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DETERMINANTS OF AMBIDEXTERITY IN BORN GLOBAL FIRMS

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Abstract

Determinants of Ambidexterity in Born Global Firms

It is well known how large firms pursue ambidexterity as a way to overcome organizational inertia. However, this does not apply to small entrepreneurial firms where resources are scarce. This paper examines to what extent a Born Global Firm (BGF) can be considered an ambidextrous organization and what the main drivers of this ambidexterity are. I used a multi case-study comparison research method based on firms' analyses of a selected number of BGFs. My findings reveal that BGFs can be considered ambidextrous firms and highlight two main determinants for ambidexterity: customer orientation and knowledge-sharing organizational culture.

Keywords: born global firms, entrepreneurial firms, ambidexterity, innovation.

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1. Introduction

During the last 30 years, scholars have started to notice a certain type of company – a type of company that takes advantage of new technologies and the homogenization of the customers' preferences (Knight and Cavusgil, 2004) to succeed in the competitive environment in which we live in. Authors have attributed varying names to these companies: Born Global Firms (BGFs) (Rennie, 1993), Global Start-ups, or International New Ventures (INVs) (Oviatt and McDougall, 1994). Regardless of what name is given to these companies, they are growing in number and made researchers wonder about the reasons for their success. As indicated by their name, Born Global firms are *born globally*, which is to say, they seek international business activities since or near inception, as well as receive a large portion of their revenues outside of their domestic market, in multiple foreign markets (Knight and Cavusgil, 2004). The attention that BGFs have attracted is a result of their high international success even when they have a clear lack of resources, such as financial, physical or human. BGFs have a unique set of characteristics that allow them to be successful – founders' previous experience, social/business networks, industry specifics, firm's unique capabilities and, the propensity to innovation (Cannone *et al.*, 2012). From these, the firm's industry specifics and the firm's propensity for innovation are most strongly correlated with the success of the firm (Cannone *et al.*, 2012). This shows the importance of innovation for BGFs, but leads to the question of how these firms pursue innovation, and how their pursuit differs from that of large firms.¹

¹ The pursuit of innovation in large firms has been most recently understood as occurring under the guise of ambidexterity, a process that – briefly – involves the firm continuing to improve its current business pursuits, while devoting attention to expanding into new fields.

This paper will seek to provide preliminary hypotheses linking the concepts of born global firms and ambidexterity. In order to do so, this paper will progress as follows. First, I will undertake a literature review of both BGFs and ambidexterity to clarify these two terms, the definition of which is subject to debate. Second, I will establish the connection between BGFs and ambidexterity by extrapolating common drivers or factors between these concepts. Third, I discuss the research method and present the selected case-studies. Fourth, I will discuss a cross-case analysis using information gathered from in-depth interviews (as described in the methodology). In order to do this, I will present a comprehensive table outlining firm-specific results garnered from the in-depth interviews, and then suggest preliminary hypotheses by drawing on the findings for each ambidexterity driver. Finally, I will discuss the main conclusions of the study, implications on current research and entrepreneurial practice, as well as my study's limitations and where future research on this topic might go.

2. Literature Review

2.1 Born Global Firm: a Conceptualization Problem

In order to approach the evolution of BGFs as a concept – and a debated one at that – it is necessary to first understand the conceptualization problem that arose from the continuous discussion of early internationalization firms. To do so, this paper will rely on the work of social scientist Kurt Weyland (2001), whose work on conceptualization has added great value to the study of Latin American politics and, more specifically, the study of populism. Regardless of the discord between Weyland's field of study and the content covered in this paper, the ideas put forward in his seminal paper on conceptualization are

without a doubt useful as a launching platform for this section's discussion on the evolution of BGFs as a concept.

In brief, Weyland (2001) sets out to understand how the social scientists approach conceptualization. In doing so, he outlines three specific 'types' of conceptualization: classic, cumulative, and radial. Classical conceptualizations, as per Weyland (2001), are formed with strict definitional boundaries: in short concept X is composed of factors W, Y, Z, the straying from which would push concept X out of its classical form. Cumulative concepts, by contrast, see concept X as drawing from some, but not all, factors from other concepts, say concepts W, Y, and Z, to set its definitional boundaries. Finally, radial concepts are relatively unbounded concepts, where typologies (or something similar) typically emerge from overflowing factors – ie, concept Xw, Xy, Xz, etc. - or, even more problematically, where concepts become limitless and thus infinitely debatable.

To examine BGFs is to examine a radial concept. From the get-go, BGFs have been a *loose* concept, bounded only by *loose* defining characteristics that have, for the most part, been inconsistent, to such an extent that a conceptual name has not even been agreed upon in the literature, although two forerunners – BGFs and International New Ventures (INVs) – have seemed to emerge as dominant classifying terms. Using Weyland's conceptualization theory, this section will critically examine the literature available on early internationalizing firms.

In the late 80's and during the 90s, academics began to observe that certain firms displayed a unique penchant for rapid internationalization. Oviatt and McDougall (1994)

were among the first to attempt a definition of these types of firms, dubbing them International New Ventures, and setting early definitional boundaries in terms of the speed of internationalization and the scope of internationalization (as in, the number of countries where sales are generated). The authors presented four sub-concepts based on the aforementioned boundaries: Import/Export Start-up, Multinational Trader, Geographically Focused Start-up, and Global Start-up. In contrast, Rennie (1993) principal in Mckinsey Sydney Office first introduced the term BGFs to explain the increasing global exportation phenomenon of manufacturing firms in Australia. Rennie set definitional boundaries in terms of speed (more precisely 2 years), which is also present in INVs, and extent (percentage of foreign sales, more precisely 75%). As scholars examined the continued emergence of these types of firms, Oviatt and McDougall's original definitional boundaries for INVs and Rennie's original definitional boundaries for BGFs were challenged.

In the following years, efforts to understand the early internationalization phenomenon were conducted, which led to definitional confusion. The aforementioned sub-concepts of speed, and extent were contested by several authors (eg: Zahra and George, 2002; among others) who set different boundaries, such as different number of years for the internationalization process, and different percentages of foreign sales for the aforementioned sub-concepts. The lack of consensus on a specific concept or even a specific sub-concept to characterize the early internationalization firms in the literature led to a "radial conceptualization" using Weyland's terms that resulted in BGFs and INVs being generally accepted as synonyms regardless of their original definers' supposed strict boundaries. As this radial concept of early internationalization firms began to unfold,

theoretical and empirical problems began to emerge – a typical characteristic of radial concepts as per Weyland (2001) – making it nearly impossible to compare different studies. In theoretical terms, academics were struggling to set strict limitations on what was considered an early internationalization firm. As a result, empirical analyses of early internationalization firms were not conducted within a consistent set of conceptual boundaries, and thus were not conducted using a consistent selection criteria. With such obvious problems in this particular field of study, there was a clear need for a redefinition of the early internationalization firms concept in a more Weyland-esque, Classical sense.

Most recently, Madsen (2013) highlighted the differences between BGFs and INVs, and attempted to reach to a clear definition of the former by recommending the use of the three dimensions (suggested earlier by Zahra and George, 2002) – speed, scope and extent - in order to facilitate comparisons between empirical studies. Madsen's (2013) work highlighting the differences between BGFs and INVs is an important milestone in the early internationalization literature, as it extrapolates a set of new, and in this author's opinion, functional set of definitional boundaries that takes into consideration the ever-important, and recurring characteristics of speed, scope, and extent. It is still early to say whether Madsen (2013) has “resolved” the conceptualization problem in early internationalization literature. However, the conceptual clarity of his most recent piece, using previously-explored, but mis-connected aspects of early internationalization firms, makes for a very hopeful conceptual redefinition.

This study will therefore use Madsen's conceptual redefinition as a launching platform to jump into its tightly conceptually bounded empirical analysis. Taking from Madsen, this

study will employ the conceptual use of BGF rather than INV; INVs, if we are to believe Madsen, are highly typological, and thus less classically bounded as BGFs. To be even more specific, this study will abide by the definition of a “True Born Global” given by Kuivalainen et al. (2007; 2012), seen in Madsen (2013), whereby the authors define a BGF as a firm that has 25% of foreign sales in the first three years since inception originating from five or more countries.

2.2.Ambidexterity and its link with BGFs

Having outlined the conceptual development of BGFs, we now turn to the crux of this essay: ambidexterity and BGFs.

The rise of BGFs in the 2000s threatened large firms, since these early international firms were more specialized in certain services and products. Furthermore due to their youth, early internationalization firms were highly flexible and adapted easily to new conditions. To face the threats of small firms, large firms have engaged in a strategy that incorporates the balance of two different activities – the improvement of the existent product/service portfolio, and the discovery of new market opportunities/trends. This balance between two innovation strategies has gained special attention in the last few years, and has become known as ambidexterity. In short, ambidexterity is the way a firm is able to exploit the present, improving current products, capabilities, while exploring the future, follow new trends, new areas, new products (O’Reilly III and Tushman, 2004).

Ambidexterity is itself not a recent term. The term was introduced earlier by Duncan (1976), but in more recent years has attracted academics to understand the importance in

terms of performance (eg. O'Reilly III and Tushman, 2004; O'Reilly III and Tushman, 2011; Gibson and Birkinshaw, 2004; Zelong and Wei, 2011), and to understand which are the antecedents/drivers of ambidexterity (eg. O'Reilly III and Tushman, 2011; Patanakul *et al.*, 2012).

Large firms adopt an ambidextrous strategy in order to overcome organizational inertia (Kollman *et al.*, 2009) that leads to a failure in achieving breakthrough innovation while conducting improvements in the product portfolio (O'Reilly III and Tushman, 2004). Moreover, the study of innovation strategies in large firms is usually associated with a structural ambidexterity strategy in which the firm creates a separate autonomous unit(s) dedicated to explorative activities, and that is strongly integrated at the senior level (O'Reilly III and Tushman, 2004). However, in small entrepreneurial firms, the above is not so easily applied. For example, in the case of BGFs, organizational inertia is not a problem as an organizational culture is not completely established, and such firms are usually in an explorative phase. In addition to this, small firms have resource constraints and as such, the pursuit of a structural ambidextrous strategy may not be possible. All this has led to concerns of whether ambidexterity is relevant to small entrepreneurial firms (Kollman *et al.*, 2009).

Some authors have strived to fill the gap in the ambidexterity field of study regarding new entrepreneurial firms by trying to prove ambidexterity's impact on the performance of entrepreneurial firms (eg. Han and Celly, 2008; Hughes *et al.*, 2010), and by trying to explain the logic behind the existence of ambidexterity in these young firms (Kollman *et al.*, 2009). On this front, some work has been done on how ambidexterity can be employed

in small firms. To expand on this, Kollman *et al.* (2009) point to the possibility of small firms adopting what Gibson and Birkinshaw (2004) dub as contextual ambidexterity, whereby ambidextrous activities are not pursued in a separate business unit as in the case of structural ambidexterity, but rather as an integrated process within the firm. Even so, little evidence is known regarding ambidexterity in small entrepreneurial firms. BGFs have shown that small entrepreneurial firms with limited resources can be innovative in a continuous way. The question here is how this ambidexterity is developed inside a born global firm and how this firm can pursue both exploitation and exploration when there is a clear struggle with resource constraints. The answer to this question is far from being obvious.

For example, a BGF might be founded on the basis of an advantageous opening in the market, and during its early phases might explore how to pursue their business so as to benefit from this market opening. This exploration, however, might end soon thereafter, and the firm may only pursue exploitative activities – or seek to improve only a core product or service – without pursuing explorative activities – or innovating beyond their core product or service. Therefore, BGFs in their nature are not *inherently* ambidextrous. This study therefore intends to find the drivers of ambidexterity in born global firms so as to shed some light on what leads to ambidexterity within BGFs, and how this ambidexterity is pursued relative to the structural ambidexterity in large firms.

2.3. Field overlap: finding the possible drivers of ambidexterity within BGFs

In order to approximate an answer to the above postulates, it is important lay out the factors that lead to ambidexterity. Kollman *et al.* (2009) make an important contribution in this sense by explaining the rationale behind ambidexterity in entrepreneurial firms. In their paper, they outline the factors that might lead to the *emergence* of ambidexterity, as well as the factors that lead to the *success* of ambidexterity. Kollman *et al.* (2009), however, only approach ambidexterity from a theoretical perspective, leaving much to be desired in terms of practical applicability of the drivers in small entrepreneurial firms. Nevertheless, Kollman *et al.* (2009) provide a good starting point for this section.

Because ambidexterity often leads to some degree of innovation, incremental or radical, process or product innovation, we triangulate the findings of the studies on ambidexterity with studies on innovation within BGFs and entrepreneurial firms in general. From these, drivers or factors overlapping the three sets were plucked and examined for repeated reference, and from those that were mentioned repeatedly, a final list of drivers and factors that *might* lead to ambidexterity within BGFs was found. In essence, the fields of BGFs, innovation, and ambidexterity were crossed to get a preliminary list of drivers or factors that lead to ambidexterity in BGFs. The results of this are displayed in their entirety in **Table 1**. Again, it must be reinforced that this is only a *preliminary* list of drivers or factors that lead towards ambidexterity in BGFs. Other drivers may be found in the future. Nevertheless, these specific drivers were chosen as a result of academic consensus; these drivers of innovation are those that show the most overlap and repetition in the literature.

Table 1: Tentative drivers or factors of ambidexterity within BGFs

Innovation drivers	Authors	Conclusions
Environmental Factors	Kollman <i>et al.</i> (2009) Jansen <i>et al.</i> (2005) Raisch and Birkinshaw (2008) <i>Cannone et al. (2012)</i> <u>Criscuolo and Nicolaau (2012)</u>	Environmental factors (such as short product life cycle, rapid changes, competition level, among others) will render the current product portfolio obsolete, leading to the firms to engage in ambidexterity.
Founders' Characteristics	Kollman and Kuckertz (2009) <i>Barringer and Jones (2005)</i> <u>DeWinne and Sels (2010)</u> <u>Heirman and Clarysse (2007)</u> <u>Arvantis and Stucki (2012)</u> <u>Sapienza et al. (2003)</u> <u>Groenewegen and Langen (2012)</u>	Multifunctioning team of founders with long term considerations, with high education, risk taking and using concrete ideas from previous occupation have a positive impact on innovation. Experience in the industry seen as negatively correlated with innovation.
Organizational Culture	Kollman <i>et al.</i> (2009) Lin and McDonough (2011) Jansen et al (2005) Gibson and Birkinshaw (2004) Chang <i>et al.</i> (2011) Zhou (2007) <u>Alsaaty (2011)</u>	A knowledge sharing organizational culture, in which information flows freely, where employees feel comfortable to speak their mind, and cooperation is a daily activity incentives to ambidexterity.
Customer Orientation	Dutta (2013) Raisch and Birkinshaw (2008) <i>Cavusgil and Kim (2011)</i> <i>Mort and Liesh (2008)</i> <i>Barringer and Jones (2005)</i> <u>Groenewegen and Langen (2012)</u>	There is a correlation between innovation and customer orientation. By understanding customers' needs, small firms are able to provide more innovative and suitable products.
Networks/Partnerships	<i>Cavusgil and Kim (2011)</i> <i>Cannone et al. (2012)</i> <u>Alsaaty (2011)</u> <u>Evers and O'Gorman (2011)</u> <u>Groenewegen and Langen (2012)</u>	Networks/partnerships have a positive influence on innovation, since they allow the firm to identify new market opportunities, create alliances, and improve quality/uniqueness.

Legend: Select literature outlining specific driver/factor that leads to ambidexterity in plain text; *select literature outlining specific driver/factor that leads to innovation in BGFs*; select literature outlining specific driver/factor that leads to innovation in small firms

With all the above in mind, the empirical study conducted below will attempt to answer to what extent a BGF can be considered an ambidextrous firm by analyzing the above mentioned drivers of ambidexterity.

3. Methodology

The decision of pursuing empirical research to understand to what extent a BGF can be considered ambidextrous is based on the fact that existing research fails to address this research question (Eisenhart, 2007). Also the complexity of such a study requires a higher familiarity of reality to understand whether the theoretical background is or is not close to said reality. The choice of conducting a multiple case study approach is justified by the need for a better understanding of how BGFs operate, and a better understanding of the forces that drive innovation and lead to an ambidextrous management strategy (Siggelkow, 2007). A cross case study provides a more complete analysis and enables the development of hypotheses that can be tested further in future studies. I relied on several sources of information such as in-depth interviews with the CEOs and employees of the firm, and secondary data from online sources. I believe that this approach, although not without limitations, is appropriate to achieve the objective of the thesis.

Here below I describe the key steps of my research method. First, I conducted a theoretical framework analysis with both ambidexterity and BGFs in order to draw out several causal drivers across both topics. Second, I identified the firms that could be relevant for this study. After the selected firms demonstrated an interest in participating in this study, I scheduled pre-interviews. These pre-interviews helped to understand the business model of the selected firms. Further questions were posed regarding the selected firms' financial aid, as well as with regards the industry in which it operates, and finally to gather more information on the internationalization process of the firm beyond what was available through secondary sources. The pre-interviews were crucial in understanding how

the firm could contribute to the study as well as to preliminarily characterize the firm as a BGF or a startup. In short, these pre-interviews screening led to a better understanding of the possible contributions that could be made to the study through multiple perspectives (Konh, 1997).

Interviews were then conducted personally, or using Skype (internet communication software). All in-depth interviews were recorded, and transcripts were made. In order to guarantee reliability, a database was constructed based on the interviews records, transcripts, and secondary data available. In the analysis process, a constant comparison was made between firms - drivers and conclusions were drawn from each case-study, and afterwards a cross analysis was made with conclusions regarding the several ambidexterity drivers found. Several types of reasoning were used to reach these results, with the hope that generalizations might be made (Johansson, 2003).

In order to verify the theoretical framework presented in the literature review, three firms were targeted who satisfied the BGF criteria outlined earlier – that is, 25% of sales outside of the domestic market within the first three years in five or more countries. Two startups that do not satisfy the BGFs' characteristics were included as a means of understanding the differences between these two sets of small entrepreneurial firms. An additional requirement was maintained for continuity: the firms included in the study were only founded from 2005 and onwards. Using a diverse set of firms, in regards to their sector of operation, business model, and geographical focus, has allowed for a good understanding of the innovation process within small entrepreneurial firms. Beyond this, the diverse selection of firms has painted a good picture of the *causal* relationship between

ambidexterity and its drivers. To wrap up: as per Kohn (1997), the heterogeneity of this study's firms may aid in producing generalized results.

4. Case Study Description

As previously mentioned, a sample of 5 start-ups with different characteristics were chosen. Table 1 shows the main characteristics of the selected sample. Furthermore, a small description of the firms will be provided. All of the firms were founded in Portugal, with one exception, Company D, which was founded in the UK.

Table 2. Characteristics of the startups.

Start-up	Industry & Sub-Sector**	Commerce transactions	Founding Year	Number of employees	Funding	BGF classification
Company A	Consumer Services: <i>Media Agency</i>	B2B	2008	5-10	Own	Yes
Company B	Consumer Goods: <i>Toys and Recreation Services</i>	B2B and B2C	2008	>50	External	No
Company C	Technology: <i>Software</i>	B2B	2010	20-25	Own	Yes
Company D	Technology: <i>Internet</i>	B2B and B2C	2011*	1-5	Own	Yes
Company E	Technology: <i>Software</i>	B2B	2010	1-5	Own	No

*Firm founded by the CEO under other name in 2007. **Classification following the Industrial Classification Benchmark (ICB) (http://www.icbenchmark.com/ICBDocs/ICB_%20Product_Spec_Nov2011.pdf)

Company A

This company is specialized in post-production 3D and music composition. The startup has satisfied the BGF criteria since its first year due to its reduced domestic market. It has had a global vision since inception, and further, due to the nature of the sector, innovation and creativity are crucial to the survival of the firm. The sector specificities imply a business to business (B2B) transaction. The competitive advantage of the firm results from its incorporation of two art fields: post-production 3D and music composition.

Company B

This firm produces scientific toys which are sent to retailers or directly to its final customer. Besides its main products, the firm also offers customer services directed towards children such as vacation camps, birthday parties, and extra-curricular activities. This firm is thus operating on both a B2B and Business-to-Consumer (B2C) basis. As this firm does not operate in the high-tech sector, and is positioned in a mature industry dominated by SMEs (in the case of Europe) (TIE, 2013). However, innovation is a must, the market is highly seasonal, and new toys are in high demand from retailers, especially for the Christmas season. The firm's competitive advantage comes from its products' domestic production, the educational nature of its products, and the associations of the product to reputable institutions. The Portuguese market is still the strongest when it came to sales.

Company C

This firm is focused in mobile advertising as its core business, but is capable of delivering all possible services that are related to the digital media area. The firm started to generate foreign revenues since inception. It was only later that the firm focuses in the domestic market. Company C's competitive advantage is the focus on increasing mobile

trend (Deloitte Development LLC, 2010), as well as the strong worldwide network constructed so far.

Company D

This firm was founded in the UK in 2007 under a different name. Later, in 2011, one of the founders divested to a company under a different name. Due to this, the interview was focused on the founding process in 2007, and then in terms of the innovation analysis in the current firm. The firm focuses on web-hosting. It started using a B2B model, and then complemented this service by also adopting a B2C transaction model. The firm started global in three different continents: North America, South America and Europe. Its competitive advantage is in its customer assistance available 24/7. The internet sector is highly concentrated, high competitive and there is a distinct need for firms to stand out from the competition.

Company E

This firm is focused in specialized consumer service in the digital marketing area. The firm deals in B2B transactions, with its competitive advantage being its high quality specialized customer service. Company E is not a BGF since it does not satisfy the criteria outlined earlier in this paper. It had some international projects but nothing stable and continuous. The focus on internationalization was never made until this point. However, the firm is starting the first steps towards internationalization.

5. Cross-case Analysis

5.1. Analysis of the Ambidexterity Drivers

Having outlined the tentative drivers or factors of ambidexterity in BGFs, as well as having identified the firms selected for this study, we are now able to move on to the cross-case analysis.

The cross-case analysis will be conducted using the drivers or factors laid out in **Table 1**. For clarity, these are: environmental factors; organizational culture; founders' characteristics; customer orientation; and networks/partnerships. Each driver or factor has been applied to the firms selected for this study and analyzed accordingly to determine their impact on the firm. The results of this are presented in **Table 3. Cross case analysis summary of ambidexterity drivers.**

Table 3. Cross case analysis summary of ambidexterity drivers. 20

Driver	Environmental Factors	Organizational Culture	Founders Characteristics	Customer Orientation	Networks/ Partnerships
Expected Results	Environmental factors (such as short product life cycle, rapid changes, competition level, among others) will render the current product, leading to the firms to engage in ambidexterity.	A knowledge sharing organizational culture, in which information flows freely, where employees feel comfortable to speak their mind, and cooperation is a daily activity promotes ambidexterity.	Multifunctioning team of founders with high education, risk taking and using ideas from previous occupation have a positive impact in innovation. Sector experience seen as negatively correlated with innovation.	A close customer relationship allows small firms to understand customers' needs and to provide more innovative and suitable products.	Ns/Ps have a positive influence in innovation, since allow the firm to identify market opportunities, create alliances, and improve quality/uniqueness.
Company A	Not a high service demand in Portugal (see Arte de Animar Portugal), invite the firm to internationalize since inception and try to stand out foreign from competition. Creativity/innovation is a must in this industry. Continuous adoption of new tools (software, hardware).	Informal, personal, cheerful and relaxed environment leads to creativity. Freedom to decorate your personal space. Continuous cooperation. Long term goals: new markets, new clients, and resources access. Global Mindset.	Two founders. International experience. Undergraduates. Work experience in the same sector as freelancer. No general knowledge in business/management. No previous experience with startups.	Continuous feedback, resulting from the type of service allows the firm to establish a close relationship with the client and to understand their needs.	Partnerships used to gain more resources and new ideas to overcome country-specificities.
Company B	The toy sector is highly seasonal, and it can be considered as innovative. The continuous need for new toys to gain shelf-space, and toys connected to new technologies to satisfy new trends makes this sector highly innovative.	Informal, dedicated and horizontal culture leads to communication and idea sharing. Values well visible at the wall. Evidence of work discipline. Long term vision.	One founder. Undergraduate. No previous experience in the industry. No previous experience with startups. General business knowledge facilitated the firm's management at the beginning.	Strong relationship with more important clients. The client influences the diversification of the products' portfolio. CRM differences between services and product.	Networks increased the value of the product - through brand awareness, association, and cost reduction.
Company C	Domestic market focused in the traditional media channels. Invite the firm to start internationally and follow the mobile trend. Innovation needed for the different campaigns.	Informal organization culture. Ideas sharing between the different subsidiaries. High cooperation between employees. LT orientation – new markets. Global mindset.	One founder. Undergraduate. The strong experience in the same sector allowed the founder to recognize the market opportunities. No previous experience in startups.	Close relationship with the clients. Continuous feedback due to the nature of the service. Client influences improvements in the service.	Partnerships showed to be crucial in the establishment of the firm. Strong business networks allow the firm to internationalize since day 1.

Drivers	Environmental Factors	Organizational Culture	Founders' experience	Customer Orientation	Networks
Company D	Dynamic and innovative sector push for continuous service improvement. Highly competitive. Continuous innovation following the market trends (see cPanel Conference 2012; Web Hosting Trends and Analysis with Philbert Shih).	Horizontal hierarchy, all members seen as partners, collaborative and informal environment – incentivize ideas sharing. Ideas and inputs, from partners, are considered important. Long term vision.	Two founders. Undergraduate (today). Founders' experience in the industry has a positive impact in idea generating. Previous experience with startups in different industries.	Strong relationship with the clients. Continuous monitoring of clients activities. Written feedback from the clients allows the improvements of the services, and new ideas for new services.	Personal and Business networks increase the pace of internationalization. Partnerships with other businesses increased performance.
Company E	High specialized service to the client – leads to a need to innovate. Competitive environment. Continuous improvements in the tools (software and hardware) used.	Informal, cooperative, and open organizational culture. The firm tries to maintain the same collaborators/freelancers to deliver a quality work. Not global mindset.	Two founders. Master Degree. CEOs previous experience in the industry does not seem to affect the propensity to innovate. No previous experience with startups.	Attribution of a key person to speak with a determined set of clients accelerates a closer relationship establishment. Clients influence the entrance in new business areas.	Business networks made previously led to establish a company with a stable clients' portfolio. Not relevant for internationalization pace. Use partnerships/networks to innovate.
Hypotheses	H1.a) Environmental Competitiveness is likely to lead to the pursuit of ambidexterity in BGFs. H1.b) Environmental dynamism is likely to lead to the pursuit of ambidexterity in BGFs.	H2: A knowledge sharing organizational culture instigates ambidexterity in BGFs.	Lack of evidence regarding general knowledge - no evidence that has a positive impact in innovation, and lack of evidence that higher education leads to more innovative firms. However, contrary to several authors, H3: Founder's experience may have a positive impact in ambidexterity in BGFs.	Strong relationship leads to customer loyalty, customer insight, open communication channels, and opportunities to spot improvements and generate ideas for new products. Informal approach seen as crucial to have an open communication with the client. H4: Customer orientation appears to be one of the most important drivers of ambidexterity in BGFs.	H5: Partnerships with external sources (such as suppliers and other firms) are likely to have a positive impact on ambidexterity in BGFs.

To move forward with the information provided in **Table 3**, what follows below is a summary of the findings sorted by means of each specific driver or factor, and using direct quotations from the in-depth interviews to support said findings. Included in these findings is a preliminary hypothesis on the impact that said driver or factor has had on ambidexterity. In cases where the driver or factor has generally yielded positive results, it can then be preliminarily assumed that this specific driver or factor leads to ambidexterity in BGFs. In order to provide a deeper analysis of the drivers and its implications in the different firms, section 5.1.2 will then outline a summary of findings on whether this study's select firms can be considered ambidextrous, along with a preliminary hypothesis.

5.1.2 Summary of findings

1) Environmental Factors

Environmental factors influence how firms manage their product portfolio and adapt to new market conditions (Jansen *et al.*, 2005; Raisch and Birkinshaw, 2008; Kollman *et al.*, 2009). Environmental factors are not the same across every industry. The different factors within each industry define the management of the firm in a broad sense. Hence, the different factors influence how firms manage the current product portfolio, the introduction of new products, or possible improvements (Kollman *et al.*, 2009).

Looking at the study sample, Companies C, D and E belong to the Technology industry (see Industrial Classification Benchmark) – an industry that is highly concentrated, so much so that firms have to stand out from the competition in order to survive in the market place. In highly competitive environments, where there are a high number of competitors and the firms compete in several areas, a need to conduct explorative activities arises. However, the concentrated market rapidly incorporates the radical changes, making it crucial to pursue

exploitative activities to sustain the position in the market place, and differentiate from competition (Raisch and Birkinshaw, 2008; Jansen *et al.*, 2005):

“Since it is an area of constant innovation, a lot of times you do not know exactly where the innovation originated from, it can be originated from any firm...We do not have a clear where the ideas are originated from.” (Founder, Company C)

“We are always very concentrated in the innovation part of our services and everything. Specially because in this business is what makes you stand out in comparison to other companies...you have something new in order to drive someone of some provider to you.” (Founder, Company D)

Competition also drives ambidexterity in a different sense. In the aforementioned case, what drove innovation was the high level of competition in the market. Looking at the case of Company B, what drives the entrance in new areas is the lack of competition,

“Since we were already market leaders in the scientific [toys] market, we thought that we needed to do something different because it was not possible anymore [to grown]; our goal was exactly that, going to new areas, fortunately we were able to [diversify] through scientific puzzles, educational puzzles...But getting away from the typical[toy].” (Founder, Company B)

In sum, the environmental competitiveness had an influence in the exploitative and explorative activities pursued by the analyzed firms. The high competition led the firms to improve their services in several categories in order to distinguish from competition, and a lack of competitors in the market may lead to the firm to diversify the areas where it competes. Hence,

Hypothesis 1a: Environmental Competitiveness is likely to lead to the pursuit of ambidexterity in BGFs.

Besides the environmental competitiveness mentioned, Jansen *et al.* (2005) also indicate environmental dynamism as an influence in the unit's exploratory and exploitative activities. Environmental dynamism incorporates rapid change in the markets, the short product life cycle of products, and processes of creative destruction (Jansen *et al.*, 2005).²

In the Technological Industry, new tools constantly appear (software and hardware), which implies a strong pace of continuous improvement for the firms:

"It is obvious that the digital market is always changing, the design from the previous year and the one from today, it is not the same. Hence, the design of some campaigns can change...we always pay attention to that [change]"

(Employee, Company C)

Company A operates in the Media Sector and is focused on post-production, and as the technological sector, this sector also implies constant improvements in terms of software and hardware (specially associated to the 3D post-production):

"...It is an area that never becomes stagnated, there is always something new coming out, there is always created new tools. And for that reason, there is always innovation, even if is due to that aspect. " (Employee, Company A)

Looking at Company B, which operates in the consumer goods industry, and more specifically in the toys industry, that was already described as being a mature market where a lot of ideas are already in the market place, the firm tried to stand out by producing an

² Mentioned by Joseph Schumpeter, in 1942, as a way to explain how the entrance of new firms disrupt the established large firms, and consequently challenge the existent technological or organizational paradigms.

innovative product that connects education and play. Even though the firm is not in the high-tech sector, it nevertheless innovates in a continuous way, both in explorative and exploitative terms. An important environmental dynamism presented in the toys sector is the high seasonality that implies a constant demand for new products by retailers (exploratory activities):

“I can tell you that the toys that are in the stores each Christmas, 50% or more are new...Hence, every year, the catalog that arrives to the stores 50%, who knows 60% have to be new, because the stores require so, the stores require products moving, products entering and leaving.” (Employee, Company B).

By engaging in explorative activities and by increasing the product portfolio, the firm gained shelf-space. Shelf-space in this industry is highly important since it contributes to higher sales and to a stable market position:

“We can extrapolate for what we see in stores, there are competitors that started to disappear from the stores, and at this point, we speak about self-space, that we notice that we increase in comparison to competitors” (Employee, Company B).

This shows that it is not only the high-tech sector that requires constant innovation; other environmental factors lead to the firms to constantly search to new products and service, making innovation is necessary for survival across many different sectors.

To conclude, the short life cycle of the tools used by the firms, the high seasonality, among other factors that can cause tumults in the environment will lead to a firm to pursue both exploitative and explorative activities in order to survive in the market place. Hence,

Hypothesis 1b: Environmental dynamism is likely to lead to ambidexterity in BGFs.

2) **Organizational Culture**

Organizational culture can be defined as “the collective programming of the mind which distinguishes the members of one organization from another” (Hofstede, 1998:478). Even though it can be defined in one sentence, there is much more than meets the eye, so much so that this section will only very briefly scrape the surface of the topic.

Several studies agree that organizational culture is an important antecedent of ambidexterity (Kollman *et al.*, 2009; Lin and McDonough III, 2011; among others). However, the different aspects are debated: the impact of the long term vision of the firm on ambidexterity (Kollman *et al.*, 2009); the impact of connectedness, which implies the cooperation through direct contact between individuals within the firm, on ambidexterity (Chang *et al.*, 2011; Jasen *et al.*, 2005); and the impact of a knowledge sharing organizational culture, which foster openness, uncertainty tolerance, among other values, on ambidexterity (Lin and McDounough III, 2011). On the innovation in BGFs field, the knowledge capabilities of the firm are also referred as crucial factor to the ability to develop inimitable products (Knight and Cavusgil, 2004). And there is a high importance given to the mechanisms of communication within small entrepreneurial firms to reach both incremental and radical innovation (Alsaaty, 2011).

A knowledge sharing organizational culture can be defined as “a culture that has achieved distinguishable levels of competency at managing, sharing, and employing information and knowledge positively influencing the organization’s ability to achieve goals and objectives” (Taylor, 2013:77). This culture can be a result of cooperation, trust,

tolerance, freedom, independence, among others (Janz and Prasarnphanich, 2003; Lin and McDounough III, 2011).

Moving on with the analysis of the firms, it was evident that there was the presence of a knowledge sharing organizational cultural through several aspects such as: informal environment, collaboration, trust, horizontal hierarchy, and openness to challenges.

All the firms studied show a highly informal environment, which leads to the increase of trust and cooperation among the members of the organization (Change *et al.*, 2011). Employees feel safe to speak up their mind, and know that their input will be considered,

“It is easier because we have an informal environment, where I say whatever I need to people.” (Founder, Company B)

“The management [of the firm] was always really open and inclusive, all collaborators had the right to give their opinions, and we did several improvements in diverse projects due to ideas that everyone gave in a brainstorming, that is really interesting, and it is the ideal way of working.” (Founder, Company E)

Also a trustful and supportive environment leads to higher collaboration between the employees, allowing higher quality services, as well as idea generation and sharing,

“It is a really good organization, but it is not because of that, that my colleague does not do my job, or I do not do his. That spirit of support has to exist always, does not matter if it is a start-up or a company already with another status.” (Employee, Company C)

“...for example we have smartphones, so it happens that I receive messages at 2 or 3 in the morning from one of my partners having some idea that they want to discuss it [sic]. (...) basically, that is how all the innovation happens: we see something, or we think about something, and then we just contact each other and see if it is worth [exploring]...” (Founder, Company D).

The knowledge sharing organizational culture foster a supportive environment, where each individual feel comfortable to give their input regarding any subject, contributing to new improvements and new ideas for future implementation. The levels of informality within the firm allow faster problem solving, since communication is performed at a faster pace (Chang *et al.*, 2011). Thus,

Hypothesis 2: A knowledge sharing organizational culture instigates ambidexterity in BGFs.

3) Founders' Characteristics

Founders and senior management have been found to be the largest contributors of existing knowledge within small entrepreneurial firms. Several characteristics are perceived as having a positive impact in innovation, such as education (Barringer and Jones, 2005; Arvantis and Stucki, 2012, Groneweger and Langen, 2012), general knowledge (Sapienza *et al.*, 2003; Heirman and Clarysse, 2007), and founder teams (Arvantis and Stucki, 2012; Groenewegen and Langen; 2012, Barringer and Jones, 2005; Heirman and Clarysse, 2007). While the positive impact on innovation is clear for the aforementioned factors, it is not as clear when it comes to experience. Some authors believe that the experience within the same sector has a negative correlation with innovation (De

Wine and Sels, 2010; Sapienza *et al.*, 2003; Heirman and Clarysse, 2012); while others believe in a positive impact of previous experience (in the same sector) on innovation (Arvanties and Stucki, 2012).

When analyzing the sample it is possible to state that in the cases of Companies A, C, D and E, experience within the same sector benefits the firms in a positive way by allowing them to have a stable portfolio of clients, as well as allowing them to spot market opportunities, and to develop strong networks. For Company C, the founder's previous experience, which was in the same sector as firm C, was important. Having worked in digital media, the founder was able to spot a market trend and see the opportunity in the market to establish a profitable start-up:

" By noticing that there were no agencies that work on a worldwide level, I had difficulties to find agencies that I could work with...so I had to internally develop those capacities...I always had the idea of creating my own firm, so it was something that came from my previous work (...) where I already knew the markets well ." (Founder, Company C).

Company B, which focuses on toys, was the only firm in which the CEO did not have previous industry experience, but rather had a broad knowledge in management that allowed for a quicker of establishment of the firm. However, the impact of said founder's broad knowledge on innovation is not clear. None of the CEOs had startup experience aside from Company D.

When analyzing the other factors, it was not possible to reach any findings. Barringer and Jones (2005), Arvantis (2012), and Groenewegen and Langen (2012), believe that

education is proportional to the propensity to innovate. However, all the CEOs interviewed were highly educated (minimum undergraduate), making it difficult to draw conclusions based on comparisons on this front in this study. In terms of founder teams, companies A, D and E were founded by teams, while firm B and C were founded by an individual. However, there is no evidence of higher innovation on firms A, D and E in comparison with the firms B and C. In terms of founders with knowledge in diverse areas (multifunction knowledge), which is stated as a factor to innovation, assumptions could not be drawn. Since all founders had specific knowledge, except the founder from Company B, and the latter did not present higher innovation levels in comparison to others, also the difference in sectors and in size makes comparison difficult.

Hence, the conclusion to be drawn from this analysis regarding the founder's previous experience, can only support Arvantis and Langen's (2012) study that points towards the fact that concrete ideas arising from the founders' previous occupation will have a positive impact on innovation:

Hypothesis 3: Founder's previous experience in the same industry is likely to lead to ambidexterity in BGFs.

4) Customer Orientation

Several authors show the positive impact of customer orientation (Cavusgil and Kim, 2011), customer intimacy (Mort and Liesch, 2008), and proactive customer approach (Gronewegen and Langen, 2012; Barringer and Jones, 2005) on innovation. However, this aspect is not appointed as a direct antecedent of ambidexterity. Raisch and Birkinshaw

(2008) highlight market orientation as a moderator for ambidexterity by Raisch and Birkinshaw (2008), while Dutta (2013) presents a high correlation between the market orientation and ambidexterity, but proposes that ambidexterity appears as a causal link between the organizational context and the market orientation.

Looking to the empirical study conducted it is possible to say that customer orientation appears to be the most important driver to ambidexterity in BGFs in this study. The following quotes show the customer orientation that the firm has:

“Our idea was to find an alliance between two areas ... what matters to the clients is ... one company devoted to several arts.” (Founder, Company A)

“What we try to do is to understand what the clients’ needs are and in which way we can develop something that meets their goals.” (Founder, Company C)

The focus on the customer allows the firms to understand the customers’ needs and develop services that meet that needs, at the same time that establish a close relationship with the customer,

“We have clients that visit us in Portugal with their family, because there is already a close relationship and they end up coming here [Portugal]. There are clients that we already have a friendship. Others that we maintain a formal relationship, but a recurrent [relationship].” (Founder, Company A)

The close relationship that the firms establish with the customer, provide the customer with a direct communication channel where the customer state their needs in terms of improvements, and in terms of new services or products,

“...There is a constant demand from the stores during the whole year...”

(Employee, Company B);

"We initiated our firm doing sites as all other firms in the technological area...Meanwhile, there was an increasing need in other areas from our clients, and we started to develop the logic capacity to offer those services... The products that we offer today are the result of the interactions that we have with the clients ... and the services as well." (CEO, Company E).

Customer orientation appears to have an important impact on the innovation process of these startups. It is important to highlight the bargaining power of the clients and how this affects the firms' innovation strategy. For instance, Company B, which deals with the toy sector, tends to focus on larger clients, such as retailers, which give important feedback on market trends and help drive innovatory decisions on the company B's end. Logically, this makes sense: large retailers themselves are aware of market trends, and are also catered to in the client-provider relationship. However, one must differentiate between a firm's larger clients and smaller clients. This is to say that bargaining power is at times not consistent across a firm's client networks, and thus the innovation process is a result of a balancing of multiple clients' needs and influences with a firm's self-driven innovation.

It is important to state that besides the bargaining power in some specific transactions, all the firms pay attention to the small clients. Meaning what influences the firms' product or process of innovation is not only appeasing the "big fishes" that the firms have as clients, but how the firm looks to the client in general. For instance, Company E highlights this logic clearly, by using complaints that may appear in the system to check if other clients have the same problems. Complaints from the clients and losing clients are seen as more important ways for the firms to understand what they are doing wrong than any other type of feedback, independent of the size of the clients.

To summarize, customer orientation is a crucial view to the firms analyzed, in order to generate ideas to new products and services, to improve the products or services based on complaints from the clients, and keep acquiring new capabilities and knowledge to satisfy the clients. Therefore,

Hypothesis 4: Customer orientation is likely to lead to ambidexterity in BGFs.

5) **Networks/Partnerships**

Some authors highlight the importance of networks to identify possible partners in the market (Evers and O’Gordman, 2011), while other highlight the importance of social networks in innovation (Cavusgil and Kim, 2011; Gronewegen and Langen, 2012; Alsaaty, 2011). Others highlight the importance of partnerships in innovation (Cavusgil and Kim, 2011; Alsaaty, 2011).

Networks and partnerships were important for this study’s selected firms for several reasons. Starting with Company A, previous networks were important to market the firm at the beginning. Moreover, previous networks also helped Company A acquiring new projects. In addition to networks, partnerships were crucial to Company A’s efforts to overcome countries’ specificities, which are important to several of their projects:

“...Or as I already mentioned, the search for specific types of music, hence [founder] works with that country in particular.”(CEO, Company A).

Looking at Company B, the partnerships established at its inception appear to have been relevant to the firm’s unique competitive advantage since it allowed it to legitimize its brand. The idea for the Company B originated from a group of students due to a project

that resulted from a partnership between two universities (where one university more focused in science would provide an idea science-related, while the other university focus in management would set up the appropriate business plan to pursue the implementation of the idea in the market).

The case of Company C demonstrates how the use of partnerships is important to penetrate important markets, that the firm acting on its own would otherwise have problems penetrating. The firm also pointed to the importance of previous business networks on the establishment of the firm:

“When I wanted to found the firm, it was with some potential investors, some more on a personal level, and then I also spoke with a partner with whom I was working with in South Africa...we had help from which, and who we already knew, and who give us a small investment, and that it was sufficient to do our job.” (Founder, Company C).

For Company D the use of partnerships led to an increase of the quality of the service provided:

“For example [X] which is a web server software, which is actually let’s say an important innovative part of our company that actually boost sales immediately. People are very and extremely satisfy with that, not only the client/customers really appreciated but [it] is also really good for us because it lowered costs, for example security costs, maintenance costs, we have less down time, so less money spent.” (Founder, Company D)

For Company E, the focus is on acquiring new projects, having access to technology, and improving quality,

"We established partnerships to win projects, to have access to technology...and to develop some projects with high quality. But [these partnerships] are not as common as that." (Founder, Company E)

To wrap up, some firms used partnerships in order to increase quality (Companies A, D and E), to penetrate new markets (Company C), to gather the necessary knowledge to overcome country specific barriers (Company A), as a source of new ideas (Company B), to have access to new technologies (Company E), and finally, to acquire new projects (Company E). Thus, partnerships have a positive impact in both explorative and exploitative activities. However, networks even if they seem to be helpful in terms of increasing of the brand awareness, and to identify partners for future businesses, this study does not provide evidence in the direct relationship between networks and ambidexterity.

Hence, the hypothesis to be formulated relies solely on the relationship between partnerships and ambidexterity:

Hypothesis 5: Partnerships (e.g., with suppliers and other firms) are likely to lead to ambidexterity in BGFs.

6. Conclusions

This study has attempted to address the gap in the field of innovation, entrepreneurship and internationalization by studying the ambidexterity drivers in BGFs. More specifically, this study has sought to identify the drivers that lead a startup to pursue both explorative

and exploitative forces. This was accomplished by first reviewing the literature already available on BGFs, highlighting the major conceptual limitations of the term, and then identifying one scholar's tentative solution to this conceptualization problem. The clarification of BGFs as a concept led to the use of several consistent dimensions (speed, extent, and scope) as a means of facilitating comparative studies, and to reach steadier conclusions.

Using this conceptualization problem as a launching point, this paper then identified a gap in BGF literature in the form of the understudy of ambidextrous management strategies within these firms, and followed by examining and linking ambidexterity as it pertains to BGFs. After triangulating a selection of five potential drivers or factors of ambidexterity within BGFs, this study used an empirical case-study approach to preliminarily, or tentatively, provide hypotheses related to the proposed drivers or factors and regarding their impact on the emergence of ambidexterity within BGFs.

All these drivers seemed to have a positive impact on ambidexterity in BGFs, giving space for future research to prove the existence of a correlation between the variables. The factors highlighted by this study can be grouped in order to provide a better understanding of its interaction, as well as the control that the members of the firm can have over these drivers.

First, the environmental factors due to their uncontrollable nature in terms of market changes, the entry of new competitors, the nature of the sector, and their frantic behavior, should remain a unique group. It is important to highlight that even though the majority of

the environmental factors cannot be controlled, the areas where the firm competes are controllable by the firm.

Second, the founder's characteristics and the organizational culture can be seen as internal factors. These internal factors are highly interconnected, since founders or top management are the ones who set the organizational culture (Lin and McDounough III, 2011), and can use this organizational culture as a social control organism (O'Reilly and Tushman, 2002). It is important to note that leadership was not analyzed as one of the drivers for ambidexterity, since it seems to influence the organizational context, and not directly the emergence of ambidexterity (Gibson and Birkinshaw, 2004). The authors that argue that leadership is an independent antecedent of ambidexterity are more focused on ambidexterity in the several hierarchical levels (Raisch and Birkinshaw, 2008), which makes more sense in larger firms rather than in small entrepreneurial firms.

Third, customers and partnerships represent an external factor. Customers and Partners (*e.g.*, suppliers and other firms), represent an external innovation source for small entrepreneurial firms (*e.g.*, Alsaaty, 2011; Cavusgil and Kim, 2011). These external invention mechanisms can be especially important for companies that suffer from resource constraints, which are seen in the cases of the initial phase of BGFs and other types of entrepreneurial firms, since it allows cost reduction, the acquisition of new ideas, and access to resources. It could potentially lead to a competitive advantage in the market, driving revenue streams to the firms.

It is crucial to highlight the differences between the aforementioned drivers, since not all determinants have the same importance for ambidexterity in BGFs. The most important drivers of ambidexterity in the analyzed firms are customer orientation and the knowledge sharing organization culture. Here it is crucial to define the term “important drivers” as the drivers that *seem* to present higher impact in the pursuit of ambidexterity. The factors to which I refer are interconnected and contribute to the firm’s development of competitive advantages. The alignment of new knowledge, originating from customers and the organization brainstorming activities, coupled with the existing knowledge in the firm, push the firms to pursue exploitative and explorative activities. Furthermore, customer orientation and knowledge sharing organizational culture receive higher attention from the members of the firm, since they represent a mechanism of idea generation.

This study shows that BGFs can be ambidextrous given their resources constraints. The lack of resources such as human and financial capital, and other input factors, important as they are, do not determine the organizational behavior, but can act as a moderator of innovative activities. This study also shows that BGFs can survive and even grow in highly dynamic and competitive environment. The continuous pursuit of exploitative and explorative activities allows these young firms to protect their current position in the market against competitors, while also preparing for future changes by listening the customers more closely, and by giving each and every employee a voice within the company. However, it is important to bear in mind that there is no single “recipe” for ambidexterity (Birkinshaw and Gibson, 2004), and that the findings of this study are *preliminary* conclusions and require further examination.

7. Limitations

This study, much like any other empirical study, has its limitations. First, the small number of firms that participated in this study limits the depth and reliability of the inferences made. Second, the fact that four out of the five startups analyzed originate in Portugal means that the study's results might be, in part, country-specific. Third, the hypotheses were drawn from in-depth interviews with only two members of each of the selected firms; this implies that the data was not or very little triangulated. Since data triangulation ensures reliability of the information received, the hypotheses suggested in this study must be seen as preliminary and need to be further refined and tested empirically in the future research. Fourth, four out of the five firms examined were BGFs, which implies a certain level of international success, which itself can influence the innovation strategies of the firm. This makes it difficult to draw conclusions for small entrepreneurial firms that do not respect the BGF's criteria. With all this in mind, it must be noted that this is an *exploratory* study of ambidexterity in BGF, the question that has received a scarce attention in the literature until now. Having undertaken a more systematic and broader analysis of the drivers of ambidexterity than earlier studies, we hope that our preliminary findings inform both research and practice.

8. Research and Practical Contributions

This paper empirically examines ambidexterity in BGFs and contributes to our better understanding of the antecedents of ambidextrous behavior of these firms. First, this study confirms, even if only preliminarily, previous literature that has postulated the existence of

ambidexterity in small entrepreneurial firms. Second, this study's theoretical approach through triangulation has helped place into focus some previously unstudied drivers of ambidexterity in BGFs; finally, this study has given firsthand accounts on the most important factors to ambidextrous strategies in BGFs.

Practical implications for CEO and managers can be drawn from this study. Top management can instigate innovation in their firms by establishing an open organizational culture as well as close relationships with the clients, and by engaging in partnerships with other institution and firms.

First, founders can set up an environment that promotes creativity by having common spaces for the employees to meet and relax (such as simple lounges, or game rooms), by organizing lunches/dinners between employees and managers, and by keeping an "open door" policy as a CEO. Besides these less formal meetings that lead to knowledge and ideas exchanges, CEOs can book brainstorming meetings (monthly, trimestral), where employees speak their mind regarding projects that they have to rest of the firm:

"It is funny that a lot of ideas are a bit idiotic. But we can say that a lot of those ideas, which are not related with anything, are the ones that lead to another genial idea." (Employee, Company C).

Second, top management may start by making sure that the firm is customer oriented and that this customer orientation is passed to each employee. Then top management may create communication channels (informal or formal) to receive constant feedback from customers in order to improve current products and services, or to raise ideas for new

products and services. Finally, top management may consider making an effort to increase networks and partnerships with institutions and other firms in order to gain an advantage in the market place. The networks can be increased, for instance, by going to startups events. Partnerships with institutions, such as universities, and other firms allow the firm to have “fresh” new ideas, legitimize their brand, and even increase the quality of their products and services.

It is also important to state some strategies employed by the firms that were interviewed that helped set them apart from the competition, and might help managers avoid certain mistake that so many startups had. During the interviews, several highlights were made regarding competitor mistakes. The first mistake mentioned was the lack of control over growth. Firms that grow exponentially need to be able to manage this growth with limited resources. Several of the BGFs examined stated that they were not at their full potential and several strategies were used to control growth. The second mistake is the urge to diversify simply due to resource existence; the entrance in areas completely different from the core area is associated with possible failure. So managers need to control growth, and diversify within their core area.

9. Future Research

Due to the exploratory nature of this study, only preliminary hypotheses were made. Nevertheless, this study has opened many doors for future research. The preliminary hypotheses call for a deeper understanding of the drivers that lead to the emergence of ambidexterity in BGFs. These hypotheses also highlight the need to understand how the

drivers extrapolated in this paper can be generalized for small entrepreneurial firms. And it is also important to understand the impact of each driver in ambidexterity. This correlation between driver and ambidexterity will require quantitative analysis. Further research might look at the type of ambidexterity strategy that the firm pursues, how it changes over time, and very importantly its impact on the competitiveness and success of BGFs.

It is important to understand more deeply how ambidexterity in BGFs is embedded in different organizational functions, such as customer relationship management, for example. Since this study has identified CRM as being one of the most important drivers of innovation within BGFs, a further, deeper analysis of how CRM impacts small entrepreneurial firms' innovation is required. Speaking to the field of innovation, it would be useful to understand the partnerships that small entrepreneurial firms establish to gain resources, access and power in the market place, as well as to what extent an open innovation model is being used as a way of survival and success for BGFs and startups in general.

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