'feasibility at least at a minimum scale to then extrapolate the results.

	Empirical Themes and Illustrative Data				
Managing threats and resource reconfiguration	Moderate/Low	Moderate/Low	Strong	Moderate	
Continuous alignment and realignment of specific tangible and intangible assets	Key factor: Specialization in BIG DATA technology. Extensive learning processes. Expansion and positioning in the US market. "() It is extremely important for us to have an office in the US market. We are seeking for a specialization path to get out of the outsourced development service market, where anyone enters and competes without adding value. A kind of specialization which does not involve increasing the number of people to escalate and growbecause that is a clear limitationThat would enable us to specialize in specific technologies that require extensive learning processesand that does create a real barrier to market entry and competition".	because the difference in costs between Argentina and Spain is almost nonexistence there may be difference between Spain and US, but that is not our caseHowever, at the beginning, selling high quality products and services in a country facing crisis was almost impossiblebut today our company has 7 or 8 years of experience and it has developed many international successful	talization and automationso we decided to focus on providing services to large media companiesbut the evolution of the market was slower than we expected and we never managed to be a profitable organization. We failed to find the adequate scalable business model although we struggled to develop mechanisms to attract customers from the media industryso we sold our intellectual property to a US company. After that, we reconfigured our resour-	'experiences through off-line sales "We decided to change from a marketplace model focused on selling online, towards a more sustainable model based on service layerwhich is superior because it involves significant logistic challenges and also consi-	

Table 10. Cross-case analysis for enterprise of turism

	Empirical Themes and Illustrative Data					
Core Concept	Case E	Case F	Case G	Case H		
Growth Path (Gradual vs. Accelerated)	Gradual	Gradual	Gradual	Gradual		
Sensing	Moderate	Moderate	Moderate/Low	Moderate/Low		
Analytical Systems and individual capacities to learn and to sense, filter, shape and calibrate opportunities	Information for identifying opportunities from customer surveys. Social and professional circles Relationship with suppliers Permanent staff training "When we started providing this all-	most important thing is to keep permanent contact with customers. () Regarding my connection with institutions within the tourism industry, I have actively participated in both local and national institutions. Networking is a must".	customers. Active participation in local and regional institutional networks directly linked to tourism activities "Opportunities always arise from direct contact and communications with customers, which can be formally or informally established we make surveys." () you have to participate because that way you can generate professional and commercial links, and even friendship, with your own competitorsand many times informal meetings are good to	their opinion about how they feel, what they expected, and what things would be positive to change And that allows us to enhance our services and grow. We are very aware of how customers feel and they appreciate that too. "		
Seizing	Strong	Moderate	Moderate/Low	Moderate/Low		
Enterprise structures, procedures, designs and incentives for seizing opportunities	Key factor: Availability of financial resources. Professional structure ISO quality certification including all the organizational processes, from service design to marketing strategies. Permanent evaluation from customers "We keep training all the time we attend external or in-house	Design of a platform to	Key factor: Limited not professional organizational structure Scarce financial resources "At the beginning there was only one employee and then we hired more staff as it was necessary depending on the demand, which is extremely seasonal. Currently, there are six part-time employees	Communication "() regarding funding,		

programs." of planning. Indeed, (...) Human resources but although we are (...) certifying was not although we spend few people we still keep and social capital are as difficult as many almost every day things organized and central in this kind of people believe. We together, we dedicate so there is a Director. activities. We regularly already had many time to debate and an executive assistant. invest in staff training control and standard create a specific and a management programs processes and the environment to talk team. Besides. (...) and we have organizational culture business." operational activities general meetings for are also divided into the whole staff at least was prepared for those changes... we only cleaning, cooking, and every one month. needed to adapt the maintenance. Communication is an way of doing certain (...) there are lots of essential resource." things. Ours was the things to do to improve first company in South our services... but the America to achieve that problem is to maintain certification profitability when costs are constantly increasing". Managing threats and resource Moderate Moderate Moderate/Low Low reconfiguration Continuous Key factor: Key factor: Key factor: Key factor: alignment and Diversification in the Diversification in the Diversification in the Diversification in the realignment of services supply services supply services supply services supply specific tangible Professionalization "Given the recent "We have made "Competition is an and intangible Development of increase in the number many changes ... for important matter to programs of social of competitors in the example, we cancelled the survival of the and environmental tourism industry, we the services from the firm...there are many responsibility decided to orientate restaurant that were problems with the "We have always tried our strategy towards no longer profitable entry barriers in the to improve existing innovation and and decided to rent the local market....there services and add differentiation...and I place to private events are not any...too new ones to face our think the most effective as a multipurpose many new entrants customers' needs.... that easily attract and mean of differentiation room. Now we have a providing services for consist in getting new "business" with absorb clients providing companies is a good increasingly involved new customers and modern services, example for that". with the customers' another source of which are less likely to "In 2007 we started experiences and then income" be provided by older working with Corporate segment the market companies. Social Responsibility according to what they need to enrich (CSR)...we already had that kind of their experience in our organizational practices resort. People do the because from the same in almost every beginning of the cottage resorts: they business we focused on sleep, eat, and rest being responsible for our challenge is to give them more than that". the environment and natural resources.

DISCUSSION

Overall, we identified some common results regarding DC across all the cases. However, firms engage in different types of growth trajectories and that influences the type of skills that firms decide to develop. Besides, there are different growth patterns related to specific industries and to specific firms. Furthermore, firms have different expectations related to growth depending on the stage of their life cycle. Strategic priorities also differ between firms.

In the present study we analyzed how growth paths differ between the sectors and how DC differ between SMEs within the same industry. Given that results were analyzed based on Teece's theoretical model of DC (2007), we identified industry-specific and common factors involved in the development of DC. We also identified that although all the firms generated some DC to grow, they applied different mechanisms, as shown in Table 9 (Cross Case Analysis between firms in the Software sector) and Table 10 (Cross Case Analysis between firms in the Tourism Sector).

With regard to the capability to sense opportunities, this identification resulted to be closely linked to the entrepreneurs and, specifically, to their entrepreneurial orientation, personal and professional contacts, and networks. This is because market and industry information is the key to identify business opportunities and be competitive. Thus, entrepreneurs contact other participants to obtain this knowledge and understand the business ecosystem, and to gain experience in making strategic decisions. Additionally, in order to obtain market information, the majority of the entrepreneurs highlighted the importance of keeping close contact with customers (particularly in tourism firms) and networking.

At the individual level, based on Teece's framework, we interpreted the role of entrepreneurs' managerial skills, particularly, in younger companies, in which individual capabilities are extremely important. Indeed, at the startup stage, firms are based mainly on entrepreneurs 'skills. On the contrary, established companies mainly focus on organizational processes and routines and the ability of the management team. In relation to this, Teece concluded that the ability to recognize opportunities depends on the capabilities of individuals, and, specifically, on knowledge about customers' needs (Teece, 2007).

To conclude, other factors also influence the process of identifying opportunities, such as the changing conditions of the macroeconomic context in which companies operate, which requires flexibility, permanent reconfiguration of business strategies, and the search for new markets for firms to compete. This conditions lead entrepreneurs to develop entrepreneurial capabilities in terms of environmental monitoring and strategic planning given that they are asked to design alternative business models and strategies. Firms A and D are good examples of the reorientation of the business strategy.

The capability to seize opportunities varies depending on the activity and the growth path of each firm. Many entrepreneurs identified or sensed opportunities but failed to seize or exploit them, particularly in the SSI sector, because of the difficulty in identifying the needs of the target market. This is primarily attributed to the lack of strategic management skills. Unfortunately,

entrepreneurs do not realize about this problem until they face grow opportunities and realized they do not are prepared for that challenge (firms A and B).

Firms that experienced gradual growth identified managerial skills as fundamental factors and the entrepreneurs of SSI firms concluded that their main weaknesses were associated to the lack of managerial skills. On the contrary, firms with accelerated growth, focused on a specific factor: organizational culture and interpersonal relationships. Flexibility and knowledge management are considered competitive advantages in the SSI sector (firm C) as well as working teams and strategic alliances (firm D).

Firms in the tourism sector demonstrated to face different problems and to focus on the availability of financial resources and the certification of quality standards. These aspects are particularly relevant for tourism firms. Whenever entrepreneurs decided to expand their services and make investment decisions, they considered both the potential opportunities and the available resources. Therefore, this is a fundamental capability for tourism firms.

Business model is also relevant in this stage. The kind of business model may have a strong impact on the firm's capacities. For example, firm B depends exclusively from a Spanish business group and that limits the action and motivation of the entrepreneurs. In many cases, the local firm had sensed opportunities to grow but was not able to make any decision and they lost them. So, it is important for the firms to remain alert and detect opportunities but also to transform customers' needs in new products or services (Teece, 2007). The decision-making process also influences the firm's possibilities to seize business opportunities, as well as networking activities, that provide access to resources and capabilities and accelerate learning processes.

With regard to the capability to manage threats and orchestrate resources, firms that experienced gradual growth based their capabilities on technological specialization and learning; and the capacity to adapt to environmental conditions. Particularly, learning from past experience in the sector, that allows entrepreneurs to visualize market changes, is critical to the development of skills related to accelerated growth in SSI companies.

Teece (2007) argues that the key to sustain growth is the ability to recombine resources and organizational structures as the company grows and markets and technologies change. In this context, it is important not only to identify the objective conditions of the environment, but also the subjective perception of entrepreneurs. In this aspect, we identified certain common concerns regarding the development of the businesses.

In the SSI sector, the most important concern is linked to the progressive loss of competitiveness of local companies in international markets, derived

from the sustained increase in labor costs (which in this sector represent the largest item in their cost structure). Besides, the international financial crisis is pushing down wages (particularly in European countries). Thus, local firms are forced to re-orientate their strategies and resources towards technical and commercial specialization and higher differentiation to reach more profitable markets.

Furthermore, in the software industry, in particular, inflation is another important factor that further hinders the scenario for companies to sustain competitive advantages. Local firms have serious difficulties in transferring the increase in costs to final prices, which are internationally determined. Besides, firms compete do not compete for customers but for qualified human resources, which are scarce resource and therefore are strongly disputed by companies.

In the tourism industry, to face change and be competitive the key factors are the development of managerial skills orientated towards the diversification of the services provided and the formulation of innovative strategies to differentiate from competitors, such as social responsibility programs and environmental programs.

Additionally, the absorptive capacity is a critical tool for touristic firms to face new environmental conditions and reformulate their strategic orientations. Besides, firms improve efficiency and quality of their services applying mechanisms or agile methodologies to analyze, repeat and experiment tasks to improve performance in the shortest time possible, and to optimize response times and continually validate customers' requirement through a more direct contact at different stages of the product development. This process of repetition and experimentation enables companies to generate necessary organizational learning.

Finally, we emphasize that the three types of DC should be analyzed together, because firms need all of them to grow. Based on our analysis, DC were developed in a context of significant openness to learning, and where experimentation and trial and error played a prominent role. The integration and reconfiguration of activities, resources, and skills did not involve a strategically planned process, but rather an emergent process, strongly motivated by the entrepreneurs' ability to identify trends and changes in the environmental conditions, which are mainly uncertain.

This is an interesting empirical finding that contradicts current literature that focuses on "how" companies grow, or "how should firms grow", identifying "better" or more sophisticated planning processes. By contrast, we identify Sarasvathy's idea (2001) about how "exposure to experiences" turns out to be a central element to develop high value learning to boost the growth in SMEs.

CONCLUSION

This study focuses on the investigation of specific capabilities associated with the growth of SMEs and shed light on some of the topics of DC that remained little explored. Specifically, we combine the literature on Entrepreneurship and Strategic Management to explore the strategic decisions that SMEs implement to grow in developing countries, and their results. We also provide empirical evidence on the role of DC in the growth of SMEs, specifically, comparing two important economic sectors.

Furthermore, the present study improves the understanding of DC, analyzing how SMEs create, identify and seize opportunities; and identify which specific capabilities led small and medium-sized to gain a sustainable market position and also to grow. Another contribution of this work is the empirical testing of theoretical constructs, particularly, applying a qualitative analysis that allowed us to identify the key aspects of the process of development of DC in SMEs. As a consequence, this study contributes to entrepreneurs and managers to understand the basis for firm sustainability based on specific capabilities associated to firm growth; and to policy makers to understand the dynamics of SMEs and obtain empirical evidence to formulate policies that foster firm growth. Furthermore, the present study proves that DC 's framework may be applied in the analysis of SMEs in developing countries.

Based on the cases, it was found that all the companies had developed capabilities associated with sensing and seizing opportunities, and reconfiguring resources. However, these capabilities differed between cases, depending on the evolutionary paths of each business. This explanation of the importance of DC in the different phases or "jumps" in the growth path is another contribution of the present study.

Besides, our findings suggest that the process of identifying business opportunities implies an emergent process rather than a predetermined strategic decision. We also conclude that the identification of opportunities is not the most important threat, since companies have successfully recognized and evaluated important business opportunities with their existing resources and capabilities. On the contrary, firms faced many difficulties in seizing opportunities and adapting to changes.

To conclude, the main limitations of this study are the lack of analysis of other factors associated with DC and the lack of delineation in the scope of the capabilities addressed. Besides, results are drawn from a limited number of cases (8), and these companies are at different stages of development. These important issues should be considered for future research on DC.

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Abstrakt (in Polish)

Jakkolwiek rezultaty badań sugerują, że rozwój dynamicznych zdolności (DZ) stanowi kluczowy czynnik osiągania i zachowania przewagi konkurencyjnej dla wzrostu, nie zbadano w pełni w jaki sposób małe i średnie przedsiębiorstwa (MSP) tworzą, identyfikują i wykorzystują szanse na ekspansję, szczególnie w krajach rozwijających się i o ograniczonych zasobach. Celem badania jest określenie, w jaki sposób MSP budują zdolności do wzrostu w specyficznym kontekście krajów rozwijających się i w warunkach ograniczonych zasobów. Dla szczegółowego opisu tych procesów zastosowano jakościową metodykę, opartą na porównawczej analizie opisów przypadku ośmiu MSP, w sektorach oprogramowania i turystyki w Argentynie. Sektory te były uprzednio określone jako sektory dynamiczne i o wysokim potencjale wzrostu. Wyniki sugerują, że MSP rozwijają DZ głównie poprzez wyłaniający się proces powtarzalnych eksperymentów, nie zaś poprzez planowanie strategiczne. Proces ten polega na koordynacji organizacyjnych działań i zasobów, w której to koordynacji menedżerowie odgrywają kluczową rolę.

Słowa kluczowe: wzrost firmy, dynamiczne zdolności, MSP, kraje rozwijające się.

Biographical notes

Claudia D'Annunzio is Director and Researcher of highest category in the national research system Argentina at the Center for Studies in Administration (CEA) on issues related to entrepreneurship, business development, and local development. Master in Business Administration (National University of Central of Buenos Aires Province) and full Professor of Organization Theory and Entrepreneurship Program. She is member of the Scientific Advisory Board of the UNCPBA and committees at national level. She is also a Board Member of the Civil Association Network MERCOSUR SMEs.

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