

Conceptualizing Innovation in Born-Global Firms

Erik Zijdemans and Stoyan Tanev

“It has been said that arguing against globalization is like arguing against the laws of gravity.”

Kofi Annan
Diplomat and Nobel Laureate

This article summarizes the insights from a systematic study of the research literature focusing on the innovation aspects of born global firms – ventures that were launched to exploit a global niche from the earliest days of their operations. The authors provide a snapshot of opinions on the different aspects of innovation in the way they were conceptualized in the academic literature. The insights are based on a selection of 32 peer-reviewed journal articles addressing the different challenges associated with early internationalization and innovation in such ventures. The article emphasizes that the early internationalization of new ventures should be considered as an innovation process in itself and that innovation and internationalization have a positive effect on each other. In addition, it points out the role of knowledge acquisition and networking capabilities as key innovation enablers and refers to the emergence of the lean startup perspective on the innovation processes in born global firms. The suggested insights will be relevant to researchers and practitioners interested in the relationship between early internationalization and innovation in international new ventures and lean global startups.

Introduction

According to Knight and Cavusgil (2004), the early internationalization of a firm and its potential success in a foreign market are functions of its internal capabilities. The superior ability of certain firms to sustain innovation leads to new knowledge creation, which enables the development of organizational capabilities that result in superior performance, particularly in highly competitive environments. On the other hand, innovation results from various sources, such as internal R&D and imitation of the innovations of other firms. R&D in particular supports the opening of new markets and the re-invention of firm's operations in a way that enables the firm to better serve those new markets. The innovativeness of such firms includes the masterful leveraging of knowledge and organizational capabilities despite scarce financial, human, and tangible resources. Knight and Cavusgil (2004) provide evidence that born-global firms are inherently entrepreneurial and innovative firms, displaying a specific pattern of knowledge and capability management that engenders early internationalization and sustainable, superior performance in foreign markets.

In what follows, we will focus on the different aspects of innovation in the way it was conceptualized within the context of international new ventures and born-global firms. We used the Web of Knowledge academic research database to identify 32 peer-reviewed journal articles in the fields of business and management that discuss the challenges associated with early internationalization and innovation in such firms. The articles were selected by looking simultaneously for two keywords: “born-global firm” and “innovation”. The underlying assumption is that the distinctive characteristics of such firms affect the way innovation is being conceptualized within their specific context. We start with the realization that the act of internationalization, and especially early internationalization, is an innovative act in itself. The next point focuses on the interrelation between internationalization and other types of innovation where particular attention is paid to the innovativeness of firms as a prerequisite for their commitment to a born-global way of internationalization. The next step in the discussion emphasizes the importance of two key innovation resources for born-global firms: knowledge and networking capabilities. Finally, we refer to the lean startup approach as one of the ways

Conceptualizing Innovation in Born-Global Firms

Erik Zijdemans and Stoyan Tanev

that could accelerate the early internationalization of startups.

Internationalization as an Innovative Act

While a large number of researchers have shown interest in the innovativeness of born-global firms or international new ventures, Jones and Coviello (2005) suggest that even the establishment of an existing business mode in a country new to the firm is a clear evidence for the existence of special innovative capabilities. Born-global firms are particularly innovative in this regard (Knight & Cavusgil, 2004). The early internationalization is stimulated by a strong innovation culture and interest to pursue international markets.

According to Afuah (2003), an innovation could be classified as incremental or radical depending on the extent to which it impacts a firm's capabilities. This is usually referred to as the organizational view of classifying innovations. In this view, an innovation is said to be radical if the knowledge required to exploit it is very different from knowledge that is available within the firm. In incremental innovations the knowledge required to develop a product builds on existing knowledge. Jones and Coviello (2005) suggest that internationalization as an innovative process can be also characterized as either radical or incremental depending on the geographic and cultural proximity to the domestic market. Internationalization as an incremental innovation is defined as the expansion to neighbouring countries or markets with only slight differences, which is in line with the traditional Uppsala model (Johanson & Vahlne, 1977), where firms acquire market knowledge of the domestic market before gradually moving to foreign markets that are culturally or geographically close. Internationalization as a radical innovation is defined as expansion to markets that are significantly different from the domestic market in regards to cultural and geographic qualities. According to this analogy, the internationalization of born-global firms is a radical innovation.

Innovation as a Result or as a Stimulus of Internationalization

Although numerous researchers suggest a close relationship between innovativeness and internationalization, a debate exists as to which is the cause and which is the effect. For example, Ramos Acedo, and Gonzalez (2011) suggest that the tendency to export is positively influenced by technical innovation. This is also acknow-

ledged by Baronchelli and Cassia (2014), who describe that investments in product innovation accelerate the internationalization process of born-global firms. According to them, born-global firms have a higher level of innovativeness and innovation skills that they use to compete successfully, which in turn allows them to be more successful in penetrating new markets. The result is higher foreign sales relative to total revenues when the company commercializes an innovative product abroad. Knight and Cavusgil (2004) and Ramos and colleagues (2011) agree that innovative firms internationalize more rapidly as compared to other companies. In other words, the innovation culture of an organization and its proclivity to pursue international markets influence its internationalization speed.

On the other hand, there are scholars who view a firm's innovativeness as one of the outcomes of early internationalization. In other words, innovativeness, knowledge, and capabilities that increase the new venture's probability for growth and for success in foreign markets are gained through the process of internationalization. Hessels and Van Stel (2011) suggest that exporting new ventures develop completely new human capital and innovation management skills through the export activities themselves. Therefore, exporting new ventures will have a better chance of pursuing new market opportunities and commercializing new ideas. Such firms will be even more conducive to innovation as compared to the majority of domestically operating new ventures.

It seems that the polarity of the two different streams might be smoothed out if one goes beyond the classical way of seeing entrepreneurship as a rational, strategic process where opportunities are discovered through a well-planned search process. Many researchers started seeing entrepreneurship as a process of effectuation instead (Sarasvathy, 2001). Effectuation means that entrepreneurs start with a generalized idea and then attempt to work towards that idea using the resources they have at their immediate disposal. The strategy of a new firm is not clearly envisioned at the beginning, and the entrepreneurs and firms that use an effectuation processes can to a large extent remain flexible, take advantage of new ideas and opportunities as they arise, and constantly be learning (Perry et al., 2012). Under such circumstances, we can see the processes of innovation and internationalization as closely interlinked, and the search for an explicit causal relationship becomes irrelevant.

Conceptualizing Innovation in Born-Global Firms

Erik Zijdemans and Stoyan Tanev

The Role of Innovation in the Emergence of a Born-Global Firm

Innovation plays a significant role in the emergence of the born-global firm. Laanti and colleagues (2007) even suggest that the main innovation is often developed prior to the establishment of such companies and is the reason why they were established in the first place. After the foundation of the company, innovation will keep playing a central role, regardless of the nature of the industry in which the firm competes. The presence of born-global firms in different industry sectors, high tech, low tech, or non tech, suggests that they must be innovative in all areas of value creation, both technological and non-technological (Weerawardena et al., 2007).

The early internationalization of born-global firms affects their innovativeness in terms of the emergence and implementation of their specific marketing strategies (Hallback & Gabrielsson, 2013). It is crucial that the firm is able to innovate, adapt, or reinvent its marketing strategies to suit the local markets, so that they can compete against incumbents in multiple foreign countries. According to Kocak and Cavusgil (2009), the firm's competitive advantage in the foreign market is maintained with the use of specific isolation mechanisms. An isolation mechanism is a way for a firm to isolate itself from competitors on one or more levels. One of the ways to build an isolation mechanism is innovation. In turn, knowledge acquisition and networking capabilities are essential in acquiring competitive advantage through innovation.

Knowledge as a Key Innovation Resource

Both Tolstoy (2009) and Prashantham and Young (2011) agree that innovative behaviour is driven by knowledge combination, an approach that is supported by entrepreneurship theory and practice. Entrepreneurship theory builds on the idea that different individuals know different things, which makes the combination of knowledge essential for opening up new opportunities. Especially the combination of market knowledge and technological knowledge is important to firms in achieving innovation and competitive advantage (Prashantham & Young, 2011). Therefore, top management has a key role in providing opportunities for employees from different functions and different departments (and sometimes even from other companies) to share and combine knowledge, for example through the reinforcement of organizational cohesiveness and collective goals.

The knowledge-based view regards knowledge as the most important resource and firms as superior to individuals in creating knowledge (Tolstoy, 2009). Knowledge creation can be either gradual or radical depending on its degree of impact on a firm's capabilities. Presutti, Boari, and Fratocchi (2007) suggest that the knowledge acquired from foreign business relationships positively influences foreign development of high-tech startups. The knowledge acquired through the network ties emerging between a globally present high-tech startup and its primary foreign customers can be exploited for both economic and innovative outcomes. In this way, knowledge acquisition from foreign customers is an important mechanism for the innovative effort of high-tech startups aiming to engage in collaborative R&D activities abroad.

The Innovative Role of Networking Capabilities

It was already pointed out that the acquisition and management of knowledge is frequently identified as an important antecedent of innovation. On the other hand, knowledge-development capabilities are directly related to the capacity of the firm to apprehend and use the relation among different informational factors to achieve their intended goals (Autio et al., 2000). According to Mort and Weerawardena (2006), the innovativeness of born-global firms is, among other things, expressed in their ability to develop networking capabilities in order to overcome their scarce tangible resources. One could argue, therefore, that the innovative behaviour of international entrepreneurial firms is stimulated by the degree of their engagement in networks (Tolstoy, 2009). There is a dialectical relation between networks and innovation, where network structure is shaped by innovations while the network structure contributes to firms' ability to innovate (Tolstoy, 2010).

Scholars agree that the emergence of born-global firms is not limited to the technology domain. Technology-driven born globals, however, manifest a stronger tendency towards the formation of open innovation networks. Blomqvist and colleagues (2008) explain that fast technological change and the need to innovate under limited resources and time pressure shape the type and the nature of the international networks born-global firms form or access. Under these circumstances, networks with hierarchies are not efficient enough, which often forces the firms to engage in open innovation initiatives and networked R&D activities catering to more flexibility, fast access to information, and high responsiveness. Capron and Mitchell (2010) elaborate on the lo-

Conceptualizing Innovation in Born-Global Firms

Erik Zijdemans and Stoyan Tanev

gic of collaborating with other firms to acquire new resources and capabilities on the level of, for example, R&D. They argue that, once a firm decides to go for an external collaboration, the selection of the specific co-operation format should depend on the nature of the resource gap and that the choice should be made between a purchasing contract, alliance, or acquisition depending on the relevance of the resources, agreement on resource's value, and the desired closeness to the resource provider.

The Lean Startup Approach to the Management of Innovation

The lean startup approach (Blank, 2013) emphasizes the need for quick and responsive product development with a focus on customer feedback. The promoters of this approach propose the deployment of a minimum viable product to the market as early as possible in order to minimize the exposure of the startup to uncertainty (Moogk, 2012). The adoption of this approach is quite natural for the uncertain environment of technology-driven born-global firms. In fact, it was already suggested that one should introduce the concept of lean global startup as a way of emphasizing the impossibility for new technology startups to deal separately with business development, innovation, and early internationalization (Lemmingier et al., 2014). In other words, for a newly established technology firm, the task of being global and innovative at the same time should be seen as one process.

The lean startup approach correlates with other frameworks emphasizing the emergent nature of the business environment of technology-based startups. For example, Onetti and colleagues (2012) introduced a business model framework for technology startups by emphasizing the link between entrepreneurship, innovation, and internationalization. The framework defines the business model as the way a company structures its own activities in determining the focus, the locus, and the modus of its business, whereby the "focus" of the business refers to the activities providing the basis for the articulation of a specific value proposition (i.e., the set of activities on which the company's efforts are concentrated); the "locus" refers to the location or locations across which the firms resources or value-adding activities are spread (i.e., local vs. foreign-based activities, inward-outward relationships with space, entry modes, local embeddedness, etc.); and the "modus" refers to the specific business approach with regards to the internal organization and the network design (i.e.,

insourcing and outsourcing of activities along social and inter-organizational ties, inward-outward relationships with other players, strategic alliances, etc.). This business model framework is probably the only one to accommodate the global allocation of resources and the emergence of global technology markets as an explicit part of the business model. Onetti's approach also emphasizes that the value proposition and the revenue model should be considered independently of the specific business activities because the value proposition and the revenue model belong predominantly to the strategic rather than to the operational level. Such focus on the relative independence of the value proposition could be considered as correlative to the focus on the emergent aspects of the business model in the lean startup approach where the emphasis is on the specific business activities helping the emergence of a specific value proposition and not on the business operationalization of a predefined value proposition.

After taking into account Onetti's approach to business model development of technology startups, one could argue that, in addition to the focus on the development of a minimum viable product, firms should focus on the clear articulation of the locus, focus, and modus of their businesses. The development of the minimum viable product and the modus of the startup could be regarded as key drivers of early internationalization when they push startups to find sourcing partners internationally for the required components, processes, or services that are not within the focus of the startup itself. Born-global firms make continuous innovation possible by linking these external value-creating actors to the internal processes of the firm in innovative ways (Bailetti, 2012). The adoption of the lean approach by technology startups influences the way the company manages its innovation processes (Tanev, 2012). The lean startup approach (Blank, 2013) significantly shortens the technology development cycle and time to market as well as lowers the risk of getting the product wrong. At the same time, it should be pointed out that companies should manage the competitive risks that could be associated with going to market with a product that is only "half-baked".

Conclusion

The main goal of this article was to elaborate on the understanding of innovation in born-global firms in the way it is articulated in academic research journals. The literature on born-global firms is consistent in its conclusion that studying the sources of innovativeness

Conceptualizing Innovation in Born-Global Firms

Erik Zijdemans and Stoyan Tanev

of these companies is very important for other firms willing to engage into a “born-global journey”. Although the topic of innovativeness has been touched on by many different authors in the literature focusing on born-global firms, it has not been addressed in an explicit and contextual way. This article offers a first step in this direction in the anticipation of future studies that could offer a more comprehensive analytical approach.

About the Authors

Erik Alexander Zijdemans is a Master’s degree candidate in Product Development and Innovation with a focus on Global Supply Chain Development at the University of Southern Denmark in Odense. Additionally, he holds a BEng in Business Engineering from Hogeschool Utrecht, The Netherlands. He has over two years of working experience in project management and employee safety management. Currently, he is conducting his research at Carleton University in Ottawa, Canada, focusing on the role of business development agencies in the support of early globalization in technology startups.

Stoyan Tanev is an Associate Professor in the Department of Technology and Innovation and member of the Centre for Integrative Innovation Management at the University of Southern Denmark, Odense, Denmark, as well as Adjunct Professor in the Department of Systems and Computer Engineering at Carleton University in Ottawa, Canada, where he was previously a faculty member in the Technology Innovation Management Program. He has a MSc and a PhD in Physics jointly from the University Pierre and Marie Curie, Paris, France and the University of Sofia, Bulgaria, a PhD in Theology from the University of Sofia, Bulgaria, an MEng in Technology Innovation Management from Carleton University, Canada, and an MA from the University of Sherbrooke, Canada. He has multidisciplinary research interests with a focus on the fields of technology innovation management, global technology entrepreneurship, business model design and value co-creation. Dr. Tanev is Senior IEEE member, and he is a member of the editorial boards of the *Technology Innovation Management Review* and the *International Journal of Actor-Network Theory and Technological Innovation*.

References

- Afuah, A. 2003. *Innovation Management: Strategies, Implementation and Profits*. Oxford: Oxford University Press.
- Autio, E., Sapienza, H. J., & Almeida, J. G. 2000. Effects of Age at Entry, Knowledge Intensity, and Imitability on International Growth. *Academy of Management Journal*, 43(5): 909-924. <http://dx.doi.org/10.2307/1556419>
- Bailetti, T. 2012. What Technology Startups Must Get Right to Globalize Early and Rapidly. *Technology Innovation Management Review*, 2(10): 5-16. <http://timreview.ca/article/614>
- Baronchelli, G., & Cassia, F. 2014. Exploring the Antecedents of Born-Global Companies' International Development. *International Entrepreneurship and Management Journal*, 10(1): 67-79. <http://dx.doi.org/10.1007/s11365-011-0197-9>
- Blank, S. 2013. Why the Lean Start-up Changes Everything. *Harvard Business Review*, 91(5): 63-72.
- Blomqvist, K., Hurmelinna-Laukkanen, P., Nummela, N., & Saarenketo, S. 2008. The Role of Trust and Contracts in the Internationalization of Technology-Intensive Born Globals. *Journal of Engineering and Technology Management*, 25(1-2): 123-135. <http://dx.doi.org/10.1016/j.jengtecman.2008.01.006>
- Capron, L., & Mitchell, W. 2010. Finding the Right Path. *Harvard Business Review*, 88(7-8): 102-107.
- Dimitratos, P., Voudouris, I., Plakoyiannaki, E., & Nakos, G. 2012. International Entrepreneurial Culture: Toward a Comprehensive Opportunity-Based Operationalization of International Entrepreneurship. *International Business Review*, 21(4): 708-721. <http://dx.doi.org/10.1016/j.ibusrev.2011.08.001>
- Hallback, J., & Gabrielsson, P. 2013. Entrepreneurial Marketing Strategies During the Growth of International New Ventures Originating in Small and Open Economies. *International Business Review*, 22(6): 1008-1020. <http://dx.doi.org/10.1016/j.ibusrev.2013.02.006>
- Hessels, J., & van Stel, A. 2011. Entrepreneurship, Export Orientation, and Economic Growth. *Small Business Economics*, 37(2): 255-268. <http://dx.doi.org/10.1007/s11187-009-9233-3>
- Johanson, J., & Vahlne, J.-E. 1990. The Mechanism of Internationalisation. *International Marketing Review*, 7(4): 11-24. <http://dx.doi.org/10.1108/02651339010137414>
- 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. <http://dx.doi.org/10.1057/palgrave.jibs.8400138>
- Knight, G. A., & Cavusgil, S. T. 2004. Innovation, Organizational capabilities, and the Born-Global Firm. *Journal of International Business Studies*, 35(2): 124-141. <http://dx.doi.org/10.1057/palgrave.jibs.8400071>
- Kocak, A., & Abimbola, T. 2009. The Effects of Entrepreneurial Marketing on Born Global Performance. *International Marketing Review*, 26(4-5): 439-452. <http://dx.doi.org/10.1108/02651330910971977>

Conceptualizing Innovation in Born-Global Firms

Erik Zijdemans and Stoyan Tanev

- Laanti, R., Gabriellson, M., & Gabriellson, P. 2007. The Globalization Strategies of Business-to-Business Born Global Firms in the Wireless Technology Industry. *Industrial Marketing Management*, 36(8): 1104-1117.
<http://dx.doi.org/10.1016/j.indmarman.2006.10.003>
- Lemminge, R. S. L., Zijdemans, E., Rasmussen, E., & Tanev, S. 2014. Lean and Global Technology Start-ups: Linking the Two Research Streams. Paper to be presented at the ISPIM Americas Innovation Forum 2014, Montreal, Canada.
- Moogk, D. R. 2012. Minimum Viable Product and the Importance of Experimentation in Technology Startups. *Technology Innovation Management Review*, 2(3): 23-26.
<http://timreview.ca/article/535>
- Mort, G. S., & Weerawardena, J. 2006. Networking Capability and International Entrepreneurship: How Networks Function in Australian Born Global Firms. *International Marketing Review*, 23(5): 549-572.
<http://dx.doi.org/10.1108/0265133061703445>
- Onetti, A., Zucchella, A., Jones, M. V., & McDougall-Covin, P. P. 2012. Internationalization, Innovation and Entrepreneurship: Business Models for New Technology-Based Firms. *Journal of Management & Governance*, 16(3): 337-368.
<http://dx.doi.org/10.1007/s10997-010-9154-1>
- Perry, J. T., Chandler, G. N., & Markova, G. 2012. Entrepreneurial Effectuation: A Review and Suggestions for Future Research. *Entrepreneurship Theory and Practice*, 36(4): 837-861.
<http://dx.doi.org/10.1111/j.1540-6520.2010.00435.x>
- Prashantham, S., & Young, S. 2011. Post-Entry Speed of International New Ventures. *Entrepreneurship Theory and Practice*, 35(2): 275-292.
<http://dx.doi.org/10.1111/j.1540-6520.2009.00360.x>
- Presutti, M., Boari, C., & Fratocchi, L. 2007. Knowledge Acquisition and the Foreign Development of High-Tech Start-ups: A Social Capital Approach. *International Business Review*, 16(1): 23-46.
<http://dx.doi.org/10.1016/j.ibusrev.2006.12.004>
- Ramos, E., Acedo, F. J., & Gonzalez, M. R. 2011. Internationalisation Speed and Technological Patterns: A Panel Data Study on Spanish SMEs. *Technovation*, 31(10-11): 560-572.
<http://dx.doi.org/10.1016/j.technovation.2011.06.008>
- Sarasvathy, S. D. 2001. Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26(2): 243-263.
<http://dx.doi.org/10.2307/259121>
- Tanev, S. 2012. Global from the Start: The Characteristics of Born-Global Firms in the Technology Sector. *Technology Innovation Management Review*, 2(3): 5-8.
<http://timreview.ca/article/532>
- Tolstoy, D. 2009. Knowledge Combination and Knowledge Creation in a Foreign-Market Network. *Journal of Small Business Management*, 47(2): 202-220.
<http://dx.doi.org/10.1111/j.1540-627X.2009.00268.x>
- Tolstoy, D., & Agndal, H. 2010. Network Resource Combinations in the International Venturing of Small Biotech Firms. *Technovation*, 30(1): 24-36.
<http://dx.doi.org/10.1016/j.technovation.2009.06.004>
- Weerawardena, J., Mort, G. S., Liesch, P. W., & Knight, G. 2007. Conceptualizing Accelerated Internationalization in the Born Global Firm: A Dynamic Capabilities Perspective. *Journal of World Business*, 42(3): 294-306.
<http://dx.doi.org/10.1016/j.jwb.2007.04.004>
- Zhou, L. X., & Wu, A. Q. 2014. Earliness of Internationalization and Performance Outcomes: Exploring the Moderating Effects of Venture Age and International Commitment. *Journal of World Business*, 49(1): 132-142.
<http://dx.doi.org/10.1016/j.jwb.2013.10.001>

Citation: Zijdemans, E., & Tanev, S. 2014. Conceptualizing Innovation in Born-Global Firms. *Technology Innovation Management Review*, 4(9): 5-10. <http://timreview.ca/article/826>



Keywords: innovation management, early internationalization, born global, lean startup approach, business model