

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

“We developed a platform solution. This means that we can work in many different areas where we can use the same platform. Whether it is diabetes, lung disease, cancer, obesity in teenagers, and so on, we can use the same ‘engine’. We can even personalize it directly for each patient, and over time it’s automatically adjusted to each person. On a technical level, you can use the solution on all devices – smartphone, tablet, computer, and the web – you name it.”

CEO of firm that produces health apps
and an interview subject in this study

The high-tech global startup has many challenges related to both innovation and internationalization. From a Danish cluster of Welfare Tech firms, eight innovative and international firms were selected and interviewed. Such firms typically have to be agile and operate in virtual networks in almost all parts of their value chains. This article contributes to the understanding of how innovation and internationalization to a great extent are interlinked. The firms have developed a core product or service offering, which the firms often describe as “a platform”. Around the platform, they develop their products and services for new customers and users in new countries. The firms have to sustain a strong focus on the platform while at the same time developing their platform solution for new products, new customers, and new markets. This pivoting makes it possible to use the platform in a new context but is highly demanding for the firms. They need to be extremely agile and fast-moving but at the same time still to have a focus on the core of the firm: the platform.

Introduction

Successful innovation progresses from an initial creative act, taking place in what is often called “the fuzzy front end” (Jørgensen et al., 2011; Reid & de Brentani, 2004), to the act of commercialization (execution), and then beyond that to sustainability and the evolution of the innovation (Wooder & Baker, 2012). Typically, this is seen as a one-way process of creating, delivering, and capturing value to defend and sustain value, but it can instead be seen as a process that circles a core idea or platform, as in the lean perspective (Blank, 2013; Tanev et al., 2015). However, the term “platform” can be used in many ways and settings.

In this article, we have chosen the concept of a platform primarily due to our respondents’ use of it. In their book about platforms, Meyer and Lehnerd (1997)

described a product platform as “a set of individual products that share common technology and address a related set of market application”, such as how Black & Decker created a cordless power tool portfolio that shares a common battery format. They try to expand this view of platforms to include services and other types of value-chain activities beyond product development. In general, they define a platform as “a network of interdependent components that work together to try to accomplish the aim of the system”. We thus link the use of the platform concept to the ecosystem of innovations and networks of firms. Platforms are more than just a technology; they must be seen as assets in a structure upon which companies can develop new products and services and then market them. This structure can be inside one firm but will often take place in an ecosystem of several firms and other actors, as seen in the cases in this article.

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

In the same vein as product and service development, internationalization is often seen as a one-way development to increasingly international firms. Instead, the process can be seen as a constant process of internationalization and de-internationalization in a setting of inward and outward international relations (Freeman et al., 2013). This process involves strategic and operations decisions regarding markets, suppliers, and partners and value-chain activities.

Innovation can be viewed as a small or large number of products and services pivoting around a core idea or platform. Internationalization of the firm (both inward and outward) can also be seen as pivoting around the sale of a platform and sourcing for this platform through internationalizing and de-internationalizing. We intend to show in this article how these processes are linked together in a complex pattern of strategic and operational choices. The theoretical points from the literature review will be supported by short case examples from Danish firms in a welfare technology cluster. What is new in this article compared to previous research on platforms is the empirical observation that innovation and internationalization go through some of the same processes in these firms and that this must have theoretical consequences, too. The article is a follow-up to research on the concept of lean global startups (cf. Rasmussen & Tanev, 2015; Tanev, 2012; Tanev & Frederiksen, 2014; Tanev et al., 2015; Zijdemans & Tanev, 2014) but with a focus on the platforms around which the firms are pivoting their innovation and internationalization.

Literature Review

The newly started high-tech global firm has many challenges, and often it has to be agile and operate in virtual networks in almost all parts of its value chain. We intend to discuss how this is possible from both theoretical and empirical points of view through a small number of case studies. Almor (2011) described these firms as “dancing as fast as they can” and suggested that their ultimate success will come from their flexibility and from a focused strategy aimed at tailoring products and services to a globalization that demands innovation solutions in both sale, sourcing, and other value chain activities. The technology-based international firms will typically grow along one of the axes of customer scope, country scope, or product scope (Almor, 2011), but in the cases that are in this paper, they will often have to grow along two axes or all three at the same time. This growth is made possible through the extensive use of local and global networks for both innovation and internationalization.

The ecosystem and network concepts

Valkokari and colleagues (2017) argue that the innovative capacity of firms depends on their ability to manage dynamic strategic interactions among actors in an ecosystem – it is a competency that enables them to ensure the future vitality of the ecosystem and their own business. This perspective can be extended to encompass not just the innovative capacity of the firm but to its internationalization capacity, too. An ecosystem typically has a large number of actors – both on firm and personal levels. The ecosystem is normally governed through informal arrangements and not contracts (Koskela-Huotari et al., 2016., Lusch et al., 2016; Pellikka & Ali-Vehmas, 2016; Stam, 2015; Viitanen, 2016). The ecosystem concept is thus an extension of the network concept. Based on technological revolutions and increasing globalization, the business landscape is changing the demands for innovation and strategic actions on a global competitive level (Hitt et al., 1998). In attempts to grow and prosper in the global business landscape, the ability to leverage social and business networks has become vital (Eberhard & Craig, 2013; Jones et al., 2011; Vasilchenko, 2011). Thus, networks are reshaping the global marketplace (Parkhe et al., 2006).

According to Bergenholtz and Waldstrøm (2011), the most cited network definition of inter-organizational social network analysis is Laumann (1978): “a set of nodes (e.g., persons, organizations) linked by a set of social relationships (e.g., friendships, transfer of funds, overlapping membership) of a specified type”. Furthermore, Bergenholtz and Waldstrøm (2011) argue that the definition unites scholars towards explicitness about both the type and number of actors and form and content of the ties, which sets it apart from more abstract and soft concepts of networks such as connectedness, interdependence, or embeddedness. Mattsson (1987) argue that all business strategies involve a degree of network position change, such as developing new technologies and introducing new ways of organizing collaboration between network actors. As a consequence, the ecological characteristics of complexity, novelty, dynamics, and (network) embeddedness are influencing the perceptions of management with regards to their firm’s innovative capacity and internationalization opportunities (Möller, 2010).

Inter-organizational network studies have expanded rapidly since 2000 (Borgatti & Halgin, 2011). The development shows a shift from individualistic and atomistic views of organizing towards a more relational, contextual, and systemic approach (Borgatti & Foster, 2003;

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

Ford & Håkansson, 2006). Network perspectives use relationships among actors as explanations of actor and (network) outcomes standing in opposition to individualistic examinations that centre on attributes of actors. From a network perspective, different dimensions of embeddedness deliver substance for business-to-business interactions, which in the end affects business networks (Ford et al., 2008). Halinen and Törnroos (1998) distinguish between vertical (across levels) and horizontal embeddedness (within the same level) to address representational roles and positions of actors within the embedded networks.

The lean startup approach

In the 2000s, the lean startup approach emerged with Steve Blank and Eric Ries claiming that it can reduce the risk of launching new products. In publishing *The Lean Startup*, Ries (2011) contributed to the establishment of a lean startup terminology, including the terms “minimum viable product”, “pivoting”, and “build-measure-learn”. The term “lean” is drawn from lean manufacturing to emphasize the core idea behind the methodology – eliminating waste. The core principle is to reduce waste by not using resources on hypotheses about the product or marketplace that the customer has not validated or do not create value (Ries, 2011). It is thus important to learn from the potential customers early in the process and thereby produce a solution based on customer needs and wants. Entrepreneurs too often “fall in love” with their product or technology from the start only to ignore negative feedback from customers and spend years building a product based on a vision that no one else shares (Furr & Ahlstrom, 2011). To avoid this pitfall, the lean startup approach calls for an iterative process where the problem, products, and customer hypotheses are developed and validated by the customers.

Eisenmann, Ries, and Dillard (2012) defined a lean startup as a firm that follows a hypothesis-driven approach to the evaluation of an entrepreneurial opportunity and the development of a new product for a specific market niche. The lean startup methodology focuses on translating a specific entrepreneurial vision into falsifiable hypotheses regarding a new product together with an associated emerging business model. The hypotheses are then tested using a series of well-thought prototypes and minimum viable products that are designed to validate specific product features or business model specifications rigorously. In this context, the entrepreneurial opportunity is based on shaping the new solution in a way that could solve a specific customer problem.

Other prominent contributors to the lean startup approach are Nathan Furr and Paul Ahlstrom with their book *Nail It then Scale It* (Furr & Ahlstrom, 2011). They suggested a three-step process through which the entrepreneur starts with a hypothesis about the customer pain and then tests it. Once the customer pain has been identified and validated, a hypothesis is made regarding the minimum feature set that will be necessary to drive a customer purchase. Next, a series of gradually more advanced prototypes should be built. Discussion and validation with customers occur throughout each of the steps. Eventually, the customer solution will be “nailed”, and the startup can focus on developing a go-to-market strategy and scaling the business.

According to Blank (2013), a startup is “a temporary organization designed to search for a repeatable and scalable business model.” Ries (2011) adds that a startup is “a human institution designed to create new products and services under conditions of extreme uncertainty”. Both authors advocate experimentation as a source of customer knowledge, which is associated with the concept of a minimum viable product (MVP). The minimum viable product is a product or a service consisting of a minimum set of features that is used as a tactic to reduce wasted engineering hours and financial resources. Furthermore, it is a specific commercialization strategy for putting the product into the hands of early and visionary customers as soon as possible. It is also a specific approach to co-developing a product with customers by looking for quick adjustments of the initial product features. The approach seeks to validate as many assumptions as possible about the viability of the final product before using extensive financial resources. Also, the new venture may adjust its course in a way that may involve “pivoting” from the original agenda. Ries (2011) describes the pivot as “a structured course correction designed to test a new fundamental hypothesis about the product, strategy, and engine of growth”.

The minimum viable products a startup builds can be seen as experiments to learn about how to create a sustainable business. It is necessary to reframe the purpose of the startup to “learn what the customer wants” rather than to prove that any original business plan was correct. Ries (2011) suggest a tool to facilitate this learning process: the build-measure-learn feedback loop. Through this process of testing initial minimum viable products with a customer, their feedback results in changes that steer the startup in the right direction (Blank & Dorf, 2012). By continuously going through

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

the loop and iterating rapidly, the startup is making incremental progress in their business model to accurately target customers and thereby increases the odds of success. Along the way, the entrepreneur faces a difficult question: Do we change the original strategy or stick with it? With the lean startup approach, the answer to this question depends on a pivot strategy where products and services are turned around the original idea.

Method: Linking Innovation and Internationalization in a Platform

The context of this study is Welfare Tech (welfaretech.dk), a publicly funded Danish cluster established in 2010 to ease and foster innovation and business development in healthcare, homecare, and social services. In 2010, it was regionally based in one of five regions in Denmark, but in 2013, it became a nation membership organization. The members include public organizations, research institutions, educational institutions, and other associations, but the majority is from private industry. Among the cluster's 202 members in 2016, 135 were private firms, most of which are characterized as small and medium-sized businesses. The cluster has 15 employees to facilitate the cluster's membership and to sustain the network development nationally and internationally. The purpose of the cluster is to develop new ideas and insights into demands and requirements, from hospitals and municipalities for example, and to

provide a rich, diverse, and dynamic business network development while addressing global societal needs and challenges associated with an aging demographic. The key value the cluster delivers to its membership is a network for product and service innovation and internationalization. As expressed by the manager of the cluster, "We build the pipelines, but the firms have to decide what should be running in the pipes".

The methodological design of the research is a longitudinal processual case study approach (Halinen & Törnroos, 2005), which takes into consideration the network's actors and how the network changes and transforms relationships between them. A systematic combination of empirical exploration, application of the theoretical framework, and in-depth case analysis is used, and the research objective is to discover new insights for developing theories (Dubois & Gadde, 2002, 2014). These insights come from a combination of longitudinal retrospective and real-time processual case research with a mixed method of qualitative and quantitative data (Bizzi & Langley, 2012). Specifically, the public funded cluster is studied in a timeframe of 3 years: 2014 to 2016.

Table 1 presents the eight cases, which were selected from a survey based on social network analysis and from secondary data obtained from public databases. In cases 1 and 7, the new owner of the firm was interviewed, and in the other cases, the owner/founder/CEO

Table 1. Overview of the selected cases from the Welfare Tech cluster

Case	Number of Employees	Year of Foundation	Type of Business
1	5–9	1973	Welfare technology (mobility solutions)
2	20	2006	Software development for automated logistical solutions
3	8	2009	IT solutions for overview, planning, and communication in healthcare
4	13	2013	Health IT (healthcare software)
5	10–19	2006	Healthcare technology (telemedicine solutions)
6	20–49	2010	Healthcare technology (touchscreens with customized apps)
7	20–49	1985	Healthcare technology (patient turning system)
8	20–49	2005	Mobile apps and web solutions for healthcare

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

was interviewed. All interviews were based on an interview guide with a focus on the firm's relation to the cluster in relation to innovation and internationalization. Furthermore, a number of questions were asked related to the history of the firm and the type of products/services they deliver. The length of the interviews was between 1.5 and 2 hours, and all interviews were transcribed and analyzed with the Nvivo tool. All quotes have been selected from this analysis and afterwards translated into English.

Cases

From the study of the Welfare Tech cluster, the researchers have selected eight firms that all are characterized by being innovative and international at the same time. Innovation does not necessarily mean that the firms are developing high-technology with patents, but that they have a focus on developing their solutions on an ongoing basis, often through close relationships with research institutions in Denmark and abroad. Internationalization is evaluated from the number of value chain activities the companies have outside Denmark and the size of these activities (e.g., export compared to total sale).

Results

For the case firms, innovation and internationalization are associated with finding customers outside Denmark, as this typical quotation shows:

“Early on, in a market outside Denmark, you have to show your partners that there is a market for your solution. You must be able to demonstrate that it can sell and that it could be interesting for a partner. They need ‘meat on the table’, so to say.” (Case 6)

The market, in this case, is outside Denmark, and the partners are both for international innovation and sales. The product or service is presented to potential partners, changed a bit, and presented again. Finding the right partners for both innovation and internationalization is crucial, and the firms and their managers use many resources to find and evaluate them. The partners will typically be placed horizontally and vertically at the same time (Halinen & Törnroos, 1998).

“You have to evaluate all the contacts you get – check them, find references, learn what they are doing, see if it could be interesting to us, and so on. This is an intentional process where you meet people and

have a dialogue, and maybe they will refer to you. You get wiser, collect data and information, and talk about yourself. There are many ways to enter a market, but it is important to find out what's happening regarding technology, products, and the firms. All this is about establishing a network and sharing it with your partners.” (Case 7)

For many of these small firms in the network, the question is: Why go international? For most of them, the answer is quite simple: Because the Danish market is too small.

“Denmark is not large enough, not if we are going to make a living out of our products. Not with the price we have to charge. You must use the contacts you have, grab the network, and implement your solution on an international scale. If the next customer is in Portugal, then go to Portugal and find somebody that can help you.” (Case 4)

For several of the firms, the international strategy has been to establish local firms (typically joint ventures with foreign and Danish partners) in each foreign market.

“We set up cooperation agreements in each country – typically with local partners. The customers will then be in contact with, for example, a German company in Germany. But, behind this, we are in control together with our partners.” (Case 3)

Often, the establishment abroad is done through one partner in the network in Denmark. This contact has typically been established through the network or by some of the organizations involved.

“We have one contact in London that we found through our network. This is a potential customer that agreed to present us to other firms in his network. The important thing is to get a lead to the next customer and then refer to the first contact. It is crucial that we have the reference to this contact and the Danish organizations. People don't ask the same questions when we have these relationships. Otherwise, we would just be another small firm trying to enter the market.” (Case 4)

Internationalization is often done with a few partners (typically larger firms) that can use the solutions the firms provide and provide access to customers and new partners abroad.

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

“We started in Denmark, and then we had a project in the US, and then an EU project with six countries. Then, we went to Sweden and Norway and Greenland. One project in Australia and one in Dubai and other projects, for example in Spain... We work on a global scale with 11 to 14 countries that are comparable to the 20 employees we have... We have distribution partners in Germany, France, the Middle East, and in the US. They function as our local ‘man on the ground’, so to say. They sell our platform solution, and we then develop it. Our solutions have to fit their business model before they can be valuable partners. They must be in the market and not have to build from scratch.” (Case 8)

For the firms in the network, it is extremely important to have the opportunity from the network to relate to larger firms and organizations that can help them with the internationalization. One of the key challenges for the Welfare Tech cluster has thus been to establish networks and relationships, especially with partners and customers abroad. These network activities involve building trust between the firms and organizations in the cluster as the first step, and then to build trust with actors outside Denmark as the second step.

“They <the Welfare Tech cluster> have given me a place where I can come and form a network... We have found a new partner – a new firm – and we will sell our products together at the export markets in the UK and France.” (Case 1)

Several of the firms need access to highly specialized industries such as hospitals, which are quite critical for new firms, especially small firms from abroad.

“We started with Q <a large Danish firm that is well established in the market> and asked them if it was the right way to enter the hospital market abroad. Together, we found some partners and one especially large partner who is the Rolls Royce of this industry. Together we can now grow our firms.” (Case 2)

Partners such as universities can be a great help for the firms, too. Often they are used as hubs to create contacts to new partners and customers. One of the lessons learned during the development of the cluster was that these hubs have to be nurtured and developed but that the time horizon is extremely long, especially if you are new, small firm.

“We have been in dialogue with K <a university> for a long time. They were leaders of a project, and we

were partners in the project. What we do is so specific that there is no competition. The import thing for us is not ‘canvas’ sale but to create new relationships with firms that can integrate our solution into their solution. Alternatively, maybe we can integrate their solution into ours.” (Case 5)

To create solutions that can fit into other firms’ products and services is thus extremely important for the case firms. To develop a platform that at the same time can be protected and fit into the partners’ products is of course not easy. One solution is to “slice” the platform “cake” into smaller pieces that each can be used in a project without giving away all the firm’s innovative secrets.

Discussion and Conclusion

A young innovative firm with international ambitions will meet many obstacles. Often, the founding period has been used to develop one unique product or service. For the firms in this research, the core product or service is typically seen as a platform for further expansion – innovations and internationalization. The respondents in the interviews were asked to present the company’s main idea – product or service. This presentation was often drawn as a platform and the products and services coming from this platform as concentric circles with the core product or platform in the centre. The quotation at the beginning of this article tells precisely how the case firms see their solutions:

“We developed a platform solution. This means that we can work in many different areas where we can use the same platform. Whether it is diabetes, lung disease, cancer, obesity in teenagers, and so on, we can use the same ‘engine’. We can even personalize it directly for each patient, and over time it’s automatically adjusted to each person. On a technical level, you can use the solution on all devices – smartphone, tablet, computer, and the web – you name it.”

In the middle is the platform, and around it are different types of applications built on the platform. Further out is the adjustments made for each customer, and in the last circle, the personalized product or service for each user is found. In each circle – except the inner circle – partners are taking care of innovation and sales outside Denmark. Further circles can be added to describe the different communication solutions – mobile phones, computer programs, the web, and so on. All the circles can be turned around the platform in the middle and, in this way, firms adjust the solution to each customer.

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

From a theoretical point of view, platforms are not new but have been described in the literature for many years (Meyer & DeTore, 2001; Meyer & Lehnerd, 1997). Our novel contribution to the traditional platform literature is to recognize platforms as potential starting points for the internationalization of firms.

Pivoting, as in the lean startup literature, is thus not just a question about innovation but also about finding the right solution for each customer, often with the help of a partner. As described above, the pivoting often implies giving away a small slice of the platform cake instead of all the innovations. In a small country such as Denmark, this use of the platform has to be done on an international scale because the Danish market is much too small for the niche products and services developed by the case firms. Innovation and internationalization are thus part of the same process as seen from the firms' point of view. From the analysis of the interviews, it is clear that innovation and internationalization are not two separate processes in many of the firms. The processes could be called "innovative globalization", and

the firms are "dancing as fast as they can", as described by (Almor, 2011), with growth along the axes of the customer, country, and product scope at the same time.

To find new customers in new country markets and to develop new products and services is for these small, innovative firms thus a question of adjusting the initial platform a bit and pivot around it. It is necessary for the firms to keep a strong focus on the platform because they do not have the resources to develop a new platform. At the same time, they have to adjust the offerings coming from the platform to new customers and markets on a global scale. To "pivot", from the lean startup literature, has thus a new meaning when looking at firms that have to be highly international, too. Pivoting – or turning around the initial idea – has to be done in relation to products and services, customers and users, and new country markets. Being able to do this with an extreme focus on the core platform and at the same with a high degree of agility in the product and market development is the essential part of what could be a new type of firm: the lean and global startup.

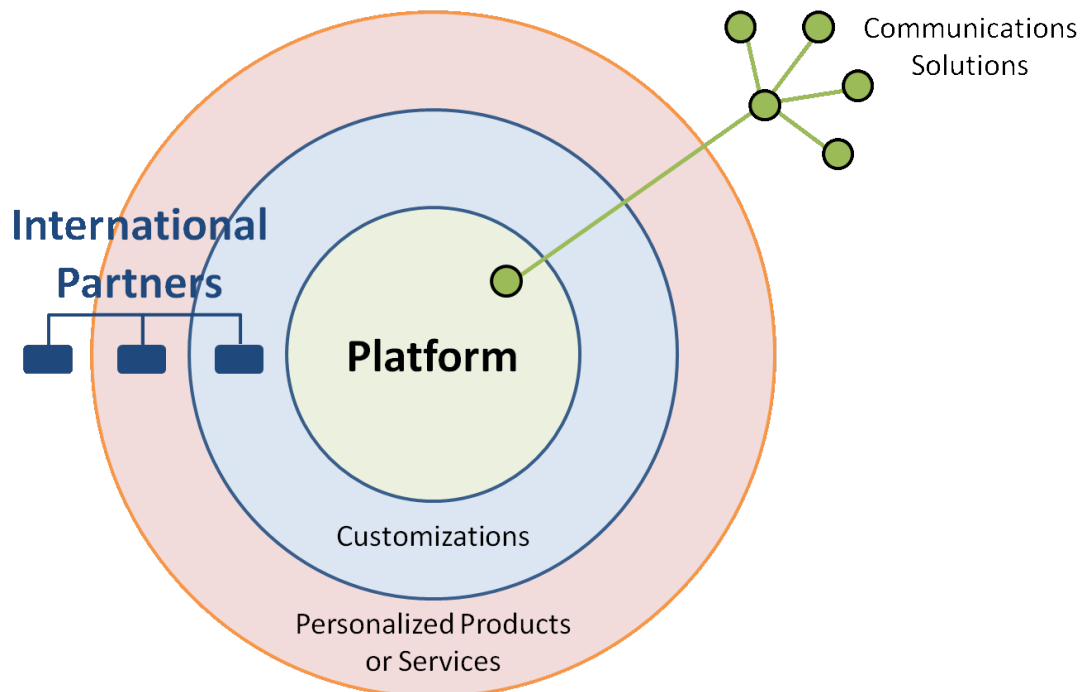


Figure 1. A typical conceptualization of a firm's view of their platform and partner interactions

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

About the Authors

Erik S. Rasmussen is an Associate Professor in the Department of Marketing and Management at the University of Southern Denmark in Odense. He received his PhD in 2001 from the University of Southern Denmark, focusing on fast-internationalizing small and medium-sized firms. His research focuses especially on international entrepreneurship and born-global firms. In recent years, he has particularly focused on studying international entrepreneurs that can avoid domestic path dependence by establishing ventures that, from the beginning, develop routines for a multi-cultural workforce, coordinate resources across nations, and target customers in several geographic places simultaneously. Furthermore, he has published a number of articles about lean and global startups combining the lean startup and born-global theories.

Nicolaj Hannesbo Petersen is a PhD student in the Department of Marketing and Management at the University of Southern Denmark in Odense. A particular focus of the project is on innovation and internationalization processes anchored in the structure of relationships among SMEs. The network perspective is concentrated on a Danish publicly funded welfare/health technology cluster. Central aspects of the work include how and why embedded opportunities and constraints evolve and are made sense of through the network for economic action. Nicolaj's work experience was gained from practice through innovation consultancy in the venture capitalist industry.

References

- Almor, T. 2011. Dancing as Fast as They Can: Israeli High-Tech Firms and the Great Recession of 2008. *Thunderbird International Business Review*, 53(2): 195–208.
<http://dx.doi.org/10.1002/tie.20401>
- Bergenholtz, C., & Waldstrøm, C. 2011. Inter-Organizational Network Studies—A Literature Review. *Industry and Innovation*, 18(6): 539–562.
<http://dx.doi.org/10.1080/13662716.2011.591966>
- Bizzi, L., & Langley, A. 2012. Studying Processes in and around Networks. *Industrial Marketing Management*, 41(2): 224–234.
<http://dx.doi.org/10.1016/j.indmarman.2012.01.007>
- Blank, S. 2013. Why the Lean Start-Up Changes Everything. *Harvard Business Review*, 91(5): 63–72.
- Blank, S. G., & Dorf, B. 2012. *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*. Pescadero, CA: K&S Ranch Incorporated.
- Borgatti, S. P., & Foster, P. C. 2003. The Network Paradigm in Organizational Research: A Review and Typology. *Journal of Management*, 29(6): 991–1013.
http://dx.doi.org/10.1016/s0149-2063_03_00087-4
- Borgatti, S. P., & Halgin, D. S. 2011. On Network Theory. *Organization Science*, 22(5): 1168–1181.
<http://dx.doi.org/10.1287/orsc.1100.0641>
- Dubois, A., & Gadde, L.-E. 2002. Systematic Combining: An Abductive Approach to Case Research. *Journal of Business Research*, 55(7): 553–560.
[http://dx.doi.org/10.1016/S0148-2963\(00\)00195-8](http://dx.doi.org/10.1016/S0148-2963(00)00195-8)
- Dubois, A., & Gadde, L.-E. 2014. “Systematic Combining”—A Decade Later. *Journal of Business Research*, 67(6): 1277–1284.
<http://dx.doi.org/10.1016/j.jbusres.2013.03.036>
- Eberhard, M., & Craig, J. 2013. The Evolving Role of Organisational and Personal Networks in International Market Venturing. *Journal of World Business*, 48(3): 385–397.
<http://dx.doi.org/10.1016/j.jwb.2012.07.022>
- Eisenmann, T., Ries, E., & Dillard, S. 2012. *Hypothesis-Driven Entrepreneurship: The Lean Startup*. Harvard Business School Entrepreneurial Management Case No. 812-095. Boston, MA: Harvard Business School.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2037237
- Ford, D., Gadde, L.-E., Håkansson, H., Snehota, I., & Waluszewski, A. 2008. *Analysing Business Interaction*. Paper presented at the 24th Industrial Marketing and Purchasing Group (IMP) Conference, September 4–6, 2008, Uppsala, Finland.
- Ford, D., & Håkansson, H. 2006. IMP – Some Things Achieved: Much More to Do. *European Journal of Marketing*, 40(3/4): 248–258.
<http://dx.doi.org/10.1108/03090560610648039>
- Freeman, S., Deligonul, S., & Cavusgil, T. 2013. Strategic Restructuring by Born-Globals Using Outward and Inward-Oriented Activity. *International Marketing Review*, 30(2): 156–182.
<http://dx.doi.org/10.1108/02651331311314574>
- Furr, N., & Ahlstrom, P. 2011. *Nail It Then Scale It: The Entrepreneur's Guide to Creating and Managing Breakthrough Innovation*. Lehi, UT: NISI Publishing.
- Halinen, A., & Törnroos, J.-Å. 1998. The Role of Embeddedness in the Evolution of Business Networks. *Scandinavian Journal of Management*, 14(3): 187–205.
[http://dx.doi.org/10.1016/S0956-5221\(98\)80009-2](http://dx.doi.org/10.1016/S0956-5221(98)80009-2)
- Halinen, A., & Törnroos, J.-Å. 2005. Using Case Methods in the Study of Contemporary Business Networks. *Journal of Business Research*, 58(9): 1285–1297.
<http://dx.doi.org/10.1016/j.jbusres.2004.02.001>
- Hitt, M. A., Keats, B. W., & DeMarie, S. M. 1998. Navigating in the New Competitive Landscape: Building Strategic Flexibility and Competitive Advantage in the 21st Century. *The Academy of Management Executive*, 12(4): 22–42.
<http://dx.doi.org/10.5465/ame.1998.1333922>
- Jones, M. V., Coviello, N., & Tang, Y. K. 2011. International Entrepreneurship Research (1989–2009): A Domain Ontology and Thematic Analysis. *Journal of Business Venturing*, 26(6): 632–659.
<http://dx.doi.org/10.1016/j.jbusvent.2011.04.001>

Platforms for Innovation and Internationalization

Erik Stavnsager Rasmussen and Nicolaj Hannesbo Petersen

- Jørgensen, J. H., Bergenholtz, C., Goduscheit, R., & Rasmussen, E. S. 2011. Managing Inter-Firm Collaboration in The Fuzzy Front-End: Structure as a Two-Edged Sword. *International Journal of Innovation Management*, 15(01): 145–163.
<http://dx.doi.org/10.1142/S1363919611003118>
- Koskela-Huotari, K., Edvardsson, B., Jonas, J. M., Sörhammar, D., & Witell, L. 2016. Innovation in Service Ecosystems—Breaking, Making, and Maintaining Institutionalized Rules of Resource Integration. *Journal of Business Research*, 69(8): 2964–2971.
<http://dx.doi.org/10.1016/j.jbusres.2016.02.029>
- Laumann, E. O., Galaskiewicz, J., & Marsden, P. V. 1978. Community Structure as Interorganizational Linkages. *Annual Review of Sociology*, 4: 455–484.
- Lusch, R. F., Vargo, S. L., & Gustafsson, A. 2016. Fostering a Trans-Disciplinary Perspectives of Service Ecosystems. *Journal of Business Research*, 69(8): 2957–2963.
<http://dx.doi.org/10.1016/j.jbusres.2016.02.028>
- Mattsson, L. G. 1987. Management of Strategic Change in a “Markets As Networks Perspective”. In A. Pettigrew (Ed.), *The Management of Strategic Change*: 234–260. London: Basil & Blackwell.
- Meyer, M. H., & DeTore, A. 2001. PERSPECTIVE: Creating a Platform-Based Approach for Developing New Services. *Journal of Product Innovation Management*, 18(3): 188–204.
<http://doi.org/10.1111/1540-5885.1830188>
- Meyer, M. H., & Lehnerd, A. P. 1997. *The Power of Product Platforms: Building Value and Cost Leadership*. New York, NY: Simon and Schuster.
- Möller, K. 2010. Sense-Making and Agenda Construction in Emerging Business Networks — How to Direct Radical Innovation. *Industrial Marketing Management*, 39(3): 361–371.
<http://dx.doi.org/10.1016/j.indmarman.2009.03.014>
- Parkhe, A., Wasserman, S., & Ralston, D. A. 2006. New Frontiers in Network Theory Development. *Academy of Management Review*, 31(3): 560–568.
<http://dx.doi.org/10.5465/amr.2006.21318917>
- Pellikka, J., & Ali-Vehmas, T. 2016. Managing Innovation Ecosystems to Create and Capture Value in ICT Industries. *Technology Innovation Management Review*, 6(10): 17–24.
<https://timreview.ca/article/1024>
- Rasmussen, E. S., & Tanev, S. 2015. The Emergence of the Lean Global Startup as a New Type of Firm. *Technology Innovation Management Review*, 5(11): 5–12.
<https://timreview.ca/article/941>
- Reid, S. E., & de Brentani, U. 2004. The Fuzzy Front End of New Product Development for Discontinuous Innovations: A Theoretical Model. *Journal of Product Innovation Management*, 21(3): 170–184.
<http://dx.doi.org/10.1111/j.0737-6782.2004.00068.x>
- Ries, E. 2011. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation To Create Radically Successful Businesses*. New York, NY: Crown Business.
- Stam, E. 2015. Entrepreneurial Ecosystems and Regional Policy: A Sympathetic Critique. *European Planning Studies*, 23(9): 1759–1769.
<http://dx.doi.org/10.1080/09654313.2015.1061484>
- 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>
- Tanev, S., & Frederiksen, M. H. 2014. Generative Innovation Practices, Customer Creativity, and the Adoption of New Technology Products. *Technology Innovation Management Review*, 4(2): 5–10.
<https://timreview.ca/article/763>
- Tanev, S., Rasmussen, E. S., Zijdemans, E., Lemminger, R., & Svendsen, L. L. 2015. Lean and Global Technology Start-Ups: Linking the Two Research Streams. *International Journal of Innovation Management*, 19(03): 1–41.
<http://dx.doi.org/10.1142/S1363919615400083>
- Valkokari, K., Seppänen, M., Mäntylä, M., & Jylhä-Ollila, S. 2017. Orchestrating Innovation Ecosystems: A Qualitative Analysis of Ecosystem Positioning Strategies. *Technology Innovation Management Review*, 7(3): 12–24.
<https://timreview.ca/article/1061>
- Vasilchenko, E., & Morrish, S. 2011. The Role of Entrepreneurial Networks in the Exploration and Exploitation of Internationalization Opportunities by Information and Communication Technology Firms. *Journal of International Marketing*, 19(4): 88–105.
<http://dx.doi.org/10.1509/jim.10.0134>
- Viitanen, J. 2016. Profiling Regional Innovation Ecosystems as Functional Collaborative Systems: The Case of Cambridge. *Technology Innovation Management Review*, 6(12): 6–25.
<https://timreview.ca/article/1038>
- Wooder, S., & Baker, S. 2012. Extracting Key Lessons in Service Innovation. *Journal of Product Innovation Management*, 29(1): 13–20.
<http://dx.doi.org/10.1111/j.1540-5885.2011.00875.x>
- Zijdemans, E., & Tanev, S. 2014. Conceptualizing Innovation in Born-Global Firms. *Technology Innovation Management Review*, 4(9): 5–10.
<https://timreview.ca/article/826>

Citation: Rasmussen, E. S., & Petersen, N. H. 2017. Platforms for Innovation and Internationalization. *Technology Innovation Management Review*, 7(5): 23–31. <http://timreview.ca/article/1074>



Keywords: platform, lean and global startups, globalization, lean startup, innovation, internationalization