

The Dynamics of Business Accelerators: A Multi-Country Study

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Abstract

Despite the strong development of business accelerators (BAs) in recent years as new actors in the entrepreneurship support ecosystem, little is known about the characteristics of these emerging structures. Aiming to fill this gap, this article investigates the business model of BAs through a multi-country study. We explore the screening process, business support, exit policy, strategic positioning and network dynamics of BAs. We use a qualitative research protocol employing semi-directed interviews with accelerator managers from Bulgaria, China, Denmark, France, Germany, India, Israel, Italy, Japan, the Netherlands, Poland, Turkey, the United Kingdom and the USA).

The results present the specificities of the BA business model and identify some differences in selection processes, support practices and exit policies among BAs. We also describe the strategic positioning of BAs (born global vs. local, for-profit vs. not-for-profit and generalist vs. specialized). We identify three major elements that constitute the value proposition of BAs: an alignment of interest between BAs and startups, the ability to build strong networks and acting as an intermediate filter for investors. Finally, we present the theoretical and practical implications of the research.

Keywords: Business accelerator, entrepreneurship support, incubator, selection, exit, network, business model.

1. Introduction

Business incubators have enjoyed increasing success in recent decades. According to a recent study by the National Business Incubation Association (2010), the survival rate of startups using business incubators (BIs) is 87%, compared with 44% for startups that do not use incubators. These firms help increase entrepreneurial success and opportunity and intend to strengthen communities. However, recent studies underline some limitations in the business model of BIs: selection and exit issues, inadequate or insufficient networking and, most importantly, inappropriate incubation duration for high-tech firms with rapid innovation cycles and fast time-to-market (Alsos et al., 2011; Bruneel et al., 2012; Chan and Lau, 2005; Gabarret et al., 2014; Isabelle, 2013).

Since 2005, a new business model to support technology ventures has emerged: business accelerators (BAs). Accelerators are interested in achieving the same overall goals as BIs but do so in a very different way. First, BAs are usually for-profit organizations (Isabelle, 2013), and they generally make an investment in the companies enrolled in their programs. BAs are also designed to be concise and generally take three to four months to complete. BAs act as very early-stage investors to accelerate the growth of startups.

The development of BAs is encouraged by governments and public institutions, who consider startups to be important levers for economic development and job creation (Henrekson and Johansson, 2010). Academic research interest in BAs is recent and growing (Bosma and Stam, 2012; Hoffman and Radojevich-Kelley, 2012; Isabelle, 2013; Malek et al., 2013; Miller and Bound, 2011). Thus, little is known about the characteristics of BAs (Isabelle, 2013). The purpose of this research is to fill this gap and to propose a descriptive survey of the organizational and strategic characteristics of business accelerators. We explore the business model, screening process, business support, exit policy and network dynamics of BAs.

To do so, we developed a multi-country study based on a qualitative research protocol with semi-directive interviews of accelerator managers (Miles and Huberman, 1994). The data analysis derived from these interviews generated seven distinct themes that we divided into 33 subthemes. Based on this analysis, distinct results emerged concerning the characteristics of business accelerators.

The results present the specificities of the BA business model and identify some differences in selection processes, support practices and exit policies among BAs. We also describe the strategic positioning of BAs (born global vs. local, for-profit vs. not-for-profit and generalist vs. specialized). We identify three major elements that constitute the value proposition of BAs: an alignment of interest between BAs and startups, the ability to build strong networks and acting as an intermediate filter for investors. Finally, we present the theoretical and practical implications of the research.

The related literature is reviewed in section one. In section two, we describe the method used to analyze the BAs, and we describe our data. Sections three to five present and discuss the results. Finally, conclusions and implications for theory and practice are drawn.

2. Theoretical background

In this section, we first provide a rationale for the birth of business accelerators (BAs) as new actors in the entrepreneurial ecosystem. Second, we explain what made it possible for accelerators to emerge.

2.1. Genesis and definition of business accelerators

The emergence of the so-called “business accelerator” model must be understood in the context of the development of the incubator industry, which was established in recent decades. Value propositions have changed through different generations of business incubators (Barbero et al., 2012; Bruneel et al., 2012; Grimaldi and Grandi, 2005; Hansen et al., 2000; Mian et al., 2012). The first generation of BIs offered office space and shared resources. The second generation provided coaching and training support as additional services that expanded the value proposition to accelerate the learning curve of incubating companies. In the third generation, access to technological, professional and financial networks was offered by BIs as an additional feature to foster access to external resources and knowledge (Bruneel et al., 2012). Allen and McCluskey (1990) discuss a business incubator continuum to describe the spectrum from a focus on real estate to capitalizing on investment opportunities and fostering new enterprises. In 2005, a new actor in the entrepreneurial ecosystem appeared, which is adding a new value proposition for rapid new venture creation: business accelerators (BAs).

The first accelerator, called “Y Combinator”, was established in 2005 in Mountain View, California (US) by Paul Graham and his team. The formula was to throw smart people together and provide them seed money to cover initial startup costs, cookie-cutter legal paperwork and to offer them an extensive network of business contacts. In addition to offering office space, Y Combinator serves as a network

contact channel into the Silicon Valley ecosystem. The emergence of the first accelerator may be regarded as an organically grown idea of an experienced and successful (Internet software) entrepreneur. Y Combinator holds three-month-cycle programs twice per year in the Bay Area, near Silicon Valley, USA, and has funded over 630 digital startups. This concept of an accelerator was copied in 2007 by Brad Feld and his “Techstars” accelerator in Boulder, Colorado. He and his team established their model in four cities in the USA and focused on integrating experienced entrepreneurs as mentors. Furthermore, Feld and his team offered their model as a blueprint for others to establish accelerators, similar to a franchise system. Since then, accelerators have appeared around the world as a new and popular mechanism to create new ventures because the model offers a new and better allocation mechanism in the startup ecosystem (Hoffman and Radojevich-Kelley, 2012; Isabelle, 2013).

Nevertheless, there is no clear consensus in the academic community on the definition of a business accelerator. Malek et al. (2013) suggest that an accelerator is a type of business incubation program that allows entrepreneurial teams to connect with and access resources from investors and other important stakeholders. It is clear that BAs share some similarities with BIs. According to Carayannis and Von Zedtwitz (2005), BIs offer five services to tenants: access to physical resources, office support, access to financial resources, entrepreneurial start-up support and access to networks.

However, BAs have some unique characteristics. Except for an explicit focus on accelerating the growth of firms (Bosma and Stam, 2012), several features characterize an accelerator and distinguish BAs from BIs: a formalized application process, a high level of selection due to competition between new tenants, the provision of seed investments (usually in exchange for equity), a focus on teams and not on individuals, time-limited support comprising programmed events that includes intense mentoring (usually over three months) and cohorts of startups accelerated by “grapes”. Finally, tenants who join an accelerator are “expected to interact and network” with the other tenants (Miller and Bound, 2011; Malek et al., 2013). In addition to these features, another attribute of an accelerator program is that it ends with a demo day in which the participating teams pitch in front of an investor audience to receive follow-on funding for their venture. This is actually the main purpose of an accelerator: to bring prepared, mentored and investment-ready, early-stage ventures together with investors who are looking to spend their money on good opportunities.

These characteristics therefore explain the popularity of the accelerator model through the institutionalized facilitation of cooperation among different actors in the start-up ecosystem that are dependent on one another. BAs serve both parties, bridging their needs. In this sense, BAs offer an innovative, allocative mechanism in the startup ecosystem. These characteristics (seen as a special set of features) also serve to distinguish BAs from other mechanisms, especially incubators and technology transfer institutions. The emergence of BAs brings a new reflection to business incubation research. To better explore the characteristics of BAs, it is relevant to understand the limitations of BIs that encouraged the emergence of BAs.

2.2. Explaining the growing success of business accelerators: Are incubators doing enough?

Even if there is evidence that ventures supported by BIs succeed at a greater rate than non-incubated ventures, research reveals the ineffectiveness of some BIs (Aerts et al., 2007; Alsos et al., 2011; Chan and Lau, 2005; Gabarret et al., 2014; Scillitoe and Chakrabarti, 2010; Tamasy, 2007). Alsos et al. (2011) show that incubator management involves balancing a set of conflicting goals. Expectations are interdependent and involve sub-processes related to different stakeholders. Goals are not fixed to an operational context. Consequently, suboptimal solutions are chosen to balance and fulfill expectations sufficiently to ensure the survival of BIs.

The strong growth of BAs in recent years may be explained by three interdependent factors that are linked to the maladjustment of the BI business model to recent changes in the entrepreneurship ecosystem. First, the high speed of innovation and rapid access to the marketplace becomes a determining factor for startups, which need a rapid and reactive incubation business model. This characteristic may be incompatible with the incubation duration of BIs. Second, the development of BAs may also be explained by dysfunctional selection and exit policies in BIs. Third, the need for an effective and powerful network also explains the success of BAs' business models relative to BIs.

2.2.1. The changing speed of innovation and time-to-market

Incubators do not generally have a strict focus on the amount of time a business will spend in the program. Tenants generally spend between 12 and 36 months in the program, but other incubators may have a longer time frame (Barbero et al., 2012; Chan and Lau, 2005; Isabelle, 2013; Gabarret et al.,

2014). However, several researchers have emphasized the importance of innovation speed in high-tech sectors (Kessler and Chakrabarti, 1996) and for startups (Heirman and Clarysse, 2007). For Kessler and Chakrabarti (1996), innovation speed is the time between an initial discovery and its commercialization. Stalk and Hout (1990) note that the speed of innovation refers to the rate at which discoveries are transformed into rent-producing assets. Other studies underline the strategic placement of new products in firms' dynamic capabilities (Nelson, 1991). Firms that are first coming to the market have a significant competitive advantage (Sonnenberg, 1993). According to Markman et al. (2005), innovation is subject to rapid depreciation. Therefore, time is regarded as a scarce resource (Lawless and Anderson, 1996), especially for rapid-growth firms. In particular, the necessity of rapid innovation and time-to-market implies a major shift in the needs of new ventures: faster access to knowledge, intangible assets, and financial capital. Clausen and Korneliussen (2012) highlight the entrepreneurial orientation of BI managers to have a positive impact on the time-to-market of incubating firms. BAs provide an answer to this time constraint. With a short period of time focused on coaching, intense mentoring and networking, BAs offer a new way for the incubation process to match the speed of innovation, change in technologies and time-to-market.

Indeed, the changes brought about by the Internet explosion in the mid-1990s affected not only technology and knowledge-based ventures but also, consequently, the incubator industry (Grimaldi and Grandi, 2005) by providing a supportive context for the BA model. The main changes are as follows (Miller and Bound, 2011):

- The first change is a decrease in start-up costs (marketing costs to launch a new product or service via Google or Facebook instead of billboard campaigns or trade fairs; flexible office lending opportunities per hour or month that avoid the need to rent an office);
- The second change is a faster time-to-market, with the potential for rapid access to customers through the Internet and easier routes to revenues (the Internet as the main platform makes it quick and easy to find new customers, and online-payment providers such as PayPal and selling platforms such as App Stores facilitate finding new paying customers);
- The third change is the methodological novelties that effectively build new products and business models. These methodological developments may be subsumed under two major topics: lean start-up principles (Ries, 2011) and business model generation (Osterwalder and Pigneur, 2010). Lean start-up principles are based on customer feedback during the process of developing new software

and applications and adding to the substantive effectiveness of product development in the entire new venture process. Business model generation, on the other hand, focuses on creating business models quickly and integrating the models very early into the process of new venture creation (Osterwalder and Pigneur, 2010). Both methodological novelties are integrated into the development of accelerators and serve their higher effectiveness and efficiency, thus making it possible to develop a (prototype) product and business model during a brief three-month accelerator program, which otherwise may not have been possible.

- The fourth change is in the investment market. Private-sector investment conducted by business angels doubled from 15 to 30 percent between 2001 and 2007 (Miller and Bound, 2011). Therefore, the growing amount of available early-stage funding has also enabled the accelerator model to develop.

2.2.2. Dysfunction of BIs in selection and exit policies

Assessing entry and exit policies has been found to be essential to understand the functioning of BIs (Mian, 1997). Other studies demonstrate that BIs' exit or graduation policies play a critical role in distinguishing between real estate and business development-focused BIs (Allen and McCluskey 1990; Bøllingtoft, 2012). Schwartz (2012) emphasizes timely graduation from BIs to lower the risk of failure afterwards. In addition, Aerts et al. (2007) focus on the screening process of BIs and reveal a positive correlation between a balanced screening practice for potential tenants and BIs' tenant survival rate. Bruneel et al. (2012) combine the two previous criteria and point beyond exit policies to strict selection criteria that should be imposed on BIs to fulfill their essential mission. In addition, with regard to the value propositions of different generations of BIs, the authors note that the latest generation offers access to networks as their main value added, in contrast to older generations of BIs. In combination with strict selection criteria and exit policies, tenants of the latest generation of BIs not only have shorter incubation periods but also are more likely to use a service portfolio more extensively (Bruneel et al., 2012). Admission and exit policies are also noted by the European Commission (EC, 2002) as a differentiating factor driving BIs and their success.

The selection of incubatees is noted in the literature as crucial for the outcomes and functioning of BIs (Aerts et al., 2007; Allen and McCluskey, 1990; Bergek and Norrman, 2008; Bruneel et al., 2012; Gabarret et al., 2014; Hackett and Dilts, 2004; Hansen et al., 2000). Selection criteria have been found

to be missing in many BIs (Bergek and Norrman, 2008; Bruneel et al., 2012). The careful selection of incubatees has a significant impact on the survival of new firms and consequently on the success of an incubator (Aerts et al., 2007). Imposing strict selection criteria has been found to make the use business support services and networking opportunities more likely (Alsos et al., 2011; Bruneel et al., 2012). A recent survey shows that BIs often demonstrate selection bias or flexible selection, which may cause performance problems for the BIs or a lack of synergy between their tenants (Alsos et al., 2011; Chan and Lau, 2005; Clarysse et al., 2005; Gabarret et al., 2014; Isabelle, 2013).

Clear exit criteria are often non-existent in BIs but are found to make timely graduation more probable (Barbero et al., 2012; Bruneel et al., 2012). Thus, the absence of clear exit criteria may affect the functioning of an incubator, as described in the in-depth study by Gabarret et al. (2014). The authors note several conflicts and tensions among different generations of incubatees due to an unclear exit strategy. This finding is problematic because previous research has noted that the capacity for older incubators' tenants to coach their younger peers can be a real success factor for BIs (Bøllingtoft, 2012; Fischer and Reuber, 2003). These studies show that an atmosphere of trustworthiness and mutual cooperation is necessary for an incubator and thus for its incubatees to thrive (Tötterman and Sten, 2005). This phenomenon could explain why exit criteria may be crucial to an incubator's functioning. By having clear selection criteria and exit policies, BAs tend to be more effective structures (Malek et al., 2013), and they therefore benefit from the trust of stakeholders and external investors.

2.2.3. The need for effective networks

The idea that access to networks is crucial for new, incubated ventures to overcome their need for resources is nothing new (Hansen et al., 2000; Hackett and Dilts, 2004; McAdam and McAdam, 2006; Rothschild and Darr, 2005; Sullivan and Ford, 2014). Birley (1985) highlights the importance of networks in the creation of new businesses, especially informal networks. Fischer and Reuber (2003) underscore the necessity of interactions between policy makers, external resource providers (e.g., venture capitalists, bankers and consultants) and rapid-growth firms such as startups. Strätling et al. (2012) add that trust is essential to achieve a successful relationship between startups and venture capitalists. Regarding BIs, Hansen et al. (2000) consider an organized network and institutionalized networking to be differentiating factors for incubators in securing preferential access to crucial strategic partnerships, talented employees and advice from experts. Both internal and external networks coexist

in BIs (Soetanto and Jack, 2013). When institutionalized, this approach to networking is independent from personal contacts (Bøllingtoft and Ulhøi, 2005; Hansen et al., 2000). Ebbers (2013) shows that networking among new ventures in BIs enlarge the number of business assignments provided to partners. Rothaermel and Thursby (2005) demonstrate that network linkages between tenants of university incubators and supporting institutions (whether informal, formal or contractual) reduce the risk of new venture failure. Moreover, access to networks is critical to the survival of BI tenants (Bøllingtoft, 2012; McAdam and McAdam, 2008). In their role as a mediator between external partners and incubatees, BIs may leverage critical resources through potential customers, potential investors, employees and other partners, which are crucial for the survival of new ventures (Bergek and Norrman, 2008; Bøllingtoft and Ulhøi, 2005; Scillitoe and Chakrabarti, 2010). In particular, relationships with networks of business angels have a strong positive impact on new venture creation in BIs (Aernoudt, 2004). These relationships to networks are also linked to the competences and structures of incubators (Rice and Matthews, 1995; Schwartz and Hornych, 2008). Ebbers and Wijnberg (2012) demonstrate that the reputation of founding members has a positive impact on investment decision of investors. Moreover, hiring competent and professional management and delivering high-quality services are regarded as necessary for the success of modern technology incubation (Mian et al., 2012), and this approach impacts the quality of an incubator network.

Despite the role of the latest generation of BIs in terms of networking, several studies (Barbero et al., 2012; Colombo and Delmastro, 2002; Gabarret et al., 2014; Schwartz and Hornych, 2008) note the difficulties faced by startups in accessing adequate funding, especially high-growth firms in their early stages of development. BAs have attempted to overcome this disadvantage by focusing on preparing their entrepreneurs for their demo day with investors. Unlike incubators, BAs provide seed amounts of funding in return for equity in a participant's startup. This strategy aims to attract new investors, many of whom became reluctant and avoided the pitfalls of investing in technology ventures after the dot-com bust of 2000 and the great recession of 2008. Indeed, in recent years, it has become extremely difficult for start-up companies to obtain necessary funding. Traditional networks offered by BIs became insufficient (Hoffman and Radojevich-Kelley, 2012; Soetanto and Jack, 2013). Through their programs, BAs educate entrepreneurs about additional investment options. According to Hoffman and Radojevich-Kelley (2012, p.1), "there is a predominant gap in early funding, which forces startups to turn to accelerator companies to help fill the funding void."

It is clear that the requirements for new ventures and technological startups have changed in recent decades. More and more startups are applying to accelerator programs (Malek et al., 2013), not just due to financial motivations but also because they need reactivity in the support they receive, face to the high speed of innovation and technology. At this level, BAs play a strategic role in helping entrepreneurs quickly launch and grow their ventures. It is therefore necessary to better understand the characteristics, practices and strategic issues of BAs. This paper intends to contribute to the knowledge on BAs by exploring and describing these dynamics.

3. Research method

We chose a qualitative research protocol based on multiple case study and open-ended interviews (Miles and Huberman, 1994) to conduct an in-depth investigation of the accelerators' characteristics.

3.1. Sample

The sample consists of 25 accelerators that have been established in 14 countries: Bulgaria, China, Denmark, France, Germany, India, Israel, Italy, Japan, the Netherlands, Poland, Turkey, the United Kingdom, and the USA. Although a homogeneous sample is better for identifying relationships and building theory while avoiding atypical inputs (Fortin, 1996), a sample with many dissimilar components is useful when the aim is to extend existing results with strong internal validity. Cook and Campbell (1979) propose an intermediate solution: using samples composed of deliberately different components to increase the external validity of the results. The principle of inference is as follows: because heterogeneity exerts a negative influence on the significance of the effect, if the relationship appears to be significant despite this disadvantage, then the results may be generalized. Therefore, a wide variety of actors and interviewees may compensate (to a certain degree) for a small sample size. For this reason, we chose a sample with a high degree of variety: 25 accelerator units (see Table 1).

The sample size is critical in qualitative research because a minimum size requirement is observed to ensure the internal validity of the research and provide a satisfactory level of confidence in the results. According to Yin (1994), size may be determined by replication or saturation. In this study, we determined the sample size using the saturation principle: theoretical saturation is reached when no further information to enrich the theory is found.

Table 1. Sample

Business accelerator	Creation	No. of units	Type	Countries of the units	Specialized (Sp.) / Generalist	No. of teams / program	No. of mentors
Eleven	2012	1	Independent	Bulgaria	Generalist	10-15	150
H-Farm	2011	1	Independent	Italy	Generalist	10-20	50
Le camping	2011	1	Public and private sponsors	France	Generalist	12	40
StartupBoot Camp	2010	8	Independent	Denmark	Sp. (mobile)	10	100 per location
				Germany	Generalist		
				UK	Sp. (financial innovation)		
				Netherlands	Generalist		
				Netherlands	Sp. (high tech)		
				Netherlands	Sp. (NCF) ¹		
				Turkey	Generalist		
Israel	Sp. (media & advertising)						
The Family	2013	1	Independent	France	Generalist	10-20	3
Microsoft	2012	6	Corporate	India China France UK Germany Israel	Sp. (ICT)	10-15	100 per location
Orange	2013	4	Corporate	USA France Japan Poland	Sp. (mobile)	6-8	N/A
Startup42	2013	1	University and private sponsors	France	Sp. (engineering)	7-8	70
Axeleo	2013	1	Independent	France	Generalist	25	4
L'accélérateur	2012	1	Independent	France	Generalist	50	26

The saturation principle is difficult to implement in practice because it is impossible to determine the cut-off point in advance, and researchers may never be completely certain that more information would not further enhance the research. As Cook and Campbell (1979) suggest, it is the researchers' responsibility to determine whether they have reached saturation; the process of adding observations is terminated when the most recently analyzed units of observation are found to contribute no new information. Our sample was formed using an iterative approach through telephone, face-to-face or email prospecting of international accelerators. Unlike the standard probability-based approach, the field for generalizing the results was defined not in the initial step but at the end of the process. Therefore, the sample is built gradually through successive iterations, with each component selected by reasoned choice (Fortin, 1996).

¹ NCF: Near Field Communications & Contactless Interactions Technologies.

3.2. Data collection

We conducted 11 semi-directive, face-to-face (or Skype) open-ended interviews with accelerator managers who manage from one to eight accelerators. Our objective was to gather discursive data reflecting the managers' conscious or unconscious mental universe (Miles and Huberman, 1994). Secondary data were also collected from the accelerator websites as well as other official web resources: the National Business Incubation Association, the European Commission and the National Endowment for Science, Technology and the Arts (NESTA). We divided the pre-structured interview guide into seven themes, which was further subdivided into 33 subthemes (see Table 2).

Table 2. Themes and subthemes for discourse analysis

Theme	Subthemes
History of the accelerator	Creation Evolution
General characteristics	Size Location Number of mentors Number of tenants Governance / stakeholders
Selection	Actors implied in the process Selection process Degree of formalization Type of projects selected
Support	Type of support Complementary services Frequency of support Interlocutors (type, number, etc.) Accelerator's requests for each tenant Accelerator's requests for the mentors
Exit	Strategic goals of the accelerator Number of exits / year Average duration of the acceleration process Exit strategy Post-acceleration support Tenants' failure management
Strategy	Funding of accelerator Performance criteria Profitability goals Other goals Link with investors Networks Development and trends Future challenges
Link with incubators	Cooperation Position in the entrepreneurial process

The interviews were tape recorded to ensure that the collected data were exhaustive and reliable. The interviews were transcribed within 24 to 72 hours.

3.3. Data analysis

The data were analyzed in three steps via a discourse analysis based on a thematic content analysis (Miles and Huberman, 1994). First, the gross database was analyzed through thematic coding. This analysis consisted of determining the units of meaning (words, sentences or phrases related to one of the pre-determined subthemes) and counting the respective occurrences (to measure the weight of each in the discourse). The occurrences were noted in “intrasite matrices” (i.e., for each accelerator) that included personal observations and certain particularly striking or illustrative remarks by the interviewees. Second, we synthesized all of the intrasite matrices into “intersite matrices” (double-entry tables for each theme, with the 33 subthemes in the columns and the 25 accelerators in the rows). The aim was to compare the managers’ discourses concerning each theme and to identify the similarities and differences. Third, we established “meta-matrices”, or crossed tables for each theme, in which the responses of all of the managers were simplified using keywords and classified as variables. After identifying similar phrases, common themes and differences and even conflicts within certain statements, we were able to isolate the common features and differences.

4. Exploring the practices of BAs

Unlike the rare surveys dedicated to accelerators, the results of this survey show that there are no homogeneous practices between the BAs in our sample. They adopt practices inspired by the Techstars model but with adjustments suited to individual countries and the accelerators themselves. They also have different patterns and strategies.

4.1. Are operational practices of BAs homogenous?

4.1.1. Selection

First, concerning selection, all of the BAs in the sample pursue a strict selection process. In general, the amount of applicants to BA programs is very high. The ratio of received applications to teams that are selected is at least eight to one. Microsoft receives 400 applications from which they ultimately select 10 teams. The selection processes are conducted in a multi-step manner, and applications must be made by a complimentary team, not by individuals. The reason cited for this policy is that it reduces the risk

of failure due to a broader competence base. Further steps in the selection process include personal interviews and a final decision made by a selection committee.

Our observations also show differences in the selection processes of the BAs. One major difference lies in the people involved. For example, Startupbootcamp, Startup42 and H-Farm have many different stakeholders involved in the selection process, including investors, mentors, partners and/or sponsors. On the opposite end of the spectrum, in The Family, there is little variety in the stakeholders, and the management team ultimately decides which teams are selected. Another important difference among the different BAs is that some stakeholders may propose teams directly (this is the case for H-Farm, Eleven, Startupbootcamp and Axeleo). When these stakeholders are investors, they may benefit from a preferential option to invest in the teams they proposed following the accelerator program.

4.1.2. Support

In terms of support, all of the BAs have administrative support covered, including legal, human resources and accounting support, by retaining external partners. The focus of support, which nonetheless lies intensively on business development, is twofold. First, training on the development of business models and extensive training on how to pitch in front of investors is common. Second, the core of the support within all of the BAs is the mentoring of the teams by experienced entrepreneurs, advisers or industry experts with a solid reputation within their particular sector.

Several differences may be observed in the amount of support. The first concerns financial support: not all of the BAs offer pre-seed money to the teams, which is usually used to supplement living costs for the period during which the teams participate in the accelerator program. Accordingly, Microsoft, Orange and Startup42 do not take equity in the startups. Another difference derives from the curriculum of the different BAs. A particular focus on customer development and storytelling were mentioned as the most useful for the teams to progress in their investment-readiness (Microsoft). On the other hand, differences in formalization could also be observed, ranging from “laissez-faire” (The Family, Startup42) to more supervised processes (Microsoft, L’Accélérateur). Some of the BAs that pursue a “laissez-faire” style see themselves more in the role of connectors. The manager of Startup42 explains: “Our goal is rather for the startups to ask for something than to push them to do anything.”

4.1.3. Exit policy and fundraising

Fundraising, combined with the exit policy, has been found to be the focal point of all of the operational processes within accelerators and the point to which all other activities aspire. All of the BAs have some sort of demo day, an institutionalized event in which the teams' development is presented in front of a community of potential investors to solicit funding. This event also represents a graduation or an exit from the BA. Our results therefore show a clear exit policy for all of the BAs at the end of each program. The interviewed managers are convinced that having this exit policy is important to provide the teams a clear signal that the support is not extendable and to apply needed pressure on the teams. The manager for the BA Eleven indicates that this event creates "peer pressure. If you work next to a team which is progressing very well, and you know that you will be on demo day with that team, you can focus a bit more." The findings suggest that the teams are brought to a place where they can be agile in the dynamic markets in which they will generally operate.

Our results show differences in support after the acceleration programs end. One difference concerns help in finding funding; a second is the possibility of remaining on the office premises for a certain period of time. A third difference among the BAs in conjunction with the exit policy is the existence of an alumni network that grants startups access to events, other startups and partners in the particular accelerator program. In our observations, support and connection with the teams after they exit an accelerator program are generally linked to whether the BAs take equity positions in their startups.

4.2. Different strategic configurations of BAs

We identified several different dimensions that explain the strategic orientation of BAs.

4.2.1. Born global versus local positioning

Our findings show a major differentiation in whether BAs are present in just one location or in multiple locations. In particular, corporate BAs established by multinational companies use their existing structures in different countries to open accelerators on different continents. This approach also reflects the notion of born-global entrepreneurs in action, as teams in these BAs may leverage their already provided international structures. Internal networks in different countries provide access to markets in these countries and the opportunity to internationalize rapidly. Orange BA explicitly offers access to its business units in 32 countries worldwide in its value proposition. Our results also show that the

strategic objective of single-location BAs often involves building an innovative entrepreneurial ecosystem that is embedded in the development of the region in which it operates. One manager states: “I think we are providing social benefits, creating almost a thousand jobs and creating an innovation area” (H-Farm).

4.2.2. For-profit vs. not-for-profit: different strategic goals

Our results show another important distinction in the configuration of BAs. While the literature has generally considered BAs to be for-profit entities (Isabelle, 2013), our results show that they may operate to generate a return on investment, or they may not. In other words, BAs can be either for-profit or not-for-profit organizations. All of the independent, private BAs in our sample were found to be for-profit, whereas the corporate and university-linked accelerators are not-for-profit organizations.

Further differences may also be observed in the range of strategic goals pursued by different BAs. Whereas for-profit BAs have the primary goal of gaining a return on investment at some point, not-for-profit accelerators have other strategic goals. Corporate BAs consider their operations to be open innovation platforms to enlarge their innovative capacity. University-linked BAs have been found to pursue their strategic goal of leveraging knowledge in the greater university environment and fostering an entrepreneurial talent pool. Interestingly, our findings also show a parallel objective in all BAs, which is to support local entrepreneurial ecosystems: “building the ecosystem is a goal on its own” (Eleven).

4.2.3. Generalists vs. specialists: a link to the ecosystem’s maturity

Our findings reveal a division of BAs between generalists and specialists. The BAs that we call generalists are industry agnostic and take on teams independent of sector; “everyone can apply” (Eleven). On the other side are the specialists, which take on teams from very specific industries and focus on vertical markets. One example is the UK accelerator Startupbootcamp (called FinTech), which specializes in new ventures in the financial industry sector.

We may suppose the existence of a link between the degree of specialization of the BAs and the level of maturity of the entrepreneurial support ecosystems in the different countries we observed. Schwartz and Hornyk (2008, 2010) show that a higher degree of specialization for BIs is associated with stronger performance than less specialized BIs. Several studies show that the incubator industry in

Europe and developing countries is not as efficient and powerful as in the USA. The surveys of Colombo and Delmastro (2002) for Italy, Mian et al. (2012) for France and Özdemir and Şehitoğlu (2013) for Turkey illustrate this argument. Although ecosystems exist in every country included in our study, the levels of maturity of these ecosystems differ. Our findings suggest that the configurations of BAs are directly linked with the maturity of their ecosystem. Thus, a more mature ecosystem is likely to have more highly specialized accelerators. In Italy, for example, where the ecosystem is less mature (Colombo and Delmastro, 2002), the BA we studied is not focused on one particular industry; rather, it selects startups that have the same industry focus as the region in which the accelerator is located. Accordingly, the same configuration exists for the BAs in Bulgaria and Turkey.

These different configurations depend on both the strategic goals and the specificities of the environment they are acting in.

5. Business accelerators: A new value proposition?

5.1. An alignment of interests

This study shows that BAs focus strictly on the business development of their teams. This focus on business development is expressed through the disappearance of the renting model and the inadequate focus that exists in the business models of many typical BIs. The managers of the BAs argue that startups need intensive knowledge and focused support more than office space. Moreover, one of the managers states that the “...value added is to connect teams with partners, mentors and investors” (Startupbootcamp).

This allocative mechanism is institutionalized and brings together the different stakeholders in the startup ecosystem. In addition, in contrast to other typical business incubators or science parks, this BA model provides an alignment of interests. Because there is no need to rent out space and gain revenue, the focus lies completely in supporting the teams and their startups. One manager of an accelerator notes, “We make money when our startups are successful ... if they succeed, we succeed ... the interests of founders and incubators are totally aligned” (Eleven).

5.2. An art of building strong networks

Our results show that BAs have the ability to build strong and large networks. On an internal level, BAs encourage strong ties between the tenants to develop synergies and peer support. Concomitantly,

the high-quality processes in terms of selection and support for startups is due to the powerful personal networks of BAs and their high level of specialized competencies. The reputation and past experience of the founders of BAs (some are serial entrepreneurs), in combination with the high level of competence of the mentors, enable the BAs to connect their startups with appropriate stakeholders. In France, for example, many BI managers come from the public sector and therefore do not necessarily have useful and appropriate networks for startups: “Our advantage in comparison to incubators is our network, which managers from public sector incubators usually don’t have to support the startups” (Axeleo).

Moreover, BAs consolidate their networks by maintaining strong ties with previous tenants. Some of the BAs benefit from the fact that they do not accommodate startups in house and thus are able to accept more teams. “The more accelerated startups we have, the bigger the network is, and the more talents we have, we can see more interactions between startups, a lot of help and collaboration, and this is a great way to function and create synergies” (L’Accélérateur). This approach enables the BAs to multiply their links and develop strong networks with former accelerated teams. The manager of The Family explains: “We believe in the culture of mutual help and exchange between former and current accelerated teams ... It’s like Silicon Valley’s culture, where many entrepreneurs dedicate some of their time to help startups ... We want to implement this culture in France, and we do everything we can so former accelerated entrepreneurs never leave our network.” This process enables the BAs to build a solid and large network of investors and potential partners.

BAs also they develop complementarity links with BIs. This complementarity may act in two directions. First, incubators can be seen as a source of projects. As one manager states: “We see incubators as a feeder system into accelerators, so we look on incubators as a source where we can recruit from” (Startupbootcamp). Second, a BI can be used after an acceleration program: “My assumption is that some teams go to an incubator after my program” (Startup42).

Thus, BAs successfully build internal networks (between the tenants), and external networks with investors, sponsors and BIs.

5.3. Business accelerators as a filter for business angels and venture capitalists

Our results indicate that BAs play an essential role in helping investors (business angels, venture capitalists) select relevant projects. BAs serve as a filter mechanism for many actors in the

entrepreneurial ecosystem. They act as a platform by bringing different stakeholders together in the start-up arena. The managers of the BAs that we met argue that they minimize risk for investors and “some of them send trainees to demo day ... they trust the quality of our job and our selection process” (Le Camping). The managers consider that the investors do not have to examine hundreds of applications; the BAs are doing it for them. Moreover, our results reveal that BAs are an ideal outlet for venture capitalists (VCs) because they can provide the filtering necessary for early-stage investments. By building companies that already have revenue and references established during the acceleration program, the BAs are able to provide already relevant companies to the VCs. The BAs act as a lever for the entrepreneurial ecosystem and as a facilitator for investors.

6. Concluding remarks and implications

The purpose of our study was to explore the dynamics of BAs. To pursue this aim we investigated 25 accelerators through a multi-country study. Our results point out a particular functioning of BAs, in terms of practices and strategy and thus offer valuable new insights on the incubation / acceleration process of startups.

6.1. Contribution to theory

This research contributes to the recent and growing literature on business accelerators (Hoffman and Radojevich-Kelley, 2012; Isabelle, 2013; Malek et al. 2013, Miller and Bound, 2011). The majority of previous findings present general characteristics of BAs. Our results confirm this literature by identifying some commonalities between the BAs. However, accelerators are far from homogeneous and our research demonstrates that BAs develop heterogeneous practices and business models. This heterogeneity in BAs configurations may reflect the current dynamism of the startup ecosystem face to the growing demand of new ventures with diverse needs.

This research also brings new insights to the literature on networking needs of startups. Compared to previous literature on BIs (Ebbbers, 2013; Hoffman and Radojevich-Kelley, 2012; Soetanto and Jack, 2013), our research demonstrates that BAs implement successful practices to develop strong internal and external networks. The present study extends the findings of Ebbbers and Wijnberg (2012). While they focused on reputation and past experience of managers giving them a large capacity for networking with investors (for finding funds), reputation also enhances the ability to mobilize mentors (for support) and partners (for sponsoring). Our results also confirm the survey of Aernoudt (2004), who considers

that business incubators should work closer together with business angels and venture capitalists. This missing link between incubation and finance (Aernoudt, 2004) is filled by the BA mechanism, as it connects the investment community and trained startups.

The research brings new knowledge on BIs governance and relationships among stakeholders. Alsos et al. (2011) indicate that the effectiveness of incubators is difficult to assess due to multiple, complex and volatile goals. There is a great risk that BIs aim for the goals that are easiest to measure and focus on short-term results. If incubator managers choose suboptimal solutions to balance the demands of different stakeholders, the long-term social returns of incubators could be questioned. This is not the case for the business accelerators we studied because the interests of all the stakeholders are aligned. Thus, this study opens up a successful case of building concordant interests between BAs stakeholders.

Our findings add to existing theory the BA as a new actor in the value-added business incubation continuum established by Allen and McCluskey (1990). By focusing purely on business development, it can be assumed that BAs create an elevated economic value. Furthermore, as it facilitates to mobilize a community of investors and at the same time leveraging entrepreneurial knowledge and know-how on a large scale, it can be seen as an extension of the business incubator continuum as it adds these new features.

6.2. Contribution to practice

This research provides useful insights for practitioners. BAs are enjoying an increasing success in the entrepreneurial support industry. This research shows that BAs act as a lever for the entrepreneurial ecosystem. BAs serve as a filter mechanism to many stakeholders (investors, incubators, institutions). They coordinate and institutionalize the relationships between these different actors by establishing links between them and the startup teams. The alignment of interests between the startups, the BA, and the investors may avoid potential conflicts and enhance communication. We should recommend that BAs reinforce their coordination role and mobilize other stakeholders which are less represented in their governance (e.g., government, business incubators, universities, etc.) in order to consolidate their ecosystem.

The popularity of BAs appears to have reached governments and policymakers. For instance, the French government has put out in early 2014 a 200 M€ envelope to support accelerators. We should recommend to clearly defining the shape of accelerators to avoid ambiguity with BIs. Indeed, face to

this trend, there might be the necessity of BIs to rethink their incubation services. We envision three strategies. First, BIs can choose the complementarity and partnership with BAs, BIs acting as a source of projects for BAs or intervening after the acceleration program. Second, incubators can successfully adopt an accelerator's services. For instance, H-Farm in Italy began as an incubator and gradually implemented a BA program that meets the standards of the definition proposed in our study. This can be considered as an imitation strategy. Third, as the BA model gains popularity, a trend of labeling can be observed. This approach generates the appearance of 'fake' accelerators, that we call simulation strategy. Several organizations may use the ambiguity of the BA definition to catch funds. Therefore, there is an emerging need to create a quality label outlining standards of operations and processes for BAs. Without such a quality label, the danger of diluting the strengths of a BA will be likely and will create confusion for founders of startups on where to go. In this sense, we suggest that teams should be very careful when looking at institutions that label themselves "accelerators".

6.3. Limitations and further research

First, we faced difficulties to interview mentors and startup teams. Therefore our sample is limited to BAs' managers and results could not be triangulated. Further research is needed to consolidate the internal and external validity of the results. Second, we could not get access to neither performance nor sustainability data of the accelerators. Reliable secondary data on these factors were incomplete. Additionally, the interviewed managers either refused to answer or declared that it is too early to assess the performance of the business model.

For future research, we suggest to consider the BA business model as in motion, which needs deeper investigation. The further dynamic development of this young industry has not proven to have models which can be regarded as sustainable yet. The for-profit accelerators, even the ones that started out very early, expect first tendencies of their long-term sustainability not before five to seven years after their start. Additionally, their financial sustainability is also dependent on future sell-outs of the companies they have an equity stake in. In this regard, the success of for-profit accelerators is hard to measure. Existing metrics (e.g., percentage of teams who received follow-on funding, number of applications received, number of engaged mentors per batch) are regarded as being helpful to measure the outcome of the activities of accelerators, but are not exhaustive to establish a comprehensive assessment framework for accelerators. Thus, further research has to be conducted to establish an assessment framework for accelerators, which fulfils the requirements of assessing all existent models equally.

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