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The Internationalization of Global Start-Ups: Understanding the Role of Serial Entrepreneurs^o

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Abstract

Using qualitative methodology, we aim to understand how serial entrepreneurs can foster the development of born-global ventures. We consider a born-global start-up as the final stage of the learning process for a serial entrepreneur, advancing propositions regarding the importance of prior entrepreneurial experience – in terms of knowledge acquisition, identification and exploitation of opportunities, social networks development – for born-global venture creation and growth. We verify that the serial entrepreneur’s previous entrepreneurial experiences could substitute for the lack of knowledge, opportunity recognition and social networks of a born-global start-up. Thus, we recognize the necessity of a shift in the unit of analysis, from born-global start-up to a global serial entrepreneur. Moreover, we suggest to follow a dynamic approach when the born-global start-up issue is discussed since we expect that the entrepreneur’s learning process evolves over time in relation to their quality of previous experiences.

Keywords: born-global, international new ventures, entrepreneurship, serial entrepreneur, internationalization, social network, entrepreneurial experience, opportunity identification, opportunity exploration, longitudinal case study.

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RESEARCH PROBLEM

During the last decade, a new type of firm has emerged in a lot of different countries – Born Globals (BGs) aka International New Ventures (INVs) or Global Start-Up – which have an international focus right from the start (Rialp, Rialp & Knight, 2005; Jones & Coviello, 2005; Hordes, Clancy & Baddaley, 1995). While this business model has been increasingly attracting the attention of international business researchers, the lack of a clear conceptualization of BGs makes it difficult to perform valid comparative empirical research.

In this paper, we use an international entrepreneurship (IE) approach to analyze the phenomenon of born global firms (Acs, Dana & Jones, 2003), according to the idea that entrepreneurship exercises a positive influence on the growth and performance of an international new firm (McDougall & Oviatt, 2000). The importance of adopting an entrepreneurship perspective of analysis can be explained by the difficulty of researchers to explain the born global phenomenon by using traditional approaches (Coviello & Jones, 2004; Zahra & George, 2002). In fact, different from traditional theories, the learning processes of a born global start-up seems to be less incremental and time dependent (Weerawardena, Mort, Liesch & Knight, 2007) or strongly correlated with the individual learning process of its entrepreneur (Autio, Sapienza & Almeida, 2000). While entrepreneurial behaviour seems to be the common denominator of born global research, the individual entrepreneur has not been studied in depth in this literature (Andersson & Evangelista, 2006).

In this paper, we focus on the concept of a serial entrepreneur – an important type of repeat entrepreneur – in order to explain the phenomenon of born global start-up. Based on qualitative methodology, we strive to understand how serial entrepreneurs foster (or perhaps impede) born-global venture creation and development, that is “...the discovery, enactment, evaluation and exploitation of opportunities across national borders...” (Oviatt & McDougall, 2005). We consider a born global start-up as the final stage of the learning process of a serial

entrepreneur, advancing propositions regarding the importance of prior entrepreneurial experience – in terms of knowledge acquisition, identification and exploitation of opportunities, social networks development – for born-global venture creation and growth.

THEORETICAL FRAMEWORK

International Entrepreneurship Approach to Born Global Phenomenon: A Focus on Individual Entrepreneur

During the last decade in large as well as small countries, a new type of firm - Born Globals (BGs) or International New Ventures (INVs) - has emerged versus the traditional view of internationalization focused on multinational companies (Jolly, Alahuhta & Jeannet, 1992; Madsen & Servais, 1997). An international new venture was originally defined as a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries (Oviatt & McDougall, 1993). More recently, Knight and Cavusgil (2005) have furnished a similar definition of BG as “business organization that, from or near their founding, seeks superior international business performance from the application of knowledge-based resources to the sale of outputs in multiple countries”. The speed of the internationalization process in BG start-ups contrasts with the so-called stages theory of internationalization (Johanson & Vahlne, 1977, 1990; Cavusgil, 1980; Reid, 1981) which explains the foreign development as a gradual process strongly influenced by resources and knowledge accumulation (Forsgren, 2002: 261). Hence, in analysing the BG start-up phenomenon, scholars’ attention started to focus on the start-up’s learning processes, suggesting that they could be less incremental and time dependent or, alternatively, strongly influenced by the prior personal experiences of their entrepreneurs (Autio et al., 2000). This meant to highlight the importance of both entrepreneurial learning and opportunity exploration in reinforcing market knowledge acquisition of a new venture.

Among different approaches to the BG phenomenon, in this paper we follow the international entrepreneurship (IE) theory as suggested by several researchers which assert that entrepreneurship has a positive influence on the development and growth of an international new firm (McDougall & Oviatt, 2000; Acs, Dana & Jones, 2003). In fact, more than early internationalization is the entrepreneurial activity of the firm that matters (Zahra, 2005). According to McDougall and Oviatt (2000), International Entrepreneurship may be defined as “...a combination of innovative, proactive and risk-seeking behaviour that crosses national borders and is intended to create value in organizations”. Despite entrepreneurial behaviour is the common denominator of the entrepreneurial approach to BG start-ups, we agree that the individual entrepreneur is not studied in depth (Andersson & Evangelista, 2006).

Based on these considerations, in this research, we concentrate on the figure of the entrepreneur in discussing the development of a BG start-up. Specifically, we consider a BG start-up as the final stage of the learning process of a serial entrepreneur as a specific kind of repeat entrepreneur. The idea is that the lack of knowledge, resources and competencies that a start-up needs inside international markets may be filled by the process of learning of its serial entrepreneur, acquired during previous work experiences. Unfortunately, the role that prior entrepreneurial experience could play in new venture early internationalization has been neglected by scholars (McGaughey, 2007), suggesting the necessity to adopt a longitudinal approach.

Our focus on a serial entrepreneur is justified by evidence showing that entrepreneurship is not always a one time action (Westhead & Wright, 1998) but it could also consist in different processes of business creation by a serial entrepreneur. In this vision, the success and failure of a firm does not represent the success and failure of its entrepreneur (Sarasvathy & Menon, 2003), since new ventures independently by their success or failure represent always a successful instrument of learning (Westhead, Ucbasaran, Wright & Binks, 2005).

The concept of repeat entrepreneur was first introduced by Ronstadt in 1982, who advanced the idea of “habitual founders” who start several businesses before launching a successful business. Hall (1995) distinguishes habitual entrepreneurs in “serial”, who own one business after another, but effectively only own one business at a time, and “portfolio” or “parallel”, who own more than one business at a time. This classification of different types of entrepreneurs is based on the assumption, common to every process of categorization, that these classes have important performance implications (Westhead and Wright, 1998). In fact, studies on repeat entrepreneurs have focused their attention trying to establish the existence of a positive relationship between entrepreneurs’ prior experiences and new ventures’ performance. These studies have attempted to identify what might be the advantages of a repeat entrepreneur over the novice: creation of an effective network useful to quickly and better identify and exploit opportunities (McGrath & MacMillan, 2000), easier access to financial resources and the possibility to hire skilled labour (Hellman & Puri, 2002). However, the results about the possibility of repeat entrepreneurs to produce superior performance contradict each other (Starr & Baygrave, 1991). Moreover, there has been a lack of consideration about the possibility that past entrepreneurial experience may not always be relevant since the experience may be difficult to exploit in new settings (Rerup, 2005).

Recently, Rerup (2005) expressed a more critical view about the relevance of the experience accumulated by repeat entrepreneurs, suggesting that a past experience may not be always useful since what really matters is the type of accumulated experiences (Wright, Robbie and Ennew, 1997). Thus, several researchers suggest a more fine grained view of accumulated experience because “the value of prior experience depends less on its similarity to current activity than it does on the dimensions of similarity” (Rerup, 2005: 452). We agree with Westhead et al.’s work (2005) to concentrate on “quality” more than “quantity” of

accumulated experience in analysing the potential advantages of a serial entrepreneur during the launch and development of a BG start-up.

RESEARCH METHODOLOGY

In analysing the phenomenon of a BG start-up, we suggest a shift in the unit of analysis, from BG start-up to a global serial entrepreneur. The idea is that the lack of a successful organizational learning process within international markets by a BG start-up does not prevent this from occurring individually by a serial entrepreneur. In particular, we focus on a serial entrepreneur (Fabrizio Capobianco) in two different moments of his potential life, before and after BG development (Funambol). It allows us to perform an exploratory longitudinal case study, together with the idea that the learning process of an entrepreneur consists in a dynamic and evolutionary path over time. Among different potential advantages tied to prior entrepreneurial experience that is useful to a BG start-up, we concentrate on the role of knowledge acquisition, social networks and opportunity discovery. The research objective is to investigate the research's problem with one serial entrepreneur and, based on the findings, to develop a potential interpretative framework and pertinent assertions to test in other entrepreneurial contexts, using a mix of quantitative and qualitative evidence.

We propose that a single exploratory case study is the appropriate design (Yin, 1989; Eisenhardt, 1989), since we ask a "how" question about a contemporary set of events over which we have little control. Moreover, Funambol represents in the Italian context a critical case of a start-up which in less than two years from its formation, it has assumed an international organizational structure, establishing its headquarters in Silicon Valley but leaving its R&D centre in Italy. In fact, this firm is often considered a BG start-up. Finally, Funambol is involved in markets – high-tech – that have a global structure.

In order to assure the validity and reliability of data, we took several precautions. First, we used a protocol prior to working on the case which was a very useful guide in carrying out the case study. Then, we used multiple sources of evidence, creating a case study database, to form the foundation of our empirical research. Data collection involved two main sources: semi-structured interviews and archival documents and records, with multiple sources used to enable triangulation of data which contributes to a comprehensive and accurate view of the examined problem. Specifically, in considering the Funambol context, we interviewed not only the serial entrepreneur (Capobianco) but also people working in Funambol. We conducted 16 open-ended and semi-structured interviews at the executive (7 interviews) and operational (9 interviews) levels involved in different corporate functions (Finance, Operations, Sales, Marketing, Product Management and Engineering). The interviews focused on different topics such as the history and growth of the firm, its success factors, anecdotes on the firm's development and especially the competencies of its entrepreneur. Detailed notes were taken and the transcription of the abstract of each interview was sent back to the respondents a few days after meeting. While the interviews are the essential source of this case study, we know that they should be considered verbal reports only (Yin, 1989) and thus subject to the common problems of bias and poor recall. Thus, we supplemented the information collected through interviews using different kinds of documents and archives which furnishes precise, quantitative and broad information. We also had the opportunity to visit the case study site many times, both in Italy and in the USA, to provide additional significant information about the topic.

To analyse Capobianco and his learning process before Funambol, we had the chance to interview him many times during a five year timeframe. These personal interviews – conducted in a semi-structured form – have been very useful, especially to obtain the information about the previous work experiences of Capobianco but also to complete the

analysis of the Funambol reality. Additional information was collected through regular email exchange and phone calls with Capobianco. During our collection of data, we always tried to maintain a chain of evidence useful to follow the derivation of evidence from initial research problem to case study conclusions.

ENTREPRENEURIAL EXPERIENCE OF CAPOBIANCO BEFORE FUNAMBOL

Capobianco was a twenty-four year old PhD student in computer science, at the University of Pavia, developing a thesis on usability. In 1994, he founded his first start-up, Internet Graffiti. This first entrepreneurial adventure of Capobianco is developed within the Artificial Vision Lab of the University of Pavia. Together with Capobianco, with a share of 40%, there are two other founders: an engineer who was a full time researcher at the University of Pavia, known by Capobianco during his doctoral program, and an university classmate of Capobianco. Capobianco was the CTO of the company and performed software development. The first co-founder helped develop the business idea and had significant competence mainly in design activity, while the other co-founder, despite his technical background, was in charge of sales and business development, leveraging his personal networks. The relationship with the University's lab was very useful in sustaining this first start-up. The company employed just one employee, who was an engineer who graduated in the Artificial Vision Lab under the tutelage of Capobianco.

Internet Graffiti was a pioneering company. It was the first Italian company to offer web design services, with a high and significant rate of innovation and growth. Despite this innovation, the firm quickly ran into financial problems. The start-up needed additional financial resources beyond the owners' means. However, this was difficult to achieve because of the domestic focus adopted by the firm since its inception. Capobianco's plan to search for

external financing was not shared by the researcher who considered the firm a part-time activity, who preferred a prudent approach to pursuing strategic financing.

These problems led Capobianco to create another entrepreneurial project in 1998, Stigma Online – an intranet portal aimed at managing company information and documents – with a greater potential for growth and a different managerial approach. Capobianco learned from his prior Internet Graffiti experience that an innovative business idea is not enough to build a successful company; adequate financing was also required. In 1996, Capobianco left Internet Graffiti to establish this firm. It was partially owned by Stigma srl, a firm that produced integration systems, who held 51% of the firm's ownership. Capobianco met the CEO of Stigma during a workshop organized by the University of Pavia. During this meeting, Capobianco declined employment by the Stigma CEO and counter-proposed that they start a joint venture. Stigma represented an interesting business partner, as it could add capital and access to customers, helping the new company ramp up quickly in a high growth market. The other two founders of Stigma Online were the student already employed at Internet Graffiti, and a friend of Capobianco, known during their college years. The latter had graduated in business administration and worked as business consultant. He possessed managerial and financial expertise that complemented Capobianco's technical acumen. These two partners were selected by Capobianco for a high level of mutual trust. In comparison with Internet Graffiti, that did not survive its early stage, Stigma Online became a medium sized company with 30 full-time employees and total revenue of about 3 millions euros. This firm was able to acquire important customers (large Italian companies such as Rai – Italian Broadcasting Television, Borsa Italiana – Italian Stock Exchange, Universities, subsidiaries of multinational companies such as Novartis and Kraft) and partner with multinational companies such as Sun and Silicon Graphics. While the experience in Internet Graffiti was useful for Capobianco to experiment with a business application of his technical expertise,

Stigma Online represented the ideal environment to improve his commercial skills. Capobianco had the chance to meet large firms and to develop significant business relationships. At the same time, at Stigma, he learned to manage a medium sized team of people with high technical competence and to deal with highly complex technical problems. However, Capobianco soon started to think that Stigma Online could not exploit its potential by maintaining a domestic focus. He made a business trip to Silicon Valley with the goal to expand the market of Stigma Online to the U.S. Capobianco had the chance to get to know Silicon Valley during his in 1995, while he was an invited scientist to HP Labs. He prepared a business plan that aimed to raise venture capital and to expand the business to the U.S. His goal was to transform the firm into a multinational and to move the headquarters to California. However, Stigma considered the plan to be too risky. Thus, Capobianco decided to leave the firm in the Autumn of 1999, when Stigma had reached its peak of revenue and market position. He sold his interest in Stigma and moved his family to California, where he was attracted by the Internet phenomenon. His entrepreneurial experience in Stigma Online can be considered to be successful, as he improved his business development and management skills. When he arrived in the U.S. in 1999, he did not have a green card and was not allowed to start a new venture. Thus, he started working as an employee of Tibco, a company on the NASDAQ exchange. At Tibco, Capobianco played different roles. After a merger with Reuters, Capobianco had worldwide responsibility for pre-sales, integration and support of Reuters Mercury, a leading platform for online trading. During his three years of experience at Tibco/Reuters, he had the chance to learn new skills and improve existing ones. Tibco was the ideal environment to experience the management challenges of a firm operating in foreign markets and the technical problems in managing and developing a global product. There, he furthered his technical and organizational background, as well as improved his marketing and sales expertise. During these years, he established several personal and

business relationships that proved to be very useful to raise capital and find employees for his next venture.

THE BG START-UP: THE FUNAMBOL CASE

The idea to start Funambol took form in Capobianco's mind in 2001. The pre-start-up phase is carried out by phone and email together with a group of friends and colleagues. In 2002, Capobianco received a green card and decided to leave Reuters and to return to Italy to create Funambol. The idea behind it was to combine "U.S. capital with Italian brains" (www.1generation.net/user/131). His plan was to develop a product concept in Italy and afterward to return to the U.S. to get funding. In Italy, thanks to the personal and work relationships that he created during his prior entrepreneurial experience, he was able to rapidly put together a technical team and to develop a proof of concept at low cost. Initially, the Funambol business idea consisted of developing synchronization software for a wireless environment. Since the inception, the founders decided to adopt a global approach to the market, developing a product for international customers. The definition of the business idea involved a small group of people, known in the previous entrepreneurial experience. Together with Capobianco, the team consisted of an engineer, who was a former employee of Stigma Online, and the friend and business consultant, who was already a partner in Stigma Online. The first contributed to the definition of the technical aspects of the product, supporting the open source orientation of Funambol. In particular, the computer science engineer brought his prior experience as the project manager for Sync4j open source project. The Sync4j project was the de-facto standard SyncML mobile application development platform, allowing wireless developers to build applications based on a "sometimes-connected paradigm" (Onetti and Capobianco, 2005). The second co-founder of Funambol contributed to the strategic and financial business validation. The first steps of Funambol were financed by the personal

means of the three founders (for two of them, this was made possible by their exit from Stigma Online). Funambol was founded initially with one hundred thousand euros. Capobianco learned from prior experience about the importance of fundraising to sustain the business's growth. Since the beginning, he leveraged relationships that he established in California. In particular, two colleagues from Tibco were intrigued by the business idea and by Capobianco's skills. They backed the new venture as angel investors, investing two hundred thousand dollars in the form of convertible loans. Moreover, Capobianco was able to raise three hundred thousand more euros in Italy by a venture capital firm, the Golden Mouse, managed by Value Partner. In 2004, Capobianco used this money to open an office in Pavia and to hire the first two employees. Pavia was chosen as a location because this was the venue of the two previous business ventures. The founders' personal networks were geographically centred around this place. Moreover, it is a town with a well known and a high quality Engineering University and – according to the founders' vision – this could help in recruiting technical people as company growth required increasing its technical staff. Capobianco and his co-founders were convinced of the high quality of Italian engineers. This characteristic, in association with a low turnover (high company loyalty) and competitive wage costs, made Italy a good choice to locate R&D and engineering activities in the software business.

As noted, Capobianco knew the importance of fundraising to sustain the company. Thanks to the Californian business angels and other business relationships that he established in his stay in California, he got in touch with U.S. venture capital firms. Despite the rational supporting the decision to locate the start-up in Italy, Italy represented a “non-standard” situation for U.S. venture capital firms. Venture capitalists typically prefer standard and non complex business entities because it reduces the time spent (and associated costs) in due diligence. With this perspective, Italy was not considered as an ideal environment to start a new venture, particularly in high tech, where Italy's reputation was not very strong. California, compared to

Italy, could offer good access to venture capital, particularly for high tech start-ups. Thus, in 2004, Capobianco decided to move to Silicon Valley where he founded Funambol, Inc. to which he transferred the Italian company's ownership. This decision, in Capobianco's mind, enabled Funambol to raise U.S. capital as it eliminated the objection of U.S. venture capitalists to invest in foreign start-ups while still allowing product development to remain in Italy. This decision was not limited to just obtaining financial support. In his prior experience in Silicon Valley, Capobianco learned the importance of the start-up location to improve the business idea. Capobianco understood that developing a high tech product in proximity with potential customers, partners and competitors can accelerate start-up growth. Given Silicon Valley's central role in the high tech and software industry, the decision to locate the company there represented was important both from a technology and sales point of view.

The experience accumulated by his previous stay in the Bay Area reduced the knowledge barriers normally associated with a decision to localize abroad. Capobianco already knew the U.S. business environment and the process employed by U.S. venture capitalists. He accepted the requirements proposed by the venture capitalists, who requested an expansion of the management team, not as a way to gain control of Funambol but as a means to grow the company and help him learn. In the U.S., Funambol completed a Series A financing, raising five million dollars from Walden International and H.I.G. Ventures. Venture capitalists urged Capobianco to enlarge the management team through the hiring of three senior vice presidents for sales, marketing and product management. The funding enabled Funambol to quickly grow. The company grew from 10 employees to currently over 50 employees worldwide, and to make important organizational changes. The engineering team was strengthened and the marketing and sales activities became more organized. At the end of 2006, Funambol completed a second round of financing with an additional five million dollars.

Venture capital represented not only an opportunity to grow but to modify the business focus as well. The opportunity to learn and exploit new opportunities was evident with the decision to enter the market for mobile push email. Funambol offers a leading open source implementation of SyncML, which transforms ordinary cell phones into powerful mobile email devices. For companies that provide push email, the main issue is device compatibility, since the service has to work with thousands of cell phone models. Funambol addresses the problem of the proliferation of devices using an open software platform in which users and developers can build device “synclets” and add them into a pool so that all users can benefit (www.funambol.com). This business very soon became the core focus. Venture capital sustained the inaugural launch of the mobile email solution and also brought a stronger formalization of the functions for strategic planning, reporting and budgeting.

Between 2005 and 2006, most of sales were realized in the U.S. Three customers contributed 60% to 80% of the total sales of Funambol. The rest of revenue was realized with about 20 customers from around the world. Today, the Italian branch of Funambol does not represent an obstacle in the process of fundraising. Conversely, it is a differentiating factor as Funambol is regarded as a blueprint of a U.S. firm with R&D in Italy, whose quality together with competitive cost savings is now appreciated. In 2007, Capobianco was recognized as a top “40 under 40” leader by American Venture Magazine. He writes a blog that was voted among the 20 best in the wireless industry by FierceWireless.

DISCUSSION OF FINDINGS

Several theoretical and empirical researchers consider entrepreneurship as a process of learning (Minniti & Bygrave, 2001; Cope, 2005), showing that entrepreneurs who have been involved in previous entrepreneurial experiences are normally able to manage in a more successful way a new start-up (Politis, 2005). Past experience is a general definition used to

illustrate different kinds of experience (Rerup, 2005), since repeat entrepreneurs can accumulate industry and technology experience, accumulate more financing and better credit, and acquire problem-solving capabilities (Starr & Bygrave, 1991). Finally, prior entrepreneurial experience contributes to increase the reputation and the legitimacy (McGaughey, 2007) of an entrepreneur, with positive effects on resources and market access.

While previous experience is considered a useful instrument for entrepreneurial learning, we suggest to analyse more deeply how serial entrepreneurs learn from these experiences, both positively and negatively (Sullivan, 2000). In particular, using a serial entrepreneur as our unit of analysis, we develop propositions concerning the importance of past entrepreneurial experience – in terms of identification/exploitation of opportunities, acquisition of knowledge and entrepreneurial social networks development – during the creation and development of a BG start-up. In fact, knowledge and social networks are considered the main factors influencing the process of opportunity identification and exploitation (Ardichvili et al., 2003) which at the same time are strongly interrelated with prior entrepreneurial experience. In other words, the accumulated entrepreneurial experience allows entrepreneurs to accumulate knowledge, develop relationships and discover new opportunities useful to accelerate learning processes and not limiting them to the already experienced ones: “... the decision to start the first business moves the entrepreneur down a venture corridor which leads to additional knowledge, access to information, extended network and attractive new business opportunities which would not have been perceived, offered and actionable without the initiation of the first venture” (Starr & Bygrave, 1991: 218).

This is consistent with our idea to consider that the lack of international experience of a BG start-up may be partially filled by the prior learning experience of its entrepreneur and to study BG start-up creation as the final stage of a serial entrepreneur’s learning process.

Past experience and opportunity identification and exploitation

The literature considers that the ability to discover and develop business opportunities is the most important ability of a successful entrepreneur (Shane & Venkataraman, 2000; McGrath & MacMillan, 2000). In fact, a prior entrepreneurial experience increases the probability of exploitation of entrepreneurial opportunities since learning enhances the entrepreneur's ability to effectively recognize and act on entrepreneurial opportunities (Ucbasaran et al., 2003). In particular, studies consider the importance of possessing prior information to identify an opportunity which furnishes the cognitive properties to value it (Ardichivili et al., 2003). The possession of prior information useful to identify an opportunity has to do with an individual's total stock of information – defined as entrepreneurial cognition – that influences the ability to recognize particular opportunities (Mitchell et al., 2002).

According to these considerations, we consider serial entrepreneurs ability to process new information more effectively than inexperienced individuals, becoming more creative and innovative, in relation to identification/exploitation of opportunities. In fact, we argue that a previous experience provides entrepreneurs the opportunity to manage information in a more significant way so as to increase their ability to cope with the risk of new conditions, and thereby provide them with the ability to enter into new markets, products, or technologies with greater success (McGrath, 1999). Capobianco recognized the importance to possess this entrepreneurial cognition which has been strongly delineated by his previous personal working experience. Thus, the development of mental schemas and simulation during his different work experiences was very important to his personal growth. By leveraging these mental schemas and simulations, Capobianco was able to develop distinct information processing skills and capacities useful to uncover opportunities, identifying new means-ends relationships in response to a particular situation. His mental schemas – which can be considered as a form of entrepreneurial alertness – represent a specific personal understanding

of how the external world works which involves heightened sensitivity to market disequilibrium signals. At the same time, his mental simulation is judged by Capobianco as distinctive features of opportunity finders which allow him to develop a deep and real reflection over past and future events. Indeed, both mental schemas and mental simulation are considered by Capobianco as the critical factors to encourage him to spend a lot of time on the analysis of different sources of information and finally on risk evaluation.

With this regard, we may conclude that the experience of Capobianco is very interesting. In fact, while literature considers that serial entrepreneurs tend to focus on achieving a particular goal and to exhibit attitudes and behaviours associated with reducing uncertainty (Wright et al., 1997), in some aspects, Capobianco shows a different approach. While during the first stage of a start-up, he tends to focus on reaching a particular goal, during the following steps, he prefers to redefine his goals, progressing from specific to more general and difficult ones. He approaches different entrepreneurial experiences in a dynamic way, with the aim to always discover new and more complex entrepreneurial opportunities. He is not interested in reducing the uncertainty, but he prefers always to search for different sources of information which are enriched by new instruments, technologies and relationships. He recognizes how previous experience has been useful to gain access to a wider range of “shadow options” and to opportunities that have not been recognized, since learning is also able to reduce the costs related to this endeavour. Funambol can be considered as the start-up where Capobianco is able to pursue only the very best opportunities, permitting the sorts of associations and linkages that may have never been considered before. Due to his previous experience, his personal creativity and trust allow him to have Funambol address risky new market opportunities in a more innovative way. Moreover his experience led him to develop knowledge of the patterns of business opportunities and technology cycles, and how to best take advantage of them. Thus, we formulate the first proposition of research:

Proposition 1: The accumulated experience allows a serial entrepreneur of a BG start-up to identify and exploit new opportunities in a more creative, risky and innovative way.

In the previous research assertion, we suggested that past entrepreneurial experience can be an advantage during the process of opportunity identification and development by an entrepreneur. In the second assertion, we advance the idea that this entrepreneurial experience is particularly significant to the identification and development of global opportunities if an entrepreneur had already acquired foreign market knowledge. In the literature on international entrepreneurship, foreign market knowledge has been considered a prerequisite for successful internationalization (Knight & Cavusgil, 2005; Eriksson et al., 1997; Zhou, 2007) and in particular for early internationalization. In fact, foreign market knowledge, which may be obtained by both prior management and entrepreneurial experience, increases the ability of a serial entrepreneur to identify and develop opportunities across borders. Thus, at the same time literature suggests that novice entrepreneurs are slow and need advice to recognize opportunities and their commercial attractiveness, since they haven't accumulated a significant level of knowledge compared to repeat entrepreneurs (Mosey & Wright, 2007). It could be a critical point especially when a novice entrepreneur aims to manage a BG start-up, since a new international venture requires significant levels of complex knowledge of foreign markets.

Our case shows that from the beginning Capobianco tends to acquire knowledge by direct experience and observation inside foreign markets. The accumulation of foreign market knowledge started during his visit in the PhD program in Silicon Valley. It was reinforced by lengthy and worthwhile knowledge exchanges with suppliers and customers that were part of his businesses. Finally, it was further formed during his employment experience at Reuters.

He recognized that, as a general rule, his prior experience has been necessary to acquire foreign knowledge useful to learn the expertise necessary to manage a BG start-up such as Funambol. In particular, he considered that for the acquisition of foreign knowledge, his experience in Reuters had a relevant and significant importance. In fact, by basing this on a direct observation of the most important market for innovative activity (Silicon Valley), he had the possibility to improve both his management and organizational expertise that helped him learn the difference between a small domestic firm and a multinational-global venture. Moreover, he gained significant knowledge of mechanisms necessary to acquire credibility inside Silicon Valley, developing important social relationships with local venture capitalists in addition to employees, customers and suppliers.

Proposition 2. The serial entrepreneurs who have previously gained foreign market knowledge are more likely to identify, explore and develop opportunities across borders.

Among the entrepreneurial past experiences influencing the exploration and identification of opportunities as well as the strategic choices made in subsequent ventures, prior success and failure play an important role (Rerup, 2005; Starr & Bygrave, 1991). Usually, prior failure increases the disregard for old patterns and the exploration and search for new innovative entrepreneurial opportunities. Thus, prior failure is considered a pre-requisite to learning: “the more failed entrepreneurs who come back to try again, the more robust the entrepreneurial knowledge base will be come in the industry” (Hine & Kapeleris: 32).

Our case suggests that failure and success of prior ventures are too general categories of past experience. As we have previously suggested, the success or failure of the entrepreneurial experience is not related to the success and failure of the firm. The entrepreneur can perceive success or failure of his entrepreneurial experience with respect to a particular opportunity he

desired to pursue, but this does not necessarily coincide with the success or failure of the venture. Thus, we advance the idea that more than the success and failure of prior ventures, it is necessary to consider the role of the success and the failure of internationalization's processes conducted in prior ventures with respect to the identification and development of across border opportunities.

Capobianco in his second venture experience tried to internationalize the firm without success. While it was an occasion to establish business relationships with international customers, Stigma Online internationalization was a failure. The business plan to expand Stigma Online activities abroad was rejected by the company's partners. Capobianco was prevented from even starting the internationalization of Stigma Online. Despite the domestic success of Stigma Online, the impossibility to pursue internationalization was Capobianco's main reason to leave this venture. The difficulty met by Capobianco in starting a process of internationalization was a reason to pursue it in the subsequent venture, Funambol, since its beginning. The internationalization of Funambol does not appear as a second order decision following the decision to start the venture, as suggested by Shane, Kolvereid and Westhead (1991) but a priority. With the failure of Stigma Online internationalization Capobianco realized his need to accumulate marketing experience in an international environment, which he satisfied by moving his family to Silicon Valley and accepting employment at Reuters/Tibco. This evidence confirms the importance of management experience as suggested by several empirical studies (Taylor, 1999), while at the same time shows as if there is a "path", it is not identifiable in the successful experiences but in failures. Capobianco tended to not choose actions that replicate or are related to the ones that he has already successfully taken, but rather the ones that target the gaps he recognized.

Proposition 3. *Serial entrepreneurs who experienced failure in prior international venture are more likely to search for global opportunities during the launch and development of a new venture.*

Past experience and social network development

There is a long history of research on networks in BG theory literature. As recently suggested by Sharma and Blomstermo (2003: 750) “the internationalization process of born global is a matter of learning through networks”. In particular, all studies about entrepreneurial networks and BG start-ups say that network ties of a start-up exist on the interpersonal level of social contacts directly developed by its entrepreneur (Gartner, Carter, 2003). In fact, entrepreneurs and their networks are inseparable at the start-up (Zhao & Aram, 1995): as the start-ups grow, the entrepreneurs’ personal networks and start-up networks merge (Johannisson, 2000; Lechner et al., 2006). When these entrepreneurs’ relationships contribute to their entrepreneurial goals, these social contacts are their social capital (Burt, 1992).

At a general level, researchers sustain the idea that previous entrepreneurial experience tends to enlarge the set of social networks useful for the start-up’s foreign growth as well as to increase their heterogeneity (Mosey and Wright, 2007). In fact, repeat entrepreneurs have normally already developed and managed many successful relationships which may be useful to the launch of a new business idea within international markets. In other words, since the entrepreneurial process inside the foreign markets tends to develop within a web of social relationships that are able to facilitate it (Granovetter, 1985), repeat entrepreneurs are in a privileged position to launch a BG start-up in comparison with novice ones since they can leverage their personal consolidated social networks.

These considerations find strong empirical support from the analysis of our case. In fact, the prior work experience of Capobianco in this regard is very significant, reinforcing the

importance of networks established during previous work experiences to accelerate the development of a BG start-up – Funambol. In fact, as previously specified, the original work network of Funambol consisted of five ex-employees of Capobianco in Stigma Online and three colleagues known during his work experience at Reuters/Tibco. Moreover, two previous partners in Stigma Online – the computer engineer and consultant – were selected by Capobianco to launch the Funambol start-up. Actually, a deep examination of all previous entrepreneurial experiences of Capobianco allows us to verify that this serial entrepreneur has always selected the business partners inside his consolidated network of relationships, developed during personal or work situations. In fact, he recognizes the possibility to leverage his personal consolidated social capital during all entrepreneurial experiences and that it was able to provide resources, emotional support, information and credibility in a rapid and simple way (Yli-Renko et al., 2001; Birley & Westhead, 1994). Moreover, in relation to the Funambol experience, he recognizes also that his personal consolidated social capital has been useful to reduce the liabilities of newness and size which normally characterise a BG start-up. In summary, since the BG start-up's development is contingent on the nature and structure of the social relationships directly developed by its entrepreneur, a serial entrepreneur can strongly accelerate the growth of a BG start-up by directly exploiting his personal and ample consolidated network of social capital. Therefore we posit the following proposition of research:

Proposition 4a: Serial entrepreneurs may simply leverage a broader set of social personal relationships to develop a BG start-up.

Moreover, this case shows that personal social networks developed by the entrepreneur during his previous work experience assure the level of trust, confidence, stability and respect

between partners which are important factors to guarantee the quality of entrepreneurial activity of a BG start-up. All these factors characterize the strong ties of social capital which form a bonding exclusive glue that hold closely knit business partners together (Davidsson & Honig, 2003). Mosey and Wright (2007) sustain that it is not just the different degree of strength of the social networks to differ between repeat and novice entrepreneurs but there is a different capability to use their personal ties to gain resources and knowledge. In fact, serial entrepreneurs have normally increased, during previous work experiences, the level of experience, reputation and credibility useful to obtain from their social capital the resources necessary to develop a BG start-up. It is coherent with the social capital theory which refers to the ability of entrepreneurs to extract benefits from their social structures, networks and membership (Lin et al., 2001). In particular, since reputation and credibility are pre-conditions for economic exchange, the presence of a serial entrepreneur has important reputational and signalling effects for the development of new social networks necessary to sustain the growth of a BG start-up (Stuart et al., 1999; Lechner et al., 2006). Thus, by using the reputational effect associated with experience gained during previous work environments, a serial entrepreneur should also encounter much less difficulty to expand their social networks, forming new social ties useful to reinforce the start-up's for foreign development (Lee et al., 2001). The primary position inside the network of relationships of a serial entrepreneur, which is guaranteed by the accumulated experience and reputation, allow him to rapidly reduce the path to access to external knowledge and resources of other partners useful to foreign growth (Burt, 1992; Hansen, 1995). It means that the social capital of a serial entrepreneur can be an useful resource for a BG start-up since it allows them to bridge new external social networks to provide necessary entrepreneurial resources (Putnam, 2000; Adler & Known, 2002). These new networks – which enlarge and reinforce the value of strong social ties developed during previous entrepreneurial and work experiences – are defined in

literature as “weak ties” (Aldrich, 1999; McKelvey, 2004). From an entrepreneurial perspective, weak ties facilitate the discovery of new opportunities of growth abroad, by providing and diffusing critical information about innovation, the availability and structures of markets, products and services (Shane & Venkataraman, 2000). Based on these considerations, we assert:

Proposition 4b. Serial entrepreneurs are better able to gain resources from their personal strong social networks of social capital and to expand them with new weak ties which are useful to support the early internationalization of their new ventures

Focusing on personal entrepreneurs’ networks, social capital literature has concentrated on differences between entrepreneurial strong and weak ties for the start-up’s development inside foreign markets (Ardichivili et al., 2003). In fact, while social strong ties are important for the launch of a BG start-up and for reaching initial milestones (Proposition 1), they may be insufficient to sustain subsequent development of a BG start-up (Johannison, 2000). In this regard, structural hole theory (Burt, 1992) stressed the benefits of brokerage opportunities guaranteed by the development of weak ties for accelerating the BG start-up’s growth (Gargiulo & Benassi, 2000; Uzzi, 1997). In fact, the lack of structural holes in the network of an entrepreneur not only reduces the diversity of resources accessible but also the actor’s autonomy to develop new useful relations (Cooper, 2002). Empirical research has verified that social over-embeddedness caused by too much strong ties among business leads to a growth barrier (Uzzi, 1997) for a BG start-up, reducing its innovation ability and the adoption of new ideas and solutions with negative consequences on the start-up’s foreign development (Sharma & Blomstermo, 2003). Consequently, a serial entrepreneur should be able to create

an equal mix between weak and strong ties, according to specific needs which its BG start-up faces during growth (Fleming et al., 2007).

The case illustrated in this paper seems to confirm these considerations. In fact, while it is strongly evident that Capobianco has always leveraged his strong personal ties during the growth of his entrepreneurial activity, at the same time, the case of Funambol shows also the importance to find and develop new weak professional relationships. In particular, Funambol is a classic example of a BG start-up where Capobianco selects as partners among previous strong personal relationships, only the actors able to share a “global business idea” with him from the beginning. Previously, both in Internet Graffiti and Stigma Online, we can verify that Capobianco has already preferred to follow a great business idea also without the support of his network of strong relationships of social capital. Thus, the possibility to leverage a network of established strong ties has been used in a successful way by Capobianco, without creating inertia to change imposed by the dynamic nature of different businesses created over time which could require the development of new weak ties. In other words, in this case of a serial entrepreneur, it did not verify the traditional problem that overembeddedness normally caused – as previously illustrated – by the exclusive development of too strong entrepreneurial ties (Gittelman & Kogut, 2003).

In particular, evidence show that Capobianco prefers to merge professional and personal criteria in selecting his partners or employees useful to Funambol's growth. Consequently, he had no problem to create new weak ties, exploiting the associated brokerage advantages. In particular, the new developed weak ties by Capobianco offered significant opportunities to access useful sources of knowledge and information that enabled him to overcome the challenges of resource availability which is typical for a BG start-up (Hargadon & Sutton, 2000; Hite, 1999). In fact, Funambol growth seems to be strongly correlated to the ability to bridge diverse sets of knowledge and to realise new innovative options and ideas. However, at

the same time, he confirmed that “to support a BG start-up it is critical to select the people who is your friend for many years...since the business and market context may rapidly change, the possibility to leverage a strong, durable and reliable relationship becomes the critical support to manage a global business idea...”. It means that strong ties of social capital remains a significant resource for BG development (Lin et al., 2001; Ebers, 1999). In fact, they encourage the development of trust and cognitive identification among business partners which reduces the risk of opportunism, simplifying the entrepreneurial drive for global growth (Kogut, 2000). Based on these considerations, we formulate the last assertion of research:

Proposition 4c: A serial entrepreneur of a BG start-up is more able to realize an equal mix between strong and weak social relationships networks.

Conclusions

MacMillan (1986: 241) argued that to “really learn about entrepreneurship ...we have to study habitual entrepreneurs”. We believe a similar approach has to be adopted if we want to improve our understanding of international entrepreneurship, since the role that repeat entrepreneurship could play in accelerated internationalization is a serious omission in international new venture literature (McGaughery, 2007: 308). This study represents an attempt to fill this gap, adopting a longitudinal approach. We treat the BG start-up phenomenon as the final result of a learning process occurring at the level of a serial entrepreneur moving through subsequent new ventures both as an entrepreneur and an employee.

The findings we present have important implications for research in international entrepreneurship because we originally studied the individual entrepreneur in depth,

advancing preliminary assertions regarding the importance of prior entrepreneurial experience – in terms of identification and exploitation of opportunities, knowledge acquisition and social network development – for BG venture creation and growth. Our main research objective was to investigate the research’s problem using one serial entrepreneur and, based on the findings, to develop a potential interpretative framework and pertinent assertions to test in several entrepreneurial contexts.

We verify that the lack of sustaining prior international experience by this kind of start-up doesn’t exclude that this process of learning may occur at the individual – entrepreneurial – level. In other words, the serial entrepreneur’s previous entrepreneurial experience could substitute for the lack of knowledge, opportunity recognition and social networks of a BG start-up. Consequently, we suggest to follow a dynamic approach when the BG start-up issue is discussed since we expect that the entrepreneur’s learning process evolves over time in relation to the quality of previous experience. In particular, while previous experience is considered a useful asset to entrepreneurial learning, we suggest to analyse more deeply how serial entrepreneurs learn from these experiences, both positive and negative ones. Consistent with those scholars who suggested to look at quality more than quantity of past experience, this study suggests the importance of considering the failure or success of prior business internationalization experience. Thus, we recognize the necessity of a shift in the unit of analysis, from BG start-up to global serial entrepreneur.

At the same time, this study contributes to the studies on repeat entrepreneurs overcoming the “traits approach”. With this regard, placing a serial entrepreneur as our unit of analysis, we discuss some critical elements – entrepreneurial knowledge, opportunity recognition and social networks which have been normally used in literature to distinguish a serial/portfolio entrepreneur from a novice entrepreneur. While repeat entrepreneurship assumes that it is

learning by doing that matters, the assertions we make relative to social network emphasize that past experience can increase the ability to learn by leveraging external relationships.

The main limitations of this study are that it is performed on a single case of a serial entrepreneur. Consequently, the first logical extension of our research would be to test for the stability of both the results and the interpretative framework by repeating the same analysis using other empirical contexts of analysis. Especially interesting would be an examination of the learning process of a serial entrepreneur when his BG start-up involves other sectors or countries. Another possible extension could consist in an adequate comparison of the learning entrepreneurial process among novice, serial and portfolio entrepreneurs who founded a BG start-up in order to delineate potential differences and similarities. Moreover, we didn't consider that previous significant management experience could be useful to acquire knowledge or develop networks and expertise useful to manage a BG start-up. Thus, we expect that other studies could compare our research with the findings gained on a longitudinal analysis focused on a manager with a lot of previous experience both inside domestic and foreign markets. Finally, we do not find negative consequences of prior experience, as suggested by some scholars (Rerup, 2005; Starr & Bygrave, 1991).

We suppose that all of these potential extensions of our work can be performed using a quantitative methodology of study where the analysis of several factors associated with a serial entrepreneur (i.e. previous working experience, background and so forth) are related to the performance of their start-ups, especially in the case of BG start-ups.

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