INFO-GLOBALIZATION AND OPENINNOVATION MANAGEMENT

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Abstract: In this article is described info-globalization versus open innovation. Info-globalization subsumes different internationalization aspects; the international exploitation of domestically generated new info-knowledge on foreign markets, either embedded in innovative products or process technologies. Open innovation is a methodology with the global valences. The article is one of the few attempts to take a broader perspective on open innovation by focusing on how these practices are organized and managed in SMEs. Why should we interest about open innovation in SMEs? These SMEs create the majority of the jobs in all world. Moreover, globalization and commoditization threaten many jobs if companies do not change strategies over time. The small companies can sidestep the commoditization pressure and price competition successfully by using open innovation to develop new and more profitable businesses. An urgent need exists to study how open innovation is managed and organized in small firms. Managing and organizing open innovation in SMEs is quite specific. This renders the need for a specific approach on open innovation in SMEs even more urgent. Open innovation creates new business opportunities for SMEs because they can develop business model innovations without having the required technologies in-house. SMEs can leverage external technologies by setting up a network with partners who have the required competencies or own assets to develop and commercialize a new offering. Managing open innovation is challenging. Open innovation is a relatively young economic phenomenon, and case-based research is an appropriate research method to analyze the explorative research. The benefits of open innovation are specific to the strategic position and situation of each firm. These open innovation aspects with global character will be described in detail in this article.

Key-words: info-globalization, open innovation, innovation, management, research.

Introduction

Many small companies today are confronted with harsh market conditions. The current economic crisis has weakened their financial health, especially in industries that are globalizing rapidly. These changing market conditions force them to look for new ways to differentiate their products and services or create new businesses. The firms that know how to manage a network of innovation partners can seize new business opportunities become key players in growth industries and turn themselves into highly profitable companies. Open Innovation is a logical step for many SMEs. Open Innovation is an important factor of globalization, which by its nature participate in strengthening the info-globalization phenomenon. Open Innovation may be defined as "…the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively." (Chesbrough, H.W., Vanhaverbeke, W., 2006).

The role of open innovation can only be understood within in broad strategic setting: entreprises engage in open innovation to create value for customers in new ways and to create a more profitable business. Open innovation has been studied mainly in large, multinational enterprises, of which most have large internal R&D departments or operate in technology intensive industries. Large companies may detect new business opportunities by carefully analysing market trends, spotting new technologies with promising applications, and so on. Small companies do not have the required resources in-house to analyse new growth opportunities systematically. Open innovation in small and medium-sized companies (SMEs) has received much less attention. Current research on open innovation in SMEs is still very limited and is not yet revealing the creative use of open innovation that many innovating SMEs around the globe are implementing (Van de Vrande, V., De Jong J.P.J., Vanhaverbeke, W. and De Rochemont, M. 2009, pp. 296-297)

Large companies deliberately introduce open innovation practices and are consequently looking for benefits by switching from closed to open innovation. The benefits of strategic change based on open innovation in small firms differ and are more interesting than the classic benefits of open innovation identified for large firms. Open innovation creates new business opportunities for SMEs because they can develop business model innovations without having the required technologies in-house. Also, SMEs can leverage external technologies by setting up a network with partners who have the required competencies or own assets to develop and commercialize a new offering. Open innovation networks enable a company to deliver value in a completely new ways to its customers and they also keep the company tied to the existing innovation partners and customers. Open innovation also means openness in communication and in reporting among the innovation partners. Partners have to trust each other to charge a reasonable price for the products or services they offer to innovation partners in the network.

Business model innovations based on an open innovation

A business model defines the way companies deliver value to a set of customers at a profit. New strategic objectives of a company should be analyzed via a business model innovation framework. Business model innovation starts with discovering or recognizing new forms of value creation for a particular customer group. Companies create different "value drivers"; that is, sources to create value and referring to any factor that enhances the total value created by a change in the business model. So are reducing costs for customers, increasing time efficiency, solving problems, increasing the attractiveness of the customers' products or services and providing new functionalities and increasing emotional value. It is needed strong partnerships with other organizations to develop the new product or service. Limited by financial constraints or lack of technical competencies, the companies have to team up with partners with complementary skills. The value of open innovation activities in SMEs can only be estimated correctly within the context of their broader strategic objectives. New strategic objectives of a company should be analyzed via a business model innovation framework. All firms have in common that their efforts are focused on creating value for a particular target customer. They start with an explicit or intuitive idea of what customers might value. Business model innovations start with articulating a customer value proposition. Creating customer value through game-changing and highly profitable business models will usually not be developed by questioning existing customers. (Vanhaverbeke W. (coord.), Research Report. 2012, p 34). It consists of tightly interlocking elements: companies create a customer value proposition, identify key resources and processes needed to deliver that value,

and design a profit formula 59)

(Christensen, C.M. and Kagermann, H. 2008, pp 51-

Reinventing the existing strategy of an SME or developing a start-up's business model starts with developing basic insight into how a company can deliver value for a specific target customer. Specifying the customer value proposition can be fairly simple, but can also be a tough process that takes months and sometimes years to get right. Business model innovation should be analyzed cross-sectionally and also dynamically because they develop and change over time. The first open innovation initiative presents new strategic options for SMEs: they build new skills and competencies over the years and they become financially stronger. Some SMEs unfold their business model innovation in several consecutive steps, building new competencies and a stronger financial position at the same time. Business models have a central place in analyzing open innovation in small firms. Business model innovations based on an open innovation imply that there are cost-increasing effects of technology sourcing and technology co-development. The new revenue streams resulting from business model innovation must be balanced against the costs of setting up and managing the external network of partners. SMEs have limited financial means to seize new business opportunities. Small companies may offer completely new experiences for customers. These radically new ways of offering value for customers takes time to develop and there are too many unknowns at the outset to guarantee a market big enough to attract big companies.

Successful SMEs do not remain with one business model forever. They search continuously new business models. Each new business model builds on the strength of the previous business model and improves its value proposition and profitability. This constitutes a complex process because new opportunities to transform the business model into being more profitable can only be detected after the previous business model has exhausted. In business model innovation, too much uncertainty exists to plan analytically a way to move forward. SMEs change their business model in a stepwise way.

Business model innovations are designed to create more value and generate more profits, and increasing profitability can be the result of several changes. Innovating SMEs can increase profitability by increasing the number of control points and creating a unique offering. (Vanhaverbeke W. (coord.), Research Report. 2012, p. 53).

If a company faces serious problems in its existing markets, it will look for a (technological) solution to solve the problems. The new technology offers several other technical advantages that were slowly translated into new business opportunities.

The open innovation model (Chesbrough 2003, 2011, pp. 35–42.) incites firms to open up their innovation process, giving up the model of the internal process.

In the internal process of innovation, firms lean upon their own R&D laboratory and develop the entire projects alone, from initial research to industrialization, because firms used to consider R&D as a strategic asset and thought innovation requires control so they generated the new idea, industrialize, and commercialize by themselves. Knowledge became an essential asset in the innovation process.

Open innovation process help firms to scan the environment and to detect potential innovation. Open innovation is superior because it let the possibility to detect what Chesbrough qualifies as "false negative." Firms that have noticed the loss of efficiency of

their process of development of innovation tend to open it by specializing in one part of the process and then using external partners to develop the innovation or acquiring license for the use of the technology. The end of the internal process gave birth to four kinds of firms specialized in the innovation process: innovation explorers, innovation merchants, innovation architects, and missionary organizations, and two kinds specialized in the commercialization stage: innovation marketers and one-stop centers (Chesbrough 2011, pp. 35–42.).

Innovation explorers specialize in generating innovation, performing the R&D discovery function. Many of these firms are spin-off of the previous internal R&D lab of large firms. Innovation merchants focus on property rights, they innovate by purchasing innovation developed by other firms or by combining this innovation with their internal resources to sell the technology outside. Innovation architects act as brokers between various companies selling a specialized set of services to connect actors in the same field. Innovation missionaries innovate to attain a goal and no to reap profits, for instance the community of practices in open software development. (Carayannis Elias, 2013, pp. 238-240)

Conclusions

Managing and organizing open innovation in SMEs is quite specific, and the lessons learned from open innovation in large firms cannot be transferred to the context of SMEs. This renders the need for a specific approach on open innovation in SMEs even more urgent. Open innovation cannot be considered in isolation from the broad strategic objectives in small firms. The benefits of open innovation-based business model changes differ from the classic open innovation benefits identified for large firms.

Developing an open innovation network requires that partners manage the balance between internal management of the company and external management of the network. Open innovation means openness in communication and in reporting among innovation partners. Partners must trust each other on charging a reasonable price for the products or services they offer to innovation partners in the network.

A business model describes how an SME creates value for a particular customer group and how it captures a portion of that value. Most of the small firms that collaborate intensively do with value chain partners and less with technology partners. Small firms in low- and medium-tech industries start cooperating with partners when they discover new business opportunities, usually based on market or customer insights. Developing technology can be very important in realizing the business model, but it is always a supporting activity. Good business models also guarantee profitability. The SMEs who innovate together with partners significantly increase profitability. There are many ways open innovation helps in executing business models with higher profitability. The main message of open innovation model is to incite firm to increase their search of innovation opportunities. This behavior of search is still a characteristic of the largest firms. Many SMEs have not yet developed such a search behavior and are still constrained by their lack of information about market or the fact that they do not need to innovate. The incitation to increase the innovation capabilities is still a good recommendation. However, at the same time, public policy should take into account the difficulties to innovate for SMEs and incite them to develop more incremental innovation than radical projects to encourage them to overcome the difficulties of the innovation project.

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