

**HOW FOUNDER CHARACTERISTICS IMPRINT VENTURES'
INTERNATIONALIZATION PROCESSES:
THE ROLE OF INTERNATIONAL EXPERIENCE AND COGNITIVE BELIEFS**

Robin De Cock

Center for Business Design and Innovation
Antwerp Management School
robin.decock@ams.ac.be

Petra Andries

Department of Marketing, Innovation, and Organization
Faculty of Economics and Business Administration - Ghent University
petra.andries@ugent.be

Bart Clarysse

Department of Management, Technology and Economics, ETH Zurich
bclarysse@ethz.ch

ABSTRACT

While ample research has demonstrated that venture founders' international experience affects their decision to internationalize, it is unclear how this experience affects the actual internationalization process of ventures that move abroad. We use a multiple case study approach to collect qualitative data on founders' international experiences and cognitive beliefs about internationalization, the strategic decisions taken with respect to the internationalization process of their venture, and the relationship between them. We identify four types of international entrepreneurs that differ with respect to their international experiences and beliefs, and show how these differences affect the strategic decisions taken in the actual internationalization process.

KEYWORDS: International entrepreneurship; Founder experience; Internationalization process; Imprinting.

1. Introduction

In recent decades, we have witnessed an increasing number of new ventures moving beyond their home base and setting up business activities in foreign countries (Eurofound, 2012; Knight & Liesch, 2016). This international entrepreneurship, which can be defined as “*the discovery, enactment, evaluation, and exploitation of opportunities – across national borders – to create future goods and services*” (Oviatt & McDougall 2005: p. 540), has been facilitated by communication innovations such as the Internet, which have diminished the cost of internationalization (Knight & Liesch, 2016). In line with this increase in international entrepreneurship, academic research on the topic has flourished and scholars have been able to identify a large number of factors at the level of the individual founder, the firm, and its environment that determine the decision of a venture to set up activities abroad (for an excellent overview, see Knight & Liesch, 2016). At the individual level, in particular founders’ international experience and network have been shown to positively and significantly affect a venture’s decision to move abroad (Acedo & Jones, 2007; Aspelund, Madsen, & Moen, 2007; Luostarinen & Gabrielsson, 2006; Coviello & Munro, 1997; Welch, Welch, Young, & Wilkinson, 1998).

However, the internationalization process as such remains under-researched (Welch and Paavilainen-Mäntymäki, 2014). Although we now know that founders’ international experience and network determine ventures’ decisions to locate abroad, what is far less understood is how these factors affect the way in which these ventures then internationalize and the challenges they face in this internationalization process (Knight & Liesch, 2016). Whereas a large proportion of international ventures are founded by entrepreneurs with substantial international experience, often obtained through employment in multinational firms or personal circumstances (Aspelund, et al., 2007; Luostarinen & Gabrielsson, 2006; Weerawardena, Mort, Liesch, & Knight, 2007), others have founders with little or no prior international experience (Knight & Liesch, 2016).

Understanding the impact of these founder characteristics on the actual internationalization process is important, as not all ventures profit from internationalization. As Mudambi and Zahra (2007) show, early internationalization can potentially threaten the performance and survival of new ventures. By investigating *how founders' international experience (or lack thereof) affects the strategic decisions taken with respect to their ventures' internationalization process*, this study intends to increase our understanding of why early internationalization pays off for some ventures, but not for others.

In order to answer our research question, we build on founder imprinting theory which argues that founders' characteristics have an important impact on the decision-making process early in a venture's lifetime (Hoang & Gimeno, 2010). An increasing number of studies view cognitive beliefs as important lenses through which strategic decision-makers interpret information and translate it into organizational decisions and actions (Nadkarni and Narayanan, 2007; Nadkarni, Hermann, & Perez, 2011; Shepherd and McMullen, 2017). Hence, we state that a founder's cognitive beliefs, which are based on his/her previous experiences and background, have an important impact on the strategic decisions taken early in the venture's lifetime and thereby affect the venture's development process (Boeker, 1988, 1989a; Simsek, Fox, & Heavey, 2015). We build on these insights and study how founders' international experiences and cognitive beliefs about the way in which the venture should internationalize in order to develop and grow (*sources of imprints*) influence the strategic decisions taken with respect to their ventures' internationalization process (*imprinted process*).

Investigating how certain factors impact (internationalization) processes typically requires qualitative research (Yin, 1994; Knight & Liesch, 2016). We therefore conducted a qualitative multiple case study of 22 digital entrepreneurs that were born in Belgium – which has a growing

digital ecosystem (De Waele & De Cleyn, 2014) – and set up entrepreneurial activities in foreign digital ecosystems. Based on semi-structured interviews and secondary data, we identify four types of international entrepreneurs that differ with respect to their international experiences and beliefs, and we show how these differences affect their ventures' location decisions and organizational design, as well as the key resources and capabilities required to pursue these strategic decisions.

This study makes several theoretical contributions. First, it adds to the literature on international entrepreneurship by moving beyond the mere decision to locate abroad and by instead investigating the internationalization process that follows this decision. While many studies have demonstrated the impact of founder characteristics on the decision whether or not to internationalize, we clarify how founders' characteristics, and their international experiences in particular, affect ventures' strategic decisions with respect to location and organizational design, as well as the key resources and capabilities underpinning these strategic decisions. As such, this study answers the widespread plea for an increased understanding of how ventures internationalize (see for example Knight & Liesch, 2016; Welch & Paavilainen-Mäntymäki, 2014; Cavusgil & Knight, 2015; Keupp & Gassmann, 2009; Schwens, Zapkau, Bierwerth, Isidor, Knight & Kabst, 2017).

Second, by looking at how ventures internationalize and move to foreign ecosystems, the current study makes a contribution to the literature on entrepreneurial ecosystems, which has predominantly focused on differences between entrepreneurial ecosystems and on how entrepreneurs can deal with an ecosystem context that is given (cfr. Nambisan & Baron, 2013). We find that, instead of merely positioning themselves strategically in their home ecosystem, entrepreneurs question the value of that home ecosystem and take strategic location decisions to increase their access to resources available in foreign ecosystems. However, we also observe that

entrepreneurs differ greatly in their cognitive belief of how ecosystem choices can determine venture success, and that these differences in ecosystem beliefs drive their strategic location decisions. We hence answer the call by Nambisan and Baron (2013) and increase our understanding of how entrepreneurs make strategic decisions to proactively deal with a world consisting of different ecosystems.

Finally, our study also adds to the imprinting literature (Stinchcombe, 1965; Boeker, 1989a; Simsek et al., 2015), which has shown that founder's background and cognitive beliefs imprint different strategic decisions and processes at the venture level, but has not yet focused on internationalization processes. By making the connection between founders' international experience and cognitive beliefs on the one hand and ventures' internationalization process on the other hand, we extend the current understanding of the imprinting process to an internationalization context.

Overall, our study hence implies that entrepreneurs need to carefully consider how and where to internationalize, and that their own international experience, the cognitive beliefs they hold about the value of their home and potential host ecosystems, and the key resources and capabilities that are required when pursuing a certain internationalization strategy need to be taken into account in this strategic decision. Our findings also have important implications for policy makers in the home and host region. They need to realize that not all international entrepreneurs have the same needs and can make the same contribution to a region. As such, support policies for international entrepreneurship should be tailored to the international experience of the entrepreneur, and to the challenges inherent to his/her specific internationalization process.

In the following sections, we first discuss the theoretical background of the study. We then provide an overview of our methods and findings, and conclude with a discussion of these findings and their implications for theory and practice.

2. Theoretical background

2.1 The role of prior international experience on the decision to internationalize early

It is generally accepted that founders' international experience impacts the speed with which a firm internationalizes. Companies whose founders have foreign professional experience (Bloodgood, Sapienza, Almeida, 1996; Oviatt & McDougal, 1994) or have been educated abroad (Bloodgood et al., 1996; Reuber & Fisher, 1997) are more likely to internationalize early. By diminishing managerial perceptions on the risk and uncertainty inherent to internationalization, prior knowledge expedites the decision to internationalize (Knight & Liesch, 2016; Cuervo-Cazurra, 2006; Jandhyala, 2013, and many others on the moderating role of firms' international experience in multinational enterprises).

However, not all founders that decide to internationalize early have the same degree of international experience. When we look at born globals, i.e. "entrepreneurial start-ups that, from or near their founding, seek to derive a substantial proportion of their revenue from the sale of products in international markets" (Knight & Cavusgil, 2004, p. 124), we see that many of them are indeed founded by individuals with substantial prior international experience, either from personal experiences or from employment in multinational enterprises (Acedo & Jones, 2007; Aspelund, Madsen, & Moen, 2007; Hewerdine & Welch, 2013; Luostarinen & Gabrielsson, 2006; McDougall, Oviatt, Shrader, 2003; Weerawardena et al., 2007). At the same time however, a substantial proportion of born globals has little or no experience in international business (Freeman, Edwards, & Schroder, 2006; Knight & Liesch, 2016). The question then becomes how founders' international experience (or lack thereof) affects the actual internationalization process of those ventures that decide to move abroad.

2.2 How founders imprint ventures' internationalization process

This study draws on imprinting theory, which is widely used in the entrepreneurship literature, to investigate how founders' international experience (or lack thereof) affects the strategic decisions they take with respect to their ventures' internationalization process. The theoretical framework of imprinting helps us to better understand the impact of international experience and cognitive beliefs beyond the initial decision to internationalize, as it allows to explain also decisions taken during the early internationalization process.

According to imprinting theory, founders are likely to dominate the decision-making process early in a venture's lifetime (Hoang & Gimeno, 2010). They are the initial architects of the organization's structure, processes and strategy (Nelson, 2003) and bring to a new venture their individual histories, beliefs, and habits, which can have a major imprint on the development process of a new venture (Bryant, 2014; Mathias, Williams, & Smith, 2015; Kimberly, 1979; Boeker, 1988, 1989a; Baron, Hannan, & Burton, 1999; Bryant, 2014; Simsek et al., 2015; Pieper, Smith, Kudlats, & Astrachan, 2015). For example, Boeker (1988;1989a) shows how founders background (age, functional experience, education, places of previous employment) imprint the strategic decisions of a venture.

The founder imprinting literature identified different sources of founder imprints: unique background and vision (Kimberly, 1979), social networks (Beckman, 2006), personality (Gruber, 2010), cognition and beliefs (Bryant, 2014), and identity (Fauchart & Gruber, 2011). We focus on cognitive beliefs as they are influenced by the prior background and experiences of a founder (including the international experience, in which we are interested) and are considered a core imprinter of strategic processes. Cognitive beliefs have been defined as a founder's or a founding team's beliefs about what is important for the success of the organization (Markoczy, 1997). In our

specific research context they relate to the founders' beliefs about the way in which the venture should internationalize in order to develop and grow. There is extensive research that shows how previous experiences and backgrounds influence, form and update cognitive beliefs (Busenitz & Barney 1997, Bryant 2007, Parker, 2006). Founders' cognitive beliefs are constructed as a result of formal and informal learning from different context experiences (Denzau & North, 1994; Fiske & Taylor, 1991). Baron and Hannan (2002), for example, find that founders with different prior experiences, embrace very different mental models and beliefs of the ideal organizational form for a technology start-up. The background and experiences of entrepreneurs therefore imprint the organization structure of their venture, as entrepreneurs' prior experiences shape their world view, limit the kinds of information they use and the way they interpret their environment making it more likely that they seek models from their own past experience (Boeker, 1989b; Beckman & Burton, 2008).

Building on previous studies, we argue here that entrepreneurs have an important imprinting effect, not only on the general strategy of ventures but also on the internationalization process (Jones & Coviello 2005). Entrepreneurs' characteristics or traits and their roles in identifying, accessing and leveraging resources in the pursuit of opportunity creation and innovation are relevant to the body of internationalization research (Bruneel & De Cock, 2016). We build on founder imprinting theory to investigate how *sources of imprints* (founder's international experience and resulting cognitive beliefs about how to internationalize) affect *imprinted processes* (internationalization process). We expect that prior exposure to different countries may influence the cognitive beliefs and mental model of founders regarding internationalization, and that such international experience and subsequent beliefs may therefore affect the strategic decisions taken during the internationalization process (Maitland & Sammartino, 2015).

3. Method

Investigating how certain factors impact certain processes typically requires qualitative research (Yin, 1994; Eisenhardt & Graebner 2007; Pratt 2009). In particular, we follow work on international entrepreneurship (Knight & Liesch, 2016), which argues that in order to understand the way in which new ventures internationalize, qualitative case study work is needed. We did not use our multi-case approach to create a fundamentally new theory, but rather to elaborate existing theory on the internationalization process (cfr. De Cock, Bruneel, & Bobelyn, 2019). Hence, we did not use a purely grounded approach, through which insights are generated only by beginning with a blank slate of data (Danneels 2003); rather, we drew on extant theory, concepts, and models as a starting point for a study to elaborate theory (Danneels 2003; Vaughan 1992). In this study, we build on imprinting theory to clarify how international experience and cognitive beliefs impact the internationalization process and generate new theory to guide understanding of the phenomenon.

3.1 Data collection

Our research setting is the digital industry (Nambisan, 2017). More specifically we used a sample of digital Belgian digital entrepreneurs that, early in their venture's lifetime, decided to set-up entrepreneurial activities abroad. The Flanders Investment Trade Agency (FiT) provided us with an official list of Belgian digital entrepreneurs with international operations. The list contained 56 entrepreneurs, which were all active in a variety of digital ecosystems (see Table 1). We dropped 24 companies after a first screening because they were either too old¹ (Zahra, 1996) or not independent. We contacted the remaining 32 companies and were able to conduct 25 interviews

¹ We follow the definition of Zahra (1996) that defines new ventures as ventures younger than 8 years old.

with 23 founders of 23 Belgian ventures operating abroad (i.e. two founders were interviewed twice). We dropped one interview as the company's international presence was restricted to the Netherlands, which is very close to Belgium. All remaining cases were present in either Silicon Valley or California. Table 1 gives an overview of the respondents.

--- TABLE 1 ---

We used a semi-structured interview protocol to collect general data about the firm and the ecosystem(s) it was active in, as well as data about the founders' international experience, their cognitive beliefs, and the internationalization process of their venture (cfr. Danneels, 2003). The semi-structured interviews began with open-ended questions designed to collect information about the venture's history (Zhang, Tan, & Tan, 2016). After the company story was clear and comprehensive, we followed a standard interview guide to ask, in line with imprinting theory, further questions about (a) founders' international experience, (b) their cognitive beliefs about the way in which the venture should internationalize in order to develop and grow (c) their strategic decisions with respect to the venture's actual internationalization process. Although the interviews were conducted using a standard interview guide, respondents were allowed to expand, illustrate, and digress. In order to improve our understanding of the different (Belgian and foreign) ecosystems, we interviewed three additional persons external to the selected cases: an experienced business angel and a successful digital entrepreneur active in Silicon Valley and California, and a seasoned digital entrepreneur active in the Belgian ecosystem. Each interview lasted between 45 min and 1 hour. Two interviewers attended each interview. One interviewer focused on asking questions in the standard interview guide while the other made field notes and also had the opportunity to probe and ask further questions more towards the end of the interview. All interviews were recorded and transcribed.

The interviews were supplemented with 206 pages of secondary data. We collected secondary data from company websites, LinkedIn, press releases and press coverage on the founder's experience, education, and cognitive beliefs, on the venture's technology, business model, network, financial performance, and internationalization process, and on the ecosystem network. The secondary data facilitated and contextualized the interpretation of the interview data and provided an external check. The names of the respondents and ventures have been changed for reasons of confidentiality.

3.2 Data analyses

We followed a partially grounded approach, starting from existing concepts in the internationalization and entrepreneurship literature. Our goal was to elaborate existing theory on founders' international experience, cognitive beliefs, and the ventures' internationalization process by analyzing the data and clarifying relationships between these concepts (cfr. Ahsan, Zheng, DeNoble, Musteen, 2018; Gehman, Glaser, Eisenhardt, Gioia, Langley, & Corley 2018; De Cock et al., 2019). We looked for general patterns using the within- and cross-analysis techniques inherent in the multiple-case study approach (Eisenhardt 1989). We started by gaining a deep understanding of each venture case (step 1), compared multiple cases to identify differences and similarities (step 2), and generated insights to improve our understanding of how (lack of) international experience affects the internationalization process (step 3). Finally, we compared our emergent insights with those of the existing literature on international entrepreneurship and on founder imprinting, and identified similarities and new advances (step 4). We explain these steps in more detail below.

In the first step, we compiled individual case histories by synthesizing information from multiple sources. We used the interviews and company documents to construct the case histories. These within-case analyses provided us with a better understanding of the international experience and cognitive beliefs of the founders and of the internationalization process of the venture. More precisely, we analyzed our transcribed interviews and field notes, building on concepts from the imprinting and international entrepreneurship literature, and guidelines for coding and analyzing qualitative data (Miles & Huberman, 1994; Strauss & Corbin, 1998). Two researchers read the interview transcripts and coded all responses that provided information on three core dimensions: (a) the background and network of the founders, (b) their cognitive beliefs about the way in which the venture should internationalize in order to develop and grow and (c) their strategic decisions with regarding to the venture's internationalization process. They discussed any differences in coding until they reached agreement.

In a second and third step, we performed cross-case analyses seeking to identify distinct themes within each of these dimensions (Strauss & Corbin, 1998). While reading and analyzing the data, we made interpretative notes, compared our observations with the academic literature, and generated memos based on these comparisons. This iterative process of constantly comparing emergent theory and data led to additional, often more qualified and refined memos. Memos are brief analytic notes that include researchers' insights as they analyze the data and emerging theory (Danneels 2007, 2011). All authors' memos were discussed in several meetings, and were organized into categories that eventually formed building blocks for the findings. This coding process led to four distinct themes depending on their international experience and cognitive beliefs, which reflect four different types of international entrepreneurs, as discussed below.

Finally, we tested the validity of our findings by cross-checking and discussing the results with the main actors in follow-up phone interviews. This helped us to structure and contextualize

the findings and test whether our interpretations of the ventures were consistent with those of the founders (cfr. Sonenshein 2014). We further contrasted our findings with the current literature on international entrepreneurship to summarize similarities and differences between our findings and existing theory.

4. Findings

Our study aims to get a better understanding of how international experience and cognitive beliefs of entrepreneurs influence their internationalization process. Based on our data analysis, we find that all of the ventures in our sample primarily decided to internationalize not for selling goods or services, but for getting access to the resources present in the foreign ecosystem, which were needed for developing and commercializing their goods or services (cfr. Zander, McDougall-Covin, Rose, 2015). Notwithstanding this common driver, we observe clear differences between the cases. In particular, we distinguish between four different types of international ventures: multi-ecosystem leveragers, ecosystem accelerators, ecosystem grownups and ecosystem adventurers. Their founders differ with respect to their *international experience*, which is reflected in their *internationalization beliefs*, i.e. in their beliefs about the way in which the venture should internationalize in order to develop and grow. These differences in founder imprints lead to different strategic decisions with respect to *location and the internationalization process*, which in turn have different implications for the *organizational design* of the venture and for the *key resources and capabilities*. The multi-ecosystem leveragers represented the smallest group (17%) while the ecosystem adventures were the largest group (33%) in our sample.

4.1 Multi-ecosystem leveragers

The first category of international entrepreneurs have traveled and worked at different places around the world and have built networks at different locations either studying at universities or working in international companies. They have built up strong *international experience* all around the world. For example, the founders of SHARKPLAY and WIZARD have diverse international backgrounds and worked and built networks at different places in the world before setting up their venture.

I've never really felt too Belgian, I have always felt European by nature, I've lived in different countries. (WIZARD)

I just went to boarding school in the U.S. for two years at age 15. My parents stayed in Belgium. I just left completely and I never went back home. To me that was realizing at 15 that if you cannot change the system, maybe there are other systems. I studied at a University in London. (SHARKPLAY)

These broad international experiences are reflected in their *internationalization beliefs*, as these international entrepreneurs clearly see the world as a place with different ecosystems having their own specific DNA, competences and resources that can be useful for the development of their venture. They view ecosystems as places where people (historically) specialized amongst certain competencies.

If you're in fashion and you start launching a fashion business, are you going to launch it in Iceland or are you going to launch it in Milan or Antwerp or New York? You better be in one of those places. There are people who recognize this and people who don't recognize it. If you want to work in finance, are you going to go to Zurich or London or New York or you're going to Luxembourg? You'll be doing great in finance in Luxembourg but you'll do a very different type of finance. From the beginning of time, even in Europe people have specialized amongst certain competencies in certain places. And it's due to a very complex set of circumstances that make those places attractive. (SHARKPLAY)

We were also located in Silicon Valley because Adtech is here...a lot of Adtech, Google, Yahoo, Adobe, Bookmatic, a lot of the IT companies are actually based here. (WIZARD)

For them, geography is a source of competitive advantage as the following quotes illustrate:

Because geography, I think as an entrepreneur is a variable you can change. And you've got a lot of variables you can't change, but geographical location, you can. (WALKLY)

But you know, geography is one of those factors that is a business advantage you can choose to control. Most people funnily enough don't see that and don't control their geography. And they just accept a set of constraints and then spend most of their time dealing with that. (SHARKPLAY)

Change the environment, right, I mean you can try to grow kiwi's in Belgium, but then after a while it could be understood that well, it's probably a waste of your time, so you better go to New Zealand. (CLARIFY)

This belief is reflected in their *location decisions*, as they take the strategic decision to work and operate from multiple locations and ecosystems. They are very growth oriented and believe that if a new venture wants to become successful it needs the best in class resources which cannot be found in one single ecosystem. They believe that a venture should be designed to work and operate from different locations and ecosystems. Hence they follow an internationalization process where they try to be active in multiple ecosystems.

[W]e wanted to be here because what we realized is that to be successful we needed to have good game DNA, but also good web DNA. The game scene is very strong in Europe. Specifically London in general has a great heritage in great game design. So we were glad to have an office in London because from a creative standpoint London is great. Look at all the ad agencies, look at all the film- London is a great place for creative industries. And game is quite strong there. But we also needed the web component- understanding the web really deeply and this is here. And so this was before Google, Android, iPhone was big but we knew if you needed to understand and recruit people who understood the web we had to be here. And then we wanted to be in China because if it explodes and became a super high complexity business just like early mobile then we needed to be able to hire very cost efficient engineering talent and China is admissible for that. You can get 10 engineers of the top quality type in China for the price of one here. So we wanted to have those three centers mostly from a recruiting standpoint and also just to be able to grow quickly because if there is a war on talent in San Francisco then you can hire in Europe or you can hire somewhere else. We became this global startup and it was an interesting experiment because we didn't seem to be very big in any place but we were bigger as a global company. (SHARKPLAY)

Interestingly, these location decisions have implications for the *organizational design* of the venture. In particular, these ventures split up the founding team so that they have a founder in

every important ecosystem where they are located. At the same, this makes communication and having meetings with the founding team more difficult.

We thought rather than start, be successful, and then become pan European, we wanted to be local everywhere from day one. In China everyone thought we were a Chinese company, in San Francisco everyone thought we were from Silicon Valley, and in London everyone thought we were European. Amongst the four of us we decided who's going to go where and I raised my hand and said, "I'll go to San Francisco". (SHARKPLAY)

Very quickly we opened a center in Bucharest to do the development. This was all video, then we made the shift to audio and we opened offices in Paris and Berlin. Recently, we also opened one in London because the U.K. In many ecosystems we need to feel comfortable, we need to have a local guy, we need to have a British guy on board sitting in London. (WIZARD)

The result of this split founding team is that, in each ecosystem, the other members of that specific ecosystem have the impression that the venture mainly operates from their ecosystem. This perception makes it easier for the venture to fully integrate into the ecosystem, and access important resources in that ecosystem. We observe that the venture's headquarters tend to change rather easily from one location to another, moving to that specific location in which the venture has the strongest network and activities at that specific point in time.

As *key resources and capabilities*, these entrepreneurs mention the capability to be very fast in identifying new trends, and to follow an aggressive international growth process. Only then, they can quickly identify and access the resources from multiple ecosystems.

The second thing we did is... we also learnt from GLO (previous company) thinking that geographical expansion is key. If you're successful this is going to become your biggest headache, that is why we wanted to be at different places from the very beginning. (SHARKPLAY)

So we wanted to have those three centers mostly from a recruiting standpoint and also just to be able to grow quickly because if there is a war on talent in San Francisco then you can hire in Europe or you can hire somewhere else. We became this global startup and it was an interesting experiment because we didn't seem to be very big in any place but we were bigger as a global company. (SHARKPLAY)

We call this type of international entrepreneurs “multi-ecosystem leveragers” as they believe strongly in the power of combining multiple ecosystems, and their internationalization process implies that they quickly after start-up enter multiple ecosystems to acquire and search for the best in class resources around the world.

4.2 Ecosystem grownups

The second category of entrepreneurs are the “ecosystem grownups”. They are all born and raised in Belgium, but move abroad in a later stage of their life for the purpose of education or work. They initially enter the host ecosystem not necessarily with the intention to start a company there, but to work in large international companies or to study in one of the leading universities in that host ecosystem. Their *international experience* in the host ecosystem triggers their entrepreneurial ambitions.

My boyfriend, now husband, was doing a PhD in Stanford, and that's how I came to America. I did not really have the ambition to go to America. The ideal for me was actually a couple of years abroad, and then I would return to Belgium. So eventually, my husband left for Stanford and then I left as an expat for [incumbent corporation in the fast moving consumer goods industry]. (FAVO)

When I joined Stanford, I never thought I was going to head a startup. And then I got bitten by the startup bug as we say, and yeah I ended up creating a startup. You know though, two years earlier, I would have sworn, I would never get into this start-up world. (SIMOLAR)

Especially the experience in the technology sector has shaped me the most as an entrepreneur. My childhood less. Because I do not come from a family of entrepreneurs and therefore had quite few examples. My studies neither. But then my experiences especially here in Silicon Valley and at [name of internet incumbent]. That motivated me especially, and seeing that my former colleagues started on their own. (FAVO)

These entrepreneurs have little or no connection to the digital ecosystem in their home country. But through their work and/or educational experience, they have built up an important network in the host ecosystem that eventually becomes instrumental in exploiting entrepreneurial

opportunities at a later stage. This experience in the host ecosystem impacts their *internationalization beliefs*. They believe that the deep roots which they have developed in the host ecosystem allow them to test the business model and offer them access to the necessarily resources to grow their venture. One of our respondents was part of YAHOO! and explains how this allowed her to build up and grow her venture. Another entrepreneur developed deep roots by studying at Stanford and getting involved in the incubator and alumni programs. They simply “grew up” with people that are now key persons in the ecosystem which makes it relatively easy to penetrate the ecosystem and get their hands on its most interesting resources.

At the time, YAHOO was a very interesting company to work for and they attracted great people. It was one of the top companies in Silicon Valley. These people were very intelligent, had the entrepreneurial spirit, helped to shape the internet we know today [...] This also meant that once they left the company, they started new ventures themselves and today have important positions in the ecosystem. This was extremely important for my own business [...] In the beginning, we did many consulting projects. These were possible mainly because of the people I knew from YAHOO who had important positions in other companies. (FAVO)

There's a lot of money around Stanford, and so we found a few people that believed in what we were doing, even though we were nowhere. And so they invested a considerable amount of pre-seed money in this. (LABS)

And so when you come from Stanford, anybody will take a meeting with you and that's really useful. And you know, the alumni database, that's also pretty helpful. (LABS)

With respect to the resulting *location decisions*, we find that these ecosystem grownups did not consider founding a venture in Belgium, but immediately started up their venture in the host ecosystem.

I would say I would never create a startup in Belgium, never in my life time. I feel pretty strongly about it. (SIMOLAR)

The *organizational design* of these ventures is mainly focused on the host ecosystem with the founding team being active in that ecosystem. Our secondary data formally confirm that all the

ecosystem grownups had their founding team located in the host ecosystem. Some of these ventures had outsourced simple straightforward engineering tasks to external companies in other ecosystems but a large majority of their venture activities were performed in the host ecosystem. Overall, the *key resources and capabilities* for an ecosystem grownup consist of the strong ties in the host ecosystem.

So there was a certain group of people who were really driven to leave a mark on an overall industry, which also meant that many of those people who later left [name of internet incumbent] either started something themselves, as an entrepreneur, or took other important positions within other companies. And that eventually became very important to me later. So if I look back on networking and especially the network I've formed in YAHOO, that actually determined the development of my start-up and the rest of my career. (FAVO)

4.3 Ecosystem accelerators

The third type of international entrepreneurs that we identified are the “ecosystem accelerators”. In terms of *international experience* and according to our secondary data sources these entrepreneurs did not extensively travel around the world before starting their business, but they have built up a strong network in their home ecosystem.

I studied at a Belgian University where I got the business idea. I further developed it while I was part-time working for [Belgian consultancy firm] and eventually participated in [Belgian business plan competition]. To our surprise, we actually won it. That's where it started [...] we got in contact with all the big companies in Belgium [...] we participate in many events of the incubator where we were located [...] we talked to nearly every VC. (ZENTRACKING)

With [name previous company] we got to know the key investors and companies in Belgium for our business. [...] I worked for [successful Belgian digital start-up] that later produced many promising spin-outs that are raising a lot of capital and were run by ex-colleagues. (SHOWTIME)

Given their deep local experience and network, they are convinced that this home ecosystem is a highly appropriate location to develop and test their ideas. Nevertheless, their experience also leads them to *belief* that it is not the best place to scale up their business. In sum, they believe that

some ecosystems are useful to develop and test ideas, while others are better suited to scale up. Moving to different ecosystems to them is a way of accelerating or scaling up the venture. As a result of this internationalization belief, their *location decisions* consist of starting-up their venture in the host ecosystem and moving to Silicon Valley later on. They see their home region as a place where they can experiment and start their venture in a “lean” way. Once they have tested and found a promising business model, they quickly move to an ecosystem that has the resources and knowledge to accelerate their growth. These way of thinking and the internationalization process that follows from it, are reflected in the following quotes:

We moved to Silicon Valley because we believed that we could hire the right people there. Belgium has very talented engineers, very good people, the only thing that they miss is the experience to build something scalable [...] That is a huge knowledge gap in Belgium. Here we find the right sales people that know how to grow from 1 to 100M dollar. You will not find those people in Belgium that know how to scale using our SAAS products and how can bring the business from 1000 users to 100k users. (SHOWTIME)

You can easily lean start in Belgium. Belgium is the perfect space to experiment. But you have to fail fast, dare to quickly kill it. You can connect with the world through the internet, you don't have to be in Silicon Valley. We are just located here because of acceleration, purely that, but only come here once you have a proven product and traction, not sooner. (VERTIGO)

Well, we have taken the strategy of 2 headquarters. We said 'Our U.S. headquarters is there and our European headquarters is here.' [...] You can perfectly invent something here, but you are going to sell it in the Silicon Valley where you can sell it on a large scale. Or you can at least sell your technology to one of the big companies. (DATAGROW)

Our analyses shows that these type of international entrepreneurs develop an organizational design that is in line with this location decision. They develop a strong engineering team in their home region. In the early stages of their venture development, the founding team works closely together with this engineering team because this allows them to quickly integrate and change many things to their product or technology. Once they've reached the stage where the market starts to

like the venture offering, the whole founding team moves to another ecosystem to accelerate the growth but keeps a large part of their engineering team in the home ecosystem. However, while digital businesses seem to be capable to operate from different places, it appears that their engineers cannot always be moved easily to other locations. This means that the founding team members frequently travel back to the home ecosystem and that coordination costs arise.

But of course, Belgium remains super important. Our engineering team is completely there, our European sales team is there, our European marketing team, our European customer sales team. (SHOWTIME)

I can't fly over one of our engineers from Belgium every time to do some development and having two engineering teams working on the same product at two different places... multi-office development, that's hell! (VERTIGO)

Right now I'm really happy with my life, with my lifestyle, 100% satisfied. I travel when I want to, I'm very free, and it's the best of both worlds. (VERTIGO)

Overall, it appears that the *key resource and capability* for an ecosystem accelerator in the host ecosystem is having a proven business model that is ready to scale. Although respondents had their network mostly in place in their home region, they all managed to quickly enter into the core of the foreign ecosystem. The fact that they had a proven business model with lots of growth potential opened doors for them.

Meanwhile, we were already taking the first steps in America. And the reason was because Google was also seriously watching what we did. We had a few meetings with Google, so we wanted to show some extra development each following meeting (ZENTRACKING).

It's very difficult if you don't have a network or someone selling you. I'm not saying it is impossible, but I wouldn't recommend it to anyone (SHOWTIME).

I never advise Belgian entrepreneurs to start straight away in Silicon Valley because it can be a real swamp here. You are one of the 10.000 startups sitting here. [...] You should come here to scale something. Once you have something, once you know something works, once you have a product-market-fit (SHOWTIME).

4.4 Ecosystem adventurers

Finally, the fourth type of international entrepreneurs in our sample are the “ecosystem adventurers”. These entrepreneurs have little or no *experience* in a foreign host ecosystem.

[...] but that's like very hard to access that core. It's like when you have a trip for a week or ten days or two weeks here, unless you really know a lot of people in advance uhm, it's very hard for you to have value from the Valley. At least that's how I felt it from my first trips when I just came here for a week or two. It was very disappointing, very useless actually (UPTOWN).

Notwithstanding this lack of experience, they have a very strong belief that the host ecosystem will be ideal to set-up and grow their venture. Although they lack a clearly tested business idea and contacts, they are very much attracted by the host ecosystem in their *international belief*.

I wasted six months of my life, because I stayed in Belgium. I should have left far earlier. [...] I was in the perfect starting block when I graduated in Belgium and when I started my entrepreneurial career in Belgium. And then, I just could not finance my startup in Belgium. In fact, it was much more than that. I realized that Silicon Valley is the place to be if you want to succeed with a worldwide company project, have a worldwide impact, for several reasons. (UPTOWN)

I had no specific startup idea when I moved to the U.S. (LAVIA)

That's of course the case when you're an entrepreneur, you'll see what happens. You just take that risk and you leave. (CHECKING)

As a result, their *location decision* consists of starting-up the venture in foreign host ecosystem straight away, and they typically give themselves 6-12 months to “make it happen”.

So basically we gave ourselves six months in the Valley to know if we were crazy or on the right path, and literally after five months and a half we got our first entering... investors put \$10,000 in the company. (STORY)

We had a runway of two weeks left in the U.S., and we believed our investors wouldn't reinvest. So I started thinking about other business opportunities and came up with BACKING. (BACKING)

Their organizational design of their venture is entirely focused on the host ecosystem, with the founding team and entire company being based in that ecosystem. While they are very enthusiastic about the host ecosystem, one of the respondents in this group admits the difficulty of his undertaking:

When you come here as a foreign entrepreneur it's very hard. You don't have any network, but Silicon Valley is pretty relationship and network based. So you have a huge disadvantage and you don't have access to all these great resources. You have only access to the bullshit resources and they would just distract you actually. Uhm but once you figure out how to get momentum, which is very hard. It's very difficult. It's the most difficult part to overcome that barrier to get to the point... But once you get there, then suddenly it flips. (UPTOWN)

It thus appears that a strong passion to make it work would be the key resource and capability for an ecosystem adventurer.

I went to Silicon Valley for the adventure. I worked and done business in Belgium for several years and I am really motivated to make it here. Silicon Valley for me always had the status of the "promising land" and I really want to succeed here. (LAVIA)

However, even for highly passionate ecosystem adventurers, this internationalization process is risky as they neither have a strong international network, nor a validated business model.

4.5 Summary

Table 2 provides an overview of the characteristics of the four types of international entrepreneurs discussed above and provides an overview of the founder imprints and the subsequent imprinted strategic decisions.

-- Insert Table 2 about here--

5. Discussion and implications

Building on founder imprinting literature, we identified four different types of international entrepreneurs: multi-ecosystem leveragers, ecosystem accelerators, ecosystem grownups and

ecosystem adventurers. These four types of entrepreneurs have different sources of imprint as they differ in *international experience and network* as well as in their *international beliefs*, i.e. in their fundamental belief about the way in which the venture should internationalize in order to develop and grow. These founders' backgrounds and beliefs affect the *location decisions* of their ventures, i.e. their decision and approach to locate in specific ecosystems, the strategic decisions taken with respect to *organizational design*, as well as the *key resources and capabilities* needed to successfully internationalize. These insights contribute to entrepreneurship literature, and specifically have important implications for the international entrepreneurship literature, for the entrepreneurial ecosystem literature, and for the literature on founder imprinting. The study also has important implications for practitioners and policy makers.

5.1 Contributions to international entrepreneurship literature

International entrepreneurship research has called for new perspectives to understand how ventures enter new places and develop their early internationalization pathways (Keupp & Gassmann, 2009; Nummela, Saarenketo, & Loane, 2016; [Tolstoy et al., XXXX](#)). A solid understanding of internationalizing new ventures and their dynamics requires in-depth insights into the entrepreneur's logic and reasoning (Coviello, 2015). We build on imprinting theory to show that an entrepreneur's prior international experience affects his/her beliefs about the way in which the venture should internationalize in order to develop and grow, and that these experiences and beliefs imprint the strategic decisions taken with respect to the internationalization process. They affect the extent to which ventures internationalize (with ecosystem grownups and ecosystem adventures operating in one ecosystem and multi-ecosystem leveragers and ecosystem accelerators operating in multiple ecosystems), as well as the nature of the actual internationalization process (with multi-ecosystem leveragers operating in different locations from day one vs. ecosystem

accelerators internationalizing gradually), but also the key resources and capabilities that are required. Entrepreneurs can either enter a foreign ecosystem based on their ability to quickly identify new trends and opportunities, a strong existing network in the host ecosystem, a proven business model which they want to scale up, or a strong passion to succeed in the ecosystem, all depending on their international experience, cognitive beliefs, and strategic decisions with respect to the internationalization process.

As such, this study also answers the call by Mainela et al (2014, pp. 120) who propose that “more attention to be paid to the cognitive processes and cognitive framing of situations in the discovery of international opportunities.” In particular, we show that founders with different international experience also have different cognitive beliefs about the way in which the venture should internationalize in order to develop and grow, and that these different beliefs will also prompt them to undertake different strategic actions in order to reap international opportunities.

This study also increases our understanding of how ecosystems influence the motives and strategies of ventures that internationalize early, a topic that has not yet received much attention in the international entrepreneurship literature (Cavusgil & Knight, 2015). We show that even entrepreneurs that originate from the same ecosystem (in our case, the Belgium digital ecosystem) and move to the same foreign ecosystem (in particular, the many entrepreneurs in our sample that moved to Silicon Valley), differ with respect to the expectations they have about that foreign ecosystem, the way they enter the ecosystem, and the challenges they face in doing so. As such, our study clearly suggests that ecosystem characteristics do not have a stand-alone effect, but instead interact with the personal background of the founder in determining his/her motives and strategies for moving there.

While international entrepreneurship has been defined as the development of opportunities across national borders, scholars in this tradition have mainly focused on market opportunities,

investigating ventures that internationalize early because they want to derive a substantial proportion of their revenue from the sale of products in international markets (Knight & Cavusgil, 2004). As such, they ignore a substantial group of new, often digital, ventures that internationalize not just for selling goods or services, but for getting access to the resources needed for developing and commercializing these goods or services (e.g., customer information, human resources, technology, capital) (Zander et al., 2015). This study moves beyond a focus on the pursuit of international market opportunities, and includes young, resource-constrained firms that are driven by a logic of creation, and resourcefulness (Zander et al., 2015). In particular, we provide a better understanding of the strategic motives of these resource-constrained firms. We identified different types of born globals that have different cognitive beliefs and expectations, and take different strategic decisions with respect to internationalization.

Finally, this study contributes to the international entrepreneurship literature by integrating theories and insights from entrepreneurship into the internationalization context. It thereby answers a longstanding plea for greater cross-fertilization with entrepreneurship research (Mainela, Puhakka, Servais, 2014; Coviello & Jones 2004; Jones & Coviello 2005; Madsen & Servais 1997). In particular, we show that imprinting theory, which is a commonly used theory in entrepreneurship research, provides a valuable basis for understanding the early internationalization process of new ventures.

5.2 Contributions to entrepreneurial ecosystem literature

This study also adds to the entrepreneurial ecosystem literature. This is a rapidly growing literature providing interesting insights on how entrepreneurial ecosystems differ in culture (Audretsch, Obschonka, Gosling, & Potter, 2017) and structure (Mason & Brown, 2014). However, most studies in this field take the perspective of the entrepreneurial ecosystem (Cohen, 2006;

Isenberg, 2011; Mason & Brown, 2014; Audretsch et al., 2017; Roundy & Roundy, 2017; Spiegel, 2017; Bruns, Bosma, Sanders, & Schramm, 2017), or the focal firm or university (Cusumano & Gawer, 2002; Pierce, 2009; Dattée, Alexy, & Autio, 2017; Theodoraki, Messeghem, & Rice, 2017; Miller & Acs, 2017; Guerrero, Urbano, Fayolle, Klofsten, & Mian, 2016). The few recent ecosystem studies that focus on entrepreneurs and their ventures investigate how entrepreneurs strategically deal with an ecosystem context that is given (Nambisan & Baron, 2013), but do not consider the possibility that entrepreneurs can make a strategic choice with respect to their location in a specific entrepreneurial ecosystem. In line with frequent business press articles, our findings show that entrepreneurs can proactively choose their ecosystem. However, we also observe that these entrepreneurs differ greatly in their cognitive belief of how ecosystem choices can determine venture success, and that these differences in ecosystem beliefs drive their specific ecosystem strategies. As such, this study is one of the first to provide a choice-centered view on entrepreneurial ecosystems by providing insights into entrepreneurs' strategic decisions on ecosystem location. Instead of merely positioning themselves strategically in their home ecosystem, they question the value of that home ecosystem and develop ecosystem strategies to increase their access to potentially more superior resources in other ecosystems abroad.

We also contribute to the entrepreneurial ecosystem literature by showing how entrepreneurs play a role in connecting entrepreneurial ecosystems. Entrepreneurial ecosystems are dynamic evolving groups of entrepreneurs and stakeholders that can be connected by the group of ecosystem leveragers or ecosystem accelerators. These group of ecosystem entrepreneurs follow an ecosystem strategy that inevitably leads to the transfer of knowledge and resources between entrepreneurial ecosystems. The fundamental importance of these 'global pipelines' has been recognized in the literature on clusters (Bathelt, Malmberg, & Maskell 2004; Brown & Mason,

2017) but it has been unclear how entrepreneurs can build global pipelines as this has hitherto received no attention within the context of entrepreneurial ecosystems.

5.3 Contributions to founder imprinting literature

Finally, our study also contributes to the imprinting literature (Stinchcombe, 1965; Boeker, 1989a; Simsek et al., 2015). This literature has identified numerous mechanisms of imprinting reflecting the social, institutional, cultural, and personal attributes of the founding process (Levinthal, 2003; Bryant, 2014). In this study we focus on the founder's international experience and cognitive beliefs as important sources of imprint. While previous research has shown that founder's background and beliefs imprinted different strategic decisions at a venture level (for an overview see Simsek et al., 2015), our study is the first, as far as we know, to validate the relevance of imprinting in the context of early internationalization.

5.4 Implications for practitioners and policy makers

The current study also has important practical implications for entrepreneurs and policy makers. Understanding how entrepreneurs internationalize and why entrepreneurs choose to start and grow their activities in a certain place is important since entrepreneurial activity, firm creation and clusters of innovative firms are associated with regional economic development, increased employment and wealth (Kolympiris, Kalaitzandonakes, & Miller 2015; Wright & Stigliani, 2013). Policy makers can better understand how to support and grow entrepreneurial ecosystems if they have insights into why ventures take certain key internationalization decisions.

This paper improves the latter understanding by showing how entrepreneurs differ greatly in their motives to enter a (home or host) ecosystem, their expectations of that ecosystem and how that ecosystem fits in a broader internationalization process. Policy makers of the home region need

to realize that international entrepreneurs have different views on how the home region fits in their internationalization process. Multi-ecosystem leveragers see it as one of their multiple ecosystems. Policy makers should try and understand what are the precise resources these multi-ecosystem leveragers value in the home ecosystem. They can try to strengthen these local resources, but can also map whether some other local resources can be elevated to bring more economic activity to the home ecosystem. On the other hand, ecosystem accelerators view the home ecosystem as their incubation region. We observe that, even after these ventures move abroad, they maintain a strong link with their home ecosystem and keep employing an important part of their employees there. As such, ecosystem accelerators can function as important developers of global pipelines between entrepreneurial ecosystems. They can transfer resources and knowledge from a possibly superior foreign ecosystem to the home entrepreneurial ecosystem which can then push the home ecosystem to higher levels (allowing the region to better support local ventures and perhaps even serve as a host region for foreign ones). Hence our study wants to convey the message to policy makers that reducing entrepreneurs' and ventures' mobility to the home region might not be beneficial for neither the growth of these ventures nor for the home region. Instead, the focus needs to be on how through internationalization, these entrepreneurs can open doors in other ecosystems and how policy makers can further facilitate the development of global pipelines between the ecosystems.

As for the policy makers of the host region, it is important to note that different types of international ventures have different needs: ecosystem grownups, for example, already have important contacts that can drive resource access and venture success, ecosystem accelerators have a tested business model which can help them to successfully enter the host ecosystem and scale up, while ecosystem adventurers seem to struggle a lot to get integrated in the ecosystem. Talented refugees coming from war zones most likely show many similarities with the ecosystem adventures as they are passionate to succeed but lack a network in the ecosystem. Connecting those nascent

entrepreneurs to ecosystem grownups or integrating them in the local network of incubation initiatives could stimulate venture successes. In addition, international education programs might be a powerful tool to attract talented and passionate entrepreneurs to the host region, and as such create a bigger and stronger pool of ecosystems grownups and multi-ecosystem leveragers that can potentially add significant value to the region.

Finally, we believe that our results also have implications for entrepreneurs. First, they need to realize that the location in which they found their venture is not necessarily the right one. Entrepreneurs are typically persons that question many things, however when we ask entrepreneurs to tell us why they set up their venture in the home ecosystem, they are generally surprised and do not know how to answer the question. While there are many things that you cannot control as an entrepreneur, the location can actually be a strategic choice that an entrepreneur can control. Our study identified the importance of having international experience for the development of international beliefs that drive the decisions of the actual internationalization process but also advanced key resources and capabilities that depend on the way entrepreneurs internationalize.

6. Limitations and suggestions for further research

As all empirical studies, our study has several limitations that provide opportunities for further research. First, it is clear that, like most qualitative case studies, our work provides insights that may not be generalizable to the total population of international ventures (cfr. Siggelkow, 2007). We studied 22 entrepreneurs and distinguished them into four different types. Future research should investigate whether other types exist. Preferably, such future studies should include entrepreneurs in sectors not limited to the digital industry. In fact, it would be good to investigate whether the mechanisms identified in digital ventures, which internationalize to access foreign ecosystem resources, are also present in ventures that internationalize in order to reach international

customers. The study by Tolstoy et al, xxxx, in the current special issue, which investigates how Swedish retail SMEs use e-commerce to attract customers in foreign markets, suggest that marketing and digital capabilities may be at least as important as international experience in determining this internationalization process. The paper by Fraccastoro, Gabrielsson, and Chetty (xxx) points to the importance of social media capabilities in this respect. Future research may want to investigate whether these marketing, digital, and social media capabilities are equally important for different types of international entrepreneurs and may want to distinguish between multi-ecosystem leveragers, ecosystem grownups, ecosystem accelerators, or ecosystem adventurers trying to reach international customers.

Moreover, it is important to note that we focused on Belgian entrepreneurs that internationalized early. Some of our findings might be limited to entrepreneurs raised and born in Belgium or to the specific ecosystems they entered. Future research should therefore investigate our research questions in other countries, regions, and ecosystems. Such studies may for example investigate the internationalization process of entrepreneurs born in transition economies (Bahl, Lahiri, and Mukherjee, xxxx) or developing countries (Aparicio, Audretsch, and Urbano, xxxx), and/or may try to understand how the process is affected by institutional characteristics of the home and/or the host country. Aparicio, Audretsch, and Urbano, (xxxx) , in the current special issue, investigate the role of institutional context for the prevalence of export-oriented entrepreneurship in a country. The work by Vanacker, Zahra, and Holmes Jr. (xxxx) shows that countries' formal institutions moderate the relationship between different types of corporate entrepreneurship and firm performance. Future research could build on their insights to investigate how different institutional characteristics affect the internationalization process of the multi-ecosystem leveragers, ecosystem grownups, ecosystem accelerators, and ecosystem adventurers identified in our study.

SecondThird, the intention of this qualitative study was to increase our understanding of *how* founders' backgrounds affect the way they internationalize. Although we obtain interesting insights in the implications of founders' background for their beliefs regarding the way in which the venture should internationalize in order to develop and grow. Our work does not intend nor allow us to draw conclusions regarding the effects of these processes on the actual performance of their international ventures. We hope that future quantitative, and preferably longitudinal studies will test the performance implications of founders' international experience, internationalization beliefs, and strategic decisions they take with respect to their ventures' internationalization process.

Finally, our sampling procedure and data collection focused on international experience and cognitive beliefs at the level of the individual founder, and related these to strategic decisions at the level of the venture. However, many ventures are founded by a team of individuals, something we did not take into account in this study. An interesting question then becomes how co-founders with different international experiences and cognitive beliefs interact in taking strategic decisions for their ventures. We hope that future qualitative and quantitative work will look into this interesting topic.

REFERENCES

- Acedo, F., & Jones, M. (2007). Speed of internationalization and entrepreneurial cognition: Insights and a comparison between international new ventures, exporters and domestic firms. *Journal of World Business*, 42(3): 236–252.
- Ahsan, M., Zheng, C., DeNoble, A., & Musteen, M. (2018). From Student to Entrepreneur: How Mentorships and Affect Influence Student Venture Launch. *Journal of Small Business Management*, 56(1), 76-102.
- Aspelund, A., Madsen, T., & Moen, O. (2007). A review of the foundation, international marketing strategies, and performance of international new ventures. *European Journal of Marketing*, 41(11/12): 1423–1448.

- Audretsch, D. B., Obschonka, M., Gosling, S. D., & Potter, J. (2017). A new perspective on entrepreneurial regions: linking cultural identity with latent and manifest entrepreneurship. *Small Business Economics*, 48(3), 681-697.
- Baron, J. N., Hannan, M. T., & Burton, M. D. 1999. Building the iron cage: Determinants of managerial intensity in the early years of organizations. *American Sociological Review*, 64: 527-547.
- Bathelt, H., Malmberg, A., & Maskell, P. (2004). Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, 28(1): 31-56.
- Beckman, C. M. (2006). The influence of founding team company affiliations on firm behavior. *Academy of Management Journal*, 49: 741-758.
- Beckman, C. M., & Burton, M. D. (2008). Founding the future: Path dependence in the evolution of top management teams from founding to IPO. *Organization science*, 19(1), 3-24.
- Bloodgood, J.M., Sapienza, H.J., & Almeida, J.G. (1996). The internationalization of new high-potential ventures: antecedents and outcomes. *Entrepreneurship Theory and Practice*, 20(4): 61-76.
- Boeker, W. (1988). Organizational Origins: Entrepreneurial and Environmental Imprinting at the Time of Founding in G. R. Carroll. *Ecological Models of Organizations*, p. 33-51 Cambridge, MA: Ballinger.
- Boeker, W. (1989a). Strategic change: The effects of founding and history. *Academy of Management Journal*, 32:489-515.
- Boeker, W. (1989b). The development and institutionalization of subunit power in organizations. *Administrative Science Quarterly*, 388-410.
- Brown, R., & Mason, C. (2017). Looking inside the spiky bits: a critical review and conceptualisation of entrepreneurial ecosystems. *Small Business Economics*, 49(1): 11-30.
- Bruneel, J., & De Cock, R. (2016). Entry mode research and SMEs: A review and future research agenda. *Journal of Small Business Management*, 54, 135-167.
- Bruns, K., Bosma, N., Sanders, M., & Schramm, M. (2017). Searching for the existence of entrepreneurial ecosystems: a regional cross-section growth regression approach. *Small Business Economics*, 49(1): 31-54.
- Bryant, P. (2007). Self-regulation and decision heuristics in entrepreneurial opportunity evaluation and exploitation. *Management Decision*, 45(4), 732-748.
- Bryant, P. T. (2014). Imprinting by design: The microfoundations of entrepreneurial adaptation. *Entrepreneurship Theory and Practice*, 38(5): 1081-1102.

- Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1): 3-16.
- Cohen, B. (2006). Sustainable valley entrepreneurial ecosystems. *Business Strategy and the Environment*, 15(1): 1-14.
- Coviello, N. (2015). Re-thinking research on born globals. *Journal of International Business Studies*, 46(1): 17-26.
- Coviello, N., & Munro, H. (1997). Network relationships and the internationalisation process of small software firms. *International Business Review*, 6(4): 361–372.
- Coviello, N., & Jones, M. (2004). Methodological issues in international entrepreneurship research. *Journal of Business Venturing*, 19: 485–508.
- Cuervo-Cazurra, A. (2006). Who cares about corruption? *Journal of International Business Studies*, 37: 807–822.
- Cusumano, M. A., & Gawer, A. (2002). The elements of platform leadership. *MIT Sloan Management Review*, 43(3): 51.
- Danneels, E. (2003). Tight–loose coupling with customers: the enactment of customer orientation. *Strategic Management Journal*, 24(6): 559-576.
- Danneels, E. (2007). The process of technological competence leveraging. *Strategic management journal*, 28(5), 511-533.
- Danneels, E. (2011). Trying to become a different type of company: Dynamic capability at Smith Corona. *Strategic Management Journal*, 32(1), 1-31.
- Dattée, B., Alexy, O., & Autio, E. (2018). Maneuvering in poor visibility: How firms play the ecosystem game when uncertainty is high. *Academy of Management Journal*, 61(2), 466-498.
- De Cock, R., Bruneel, J., & Bobelyn, A. (2019). Making the Lean Start-Up Method Work: The Role of Prior Market Knowledge. *Journal of Small Business Management*.
- De Waele, W., & De Cleyn, S. H. (2014). Belgium: building a digital Cluster of Innovation in the heart of Europe. *Global Clusters of Innovation: Entrepreneurial Engines of Economic Growth around the World*, 120-135.
- Denzau, A. T., & North, D. C. (1994). Shared mental models: ideologies and institutions. *Kyklos*, 47(1), 3-31.
- Efrat, K., & Shoham, A. (2012). Born global firms: The differences between their short- and long-term performance drivers. *Journal of World Business*, 47(4): 675–685.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4): 532-550.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 25-32.

Eurofound (2012). *Born global: The potential of job creation in new international businesses*. Luxembourg: Publications Office of the European Union.

Fauchart, E., & Gruber, M. 2011. Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of Management Journal*, 54: 935-957.

Fernhaber, S., McDougall, P., & Oviatt, B. (2007). Exploring the role of industry structure in new venture internationalization. *Entrepreneurship Theory and Practice*, 31(4): 517-542.

Freeman, S., Edwards, R., & Schroder, B. (2006). How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, 14(3): 33-63.

Fiske, S. T., & Taylor, S. E. (1991). Social cognition. 2. Aufl., New York, 253.

Gehman, J., V. L. Glaser, K. M. Eisenhardt, D. Gioia, A. Langley, and K. G. Corley (2018). "Finding Theory-Method Fit: A Comparison of Three Qualitative Approaches to Theory Building," *Journal of Management Inquiry* 27(3), 1-18.

Gruber, M. 2010. Exploring the origin of organizational paths: Empirical evidence from new founded firms. *Journal of Management*, 36:1143-1167.

Guerrero, M., Urbano, D., Fayolle, A., Klofsten, M., & Mian, S. (2016). Entrepreneurial universities: emerging models in the new social and economic landscape. *Small Business Economics*, 1-13.

Hewerdine, L., & Welch, C. (2013). Are international new ventures really new? A process study of organizational emergence and internationalization. *Journal of World Business*, 48(4): 466-477.

Hoang, H., & Gimeno, J. (2010). Becoming a founder: How founder role identity affects entrepreneurial transitions and persistence in founding. *Journal of Business Venturing*, 25(1), 41-53.

Isenberg, D. (2011). The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship. *Presentation at the Institute of International and European Affairs*.

Jandhyala, S. (2013). Property rights and international investment in information technology services. *Strategic Management Journal*, 34: 877-889.

Jones, M. V., & Coviello, N. E. (2005). Internationalisation: conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36(3), 284-303.

Keupp, M. M., & Gassmann, O. (2009). The past and the future of international entrepreneurship: a review and suggestions for developing the field. *Journal of Management*, 35(3): 600-633.

- Kimberly, J. R. 1979. Issues in the creation of organizations: Initiation, innovation and institutionalization. *Academy of Management Journal*, 22: 437-457.
- Kolympiris, C., Kalaitzandonakes, N., & Miller, D. (2015). Location choice of academic entrepreneurs: Evidence from the US biotechnology industry. *Journal of Business Venturing*, 30(2): 227-254.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124-141.
- Knight, G. A., & Liesch, P. W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51: 93–102.
- Kudina, A., Yip, G., & Barkema, H. (2008). Born global. *Business Strategy Review*, 19(Winter): 38–44.
- Levinthal, D.A. (2003). Imprinting and the evolution of firm capabilities. In C.E. Helfat (Ed.), *The SMS Blackwell handbook of organizational capabilities: Emergence, development, and change* (pp. 100–103). Malden, MA: Blackwell.
- Luostarinen, R., & Gabrielsson, M. (2006). Globalization and marketing strategies of born globals in SMOPECs. *Thunderbird International Business Review*, 48(6): 773–801.
- Madsen, T., & Servais, P. (1997). The internationalization of born globals: An evolutionary process. *International Business Review*, 6(6): 561–583.
- Mainela, T., Puhakka, V., & Servais, P. (2014) The Concept of International Opportunity in International Entrepreneurship: A Review and a Research Agenda. *International Journal of Management Reviews*, 16: 105–129.
- Maitland, E., & Sammartino, A. (2015). Managerial cognition and internationalization. *Journal of International Business Studies*, 46(7), 733-760.
- Mason, C., & Brown, R. (2014). Entrepreneurial ecosystems and growth oriented entrepreneurship. *Final Report to OECD, Paris*, 30(1): 77-102.
- Mathias, B. D., Williams, D. W., & Smith, A. R. (2015). Entrepreneurial inception: The role of imprinting in entrepreneurial action. *Journal of Business Venturing*, 30(1): 11-28.
- McDougall, P., Oviatt, B., & Shrader, R. (2003). A comparison of international and domestic new ventures. *Journal of International Entrepreneurship*, 1(1): 59–82.
- Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
- Miller, D. J., & Acs, Z. J. (2017). The campus as entrepreneurial ecosystem: the University of Chicago. *Small Business Economics*, 1-21.
- Mudambi, R., & Zahra, S. (2007). The survival of international new ventures. *Journal of International Business Studies*, 38: 333–352.

- Nadkarni, S., & Narayanan, V. K. (2007). Strategic schemas, strategic flexibility, and firm performance: The moderating role of industry clockspeed. *Strategic management journal*, 28(3), 243-270.
- Nadkarni, S., Herrmann, P., & Perez, P. D. (2011). Domestic mindsets and early international performance: The moderating effect of global industry conditions. *Strategic Management Journal*, 32(5), 510-531.
- Nambisan, S., & Baron, R. A. (2013). Entrepreneurship in innovation ecosystems: entrepreneurs' self-regulatory processes and their implications for new venture success. *Entrepreneurship Theory and Practice*, 37(5), 1071-1097.
- Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029-1055.
- Nelson, T. (2003). The persistence of founder influence: Management, ownership, and performance effects at initial public offering. *Strategic Management Journal*, 24(8): 707-724.
- Nummela, N., Saarenketo, S., & Loane, S. (2016). The dynamics of failure in international new ventures: A case study of Finnish and Irish software companies. *International Small Business Journal*, 34(1): 51-69.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 45-64.
- Oviatt, B., & McDougall, P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice*, 29(5): 537-554.
- Parker, S.C. (2006) Learning about the unknown: How fast do entrepreneurs adjust their beliefs?. *Journal of Business Venturing*, 21(1), 1-26.
- Pieper, T. M., Smith, A. D., Kudlats, J., & Astrachan, J. H. (2015). The persistence of multifamily firms: Founder imprinting, simple rules, and monitoring processes. *Entrepreneurship Theory and Practice*, 39(6): 1313-1337.
- Pierce, L. (2009). Big losses in ecosystem niches: How core firm decisions drive complementary product shakeouts. *Strategic Management Journal*, 30(3): 323-347.
- Pratt, M. G. (2009). From the editors: For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research, *Academy of Management Journal*, 52(5): 856-862.
- Reuber, A. R., & Fischer, E. (1997). The influence of the management team's international experience on the internationalization behavior of SMEs. *Journal of International Business Studies*, 28: 807-825.
- Roundy, P. T., & Roundy, P. T. (2017). "Small town" entrepreneurial ecosystems: Implications for developed and emerging economies. *Journal of Entrepreneurship in Emerging Economies*, 9(3), 238-262.

- Schwens, C., Zapkau, F. B., Bierwerth, M., Isidor, R., Knight, G., & Kabst, R. (2018). International entrepreneurship: a meta-analysis on the internationalization and performance relationship. *Entrepreneurship theory and practice*, 42(5), 734-768.
- Shepherd, D. A., McMullen, J. S., & Ocasio, W. (2017). Is that an opportunity? An attention model of top managers' opportunity beliefs for strategic action. *Strategic Management Journal*, 38(3), 626-644.
- Simsek, Z., Fox, B. C., & Heavey, C. (2015). "What's past is prologue" A framework, review, and future directions for organizational research on imprinting. *Journal of Management*, 41(1): 288-317.
- Sonenshein, S. (2014). How Organizations Foster the Creative Use of Resources, *Academy of Management Journal* 57(3), 814-848.
- Spigel, B. 2017. The relational organization of entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, 41(1): 49-72.
- Stinchcombe, A. L. 1965. Social structure and organizations. In J. G. March (Ed.), *Handbook of organization*: 142-193. Chicago: Rand-McNally.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.)*. Thousand Oaks, CA: Sage.
- Theodoraki, C., Meseghem, K., & Rice, M. P. (2017). A social capital approach to the development of sustainable entrepreneurial ecosystems: an explorative study. *Small Business Economics*, 1-18.
- Vaughan D. 1992. Theory elaboration: the heuristics of case analysis. In *What is a Case?*, Ragin CC, Becker HS (eds). Cambridge University Press: New York; 173-202.
- Weerawardena, J., Mort, G., Liesch, P., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42(3): 294-306.
- Welch, C., & Paavilainen-Mäntymäki, E. (2014). Putting process (back) in: Research on the internationalization process of the firm. *International Journal of Management Reviews*, 16: 2-23.
- Welch, D., Welch, L., Young, L., & Wilkinson, I. (1998). The importance of networks in export promotion: Policy issues. *Journal of International Marketing*, 6(4): 66-82.
- Wright, M., & Stigliani, I. 2013. Entrepreneurship and growth. *International Small Business Journal*, 31(1): 3-22.
- Yin, R. 1994. *Case study research: Design and methods*. Beverly Hills, CA: Sage publishing.
- Zahra, S. A. (1996). Technology strategy and new venture performance: a study of corporate-sponsored and independent biotechnology ventures. *Journal of Business Venturing*, 11(4): 289-321.

Zander, I., McDougall-Covin, P., & Rose, E. L. (2015). Born globals and international business: Evolution of a field of research. *Journal of International Business Studies*, 46(1): 27-35.

Zhang, C., Tan, J., & Tan, D. (2016). Fit by adaptation or fit by founding? A comparative study of existing and new entrepreneurial cohorts in China. *Strategic Management Journal*, 37(5): 911-931.

Table 1: Overview respondents

Nr	Respondent function	Company Name ²	# inter-views	Business description	Raised capital ³	Age ⁴	Locations	Types of international entrepreneur
1	Founding CEO	WIZARD	1	Online video/radio	2000	7	San Francisco/London/Paris/Brussels/Bucharest	Multi-ecosystem leverager
2	Founding CEO	SHARKPLAY	1	Online and mobile games	21000	8	San Francisco/London/Tromso/Beijing/Tokyo	Multi-ecosystem leverager
3	Founding CEO	CLARIFY	1	Storytelling online platforms	2023	6	San Francisco/New York/Toronto	Multi-ecosystem leverager
4	Founding CEO	WALKY	1	Customer relationship platforms	150	3	San Francisco/Barcelona/Lille	Multi-ecosystem leverager
5	Founder / VP bus. Dev.	NOMY	1	Online video/radio	6000	8	San Francisco/New York/Brussels /Chicago/Southlake/Westhills/Paris/Shiphol	Multi-ecosystem leverager
6	Founding CEO	LABS	1	Wearables	0	2	San Francisco	Ecosystem grownup
7	Founding CEO	SIMOLAR	1	Software for risk management	0	3	San Francisco	Ecosystem grownup
8	Founding CEO	FAVO	2	Simple mobile applications	0	1	Los Angeles, San Francisco	Ecosystem grownup
9	Founding CEO	READ	1	Web content visualization	6445	4	Los Angeles	Ecosystem grownup
10	Founder and COO	GIVES	2	Online social platform	0	4	San Francisco	Ecosystem grownup
11	Founder / VP EMEA	ZENTRACKING	1	Online video/radio	3300	5	Gent / San Francisco /New York/Helsinki	Ecosystem accelerator
12	Founder and CTO	DATAGROW	1	Data storage/ cloud software	43500	7	San Francisco/Gent	Ecosystem accelerator
13	Founder and VP N-America	SHOWTIME	1	Customer relationship platforms	10500	4	San Francisco/Gent /London	Ecosystem accelerator
14	Founding CEO	VERTIGO	1	E-health and Mobile health	0	8	San Francisco/Diepenbeek /Wanssum	Ecosystem accelerator
15	Founding CEO	CENTRALPARK	1	Customer relationship platforms	17600	4	San Francisco/Hasselt (BE)	Ecosystem accelerator
16	Founding CEO	DATY	1	Web content visualization	0	2	San Francisco/ Antwerp	Ecosystem accelerator
17	Founding CEO	LUV	1	E-health and Mobile health	1800	7	San Francisco/Leuven /Gent	Ecosystem accelerator
18	Founding CEO	UPTOWN	1	Payment software solutions	540	2	San Francisco	Ecosystem adventurer
19	Founding CEO	LAVIA	1	Safety software solutions	0	3	San Francisco/Gent	Ecosystem adventurer
20	Founding CEO	STORY	1	Social website	0	2	San Francisco	Ecosystem adventurer
21	Founding CEO	CHECKING	1	HR web tools	0	8	San Francisco	Ecosystem adventurer
22	Founding CEO	BACKING	1	Simple mobile applications	3900	4	San Francisco	Ecosystem adventurer

² The names of the companies are anonymized

³ In thousand EUR, by the time of the interviews

⁴ Venture age in years, at the time of the interviews

Table 2: Typology of entrepreneurs and ecosystem strategies

		Multi-ecosystem leveragers	Ecosystem grownups	Ecosystem accelerators	Ecosystem adventurers
Founder imprints	International Experience	Strong international experience, networks all around the world	Strong international experience in one host ecosystem – weak connection with the home ecosystem	Strong experience in the home ecosystem – weak connection with the host ecosystem	Limited experience and network in the host ecosystem
	International Beliefs	Believe that the world consists of many ecosystems all having own specific competences and resources that can fit the development of the venture	Believe that the ecosystem in which you have deep roots (in this case the host ecosystem) will be best suited to drive entrepreneurial success	Believe that some ecosystems are useful to develop and test ideas, while others are better suited to scale up	Believe that one particular ecosystem has all it takes to support the success and develop of their venture
Strategic decisions with respect to internationalization process (imprinted processes)	Location Decisions	Start-up in different ecosystems simultaneously	Locate in the ecosystem where you have deep roots (in this case the host ecosystem)	Start lean in the home ecosystem, find a business model that works in the home ecosystem, and scale up in another ecosystem	Move to where “it” happens (whatever “it” may be), and give yourself a fixed period of time in which to succeed
	Organizational Design	Founding team is split between home and host ecosystem	Founding team is active in the host ecosystem	Founders travel and move a lot between ecosystems	Founding team is active in the host ecosystem
	Key resources and capabilities	An ability to quickly identify new trends and opportunities An aggressive internationalization strategy	A strong network in the host ecosystem	A proven business model ready to scale	A strong passion to make it work