

Motivations, Success Factors and Challenges of Open Innovation for Start-Ups

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ABSTRACT

The purpose of this paper is to clarify the concept of open innovation and to develop insights on how Open Innovation can benefit young entrepreneurs who are in the process of creating their own start-up company. It discusses the reasons and motives of why young start-ups are encouraged to adopt open innovation practices. Moreover, the success factors and challenges that start-up face that implements open innovation practices are vital for all entrepreneurs to study as via open innovation start-ups can overcome the initial barriers that most start-ups face. This paper focusses on different dimensions of open innovation for young entrepreneurs – Start-ups and Open Innovation, Antecedents of Open Innovation, Success Factors and Challenges - and serves as an information guiding tool for young entrepreneurs to understand various notions of open innovation so they can adapt their business before an open innovation practice can be successfully implemented.

Keywords: Open innovation, Entrepreneurship, Students start-ups, Entrepreneurial motivation

INTRODUCTION

One of the biggest challenges that small and medium enterprises face is the need to follow a continuous growth-path, particularly essential for Start-ups (Rexhepi et al., 2019). Furthermore, global challenges force companies to look for even smarter ways to grow (Rexhepi et al., 2019). If entrepreneurs agree with the idea that not all smart people work for their company, the embracement of the paradigm of ‘Open Innovation’ is a logical step. Open innovation assumes that ‘knowledge beneficial for a company is widely dispersed inside and outside the organization, and therefore companies need to collaborate with external parties in order to be successful and achieve a competitive advantage’ (Chesbrough, 2003, p. XXV).

Open Innovation has become a trending topic across the globe. Bogers, Chesbrough and Moedas (2018) state that open innovation might be the answer for some of the significant challenges the world is facing today. Penin et al. (2011), expresses that all kinds of companies, both multinationals, and SMEs, who embrace the open innovation strategies can receive the many potential opportunities connected with open innovation. The first time the idea of open innovation was introduced was in 2003 when Henry

Chesbrough coined the term ‘Open Innovation’ to describe the process of ‘the purposive inflows and outflows of knowledge to accelerate internal innovation’ and for external use of innovation in the expansion process to other markets (Chesbrough et al. 2014). In other words, the use of internal and external ideas for innovation as well as the use of internal and external commercialization channels. Consequently, all kinds of organizations have opened their networks, organizational structures, evaluation processes and knowledge management to third parties (Chesbrough, 2003, p. XXVI). Accordingly, the massive interest of companies, governments, universities and other involved institutions for open innovation is according to Bogers, Chesbrough and Moedas (2018) potentially good news for Europe; with its strong technical and scientific bases. In this respect, many of the new technologies currently being developed in Europe are in the early stages of development, and it is not clear if and how these technologies will lead to success (Bogers, Chesbrough and Moedas, 2018). However, (Penin et al., 2011) warns that open innovation creates besides new opportunities also new challenges for practitioners of open innovation.

The purpose of this paper is to clarify the concept of open innovation and to develop insights (success factors and challenges) on how Open Innovation can benefit young entrepreneurs who are in the process of creating their own start-up company. It discusses in particular the reasons and motives of why start-ups are encouraged to adopt open innovation practices.

START-UPS AND OPEN INNOVATION

Starting your own business has become more and more popular because of easy access to new technology and new markets that are accessible for Start-ups (Osterwalder and Pigneur, 2013). A start-up is a company, a partnership or temporary organization designed to search for a repeatable and scalable business model (Dabic et al., 2016). Additionally, Caputo et al. (2016) add that start-ups are an essential enabler of economic growth and are a primary source of newly created jobs. Furthermore, start-ups bring innovative products and services to the market based on new technologies (Caputo et al. 2016).

However, despite the growing literature on open innovation, so far, there has been little discussion on how start-ups can benefit from open innovation (Usman & Haverbeke, 2017). Van de Vrande et al. (2009), noted that the open innovation practices used by medium and large companies cannot be directly applied by small companies and start-ups in the same way. For example, start-ups have to work with limited technical and financial resources while developing commercially promising technology; these limitations trigger them to develop simple but technically sound innovations. Large companies, go through an extensive and expensive process to develop a product that will satisfy both the technicians and commercial departments of the organization, which results in a longer time-to-market and higher costs (Usman and Haverbeke, 2017). It can be concluded, following the work from Chesbrough that collaboration between an SME and a large company might results in positive gains for both collaborators because they complement each other’s weaknesses.

Yet, there is no guarantee that every open innovation practices by a start-up will be successful, and it is a long and complicated way for start-ups to start from scratch and become a profitable and sustainable business (Usman & Haverbeke, 2016). Caputo et al. (2016), states that despite the success-potential, many start-ups fail because firstly they lack access to critical market- and distribution-channels, secondly are not familiar with the operational, strategic and technical knowledge relevant for the industry, and finally start-ups lack the funds to invest in research and development. In the same way, Bogers et al. (2011), points out that open innovation is a necessity for start-ups in order to overcome “the liability of newness and the liability of smallness”. “Therefore start-ups look increasingly to the practices of open innovation to source external resources and knowledge and hence open innovation is even more important for start-ups than for large companies” (Usman and Haverbeke, 2017).

ADVANTAGES OF OPEN INNOVATION

In the past two decades, numerous studies have attempted to determine the advantages of open innovation. Van de Vrande et al. (2009) discusses that the most important reasons for companies to embrace open innovation are market-related motives. The authors argue that the open innovation methods are regarded as “a way to keep up with market developments and to meet customer demand, which eventually should result in increased growth, better financial results, or increased market share” (Van de Vrande et al., 2009). The advantages of open innovation are mentioned and summarized in table 1 and show an overview of the different findings of the researchers. Later in this paper, the specific advantages and challenges for start-ups will be addressed.

ANTECEDENTS OF OPEN INNOVATION

In the previous paragraphs, it was established that start-ups face different issues than larger companies. Since there is a relation between start-up organizational performance and the level of innovation, it is essential for start-ups to overcome their innovation weaknesses (Pellegrino, 2017). Enkel et al. (2009) argue that open innovation does not fit with every start-up company and every situation. Therefore all start-ups must assess themselves what motivates them to use open innovation within their start-up and what is it that they would like to reach. Van de Vrande et al. (2009) identified different motives for open innovation adoption, in his research drawing on a database of 605 Dutch SMEs, they showed that the most important reasons to adopt open innovation are market-related motives. Pellegrino (2017) observes that when one of the motives or desires identified by Van de Vrande et al. are present in a start-up, it might be the main explanation why start-ups embrace open innovation practices. Table 2 presents the motives and desires found by Van de Vrande et al. (2009).

Success Factors

Pellegrino (2017) argues that when a start-up decides to use open innovation practices, the start-up should first evaluate the success factors and challenges

Table 1. Advantages of open innovation.

Advantages	Explanation	Researchers
Improved development of new knowledge, and advanced technologies against lower costs	Entry to knowledge networks, setting up listening posts to speed up the innovation process	Kutvonen (2011), (Dahlander and Gann 2010), Chesbrough (2006), Usman & Vanhaverbeke (2016), Van de Vrande et al. (2009)
Market expansion, Market growth, increased revenues,	Shared development of technology can be used to expand to new markets, sell more advanced products and to serve better the needs of customers	Kutvonen (2011), Chesbrough (2006), Vanhaverbeke et al., (2009)
Improved learning processes	The knowledge transfer speeds up the capability to absorb new information	Kutvonen (2011)
More focus and control on the core knowledge process	Decisions must be made what to share/absorb and what to keep/develop	Kutvonen (2011), Van de Vrande et al. (2009)
Research as a core competence	A new type of companies that foremost focus on R&D as their core business model	Kutvonen (2011)
Exerting external control	Increased control/insight into the external environment by keeping up-to-date with (advanced) developments	Kutvonen (2011)
Access to talent	Companies find ways to connect with the expertise and skills of talented people	(Dahlander and Gann 2010)
Share risks	Companies spread the innovation risk and uncertainty among the collaborators; you cannot do it alone.	Kutvonen (2011), Van de Vrande et al. (2009)
Reputation increased	Companies benefit from the other companies reputation in the market	Usman & Vanhaverbeke (2016)

Table 2. Motives to adopt open innovation. (Van de Vrande et al., 2009).

Motives / Desires	examples
Control	Increased control over activities, better organization of complex processes.
Focus	Fit with core competencies, a clear focus of firm activities.
Innovation process	Improved product development, process-/ market innovation, integration of new technologies.
Knowledge	Gain knowledge, bring expertise to the firm.
Costs	Cost management, profitability, efficiency.
Capacity	Cannot do it alone, counterbalance lack of capacity.
Market	Keep up with current market developments, customers, increase growth.
Policy	Organization principles, management conviction that involvement of employees is desirable.
Utilization	Optimal use of talents, knowledge, qualities, and initiatives of employees.
Motivation	Involvement of employees in the innovation process increases their motivation and commitment.

for open innovation to check if the right conditions for open innovation are present. Durst and Stähle (2013) identified in their literature study several success factors of open innovation. These success factors can be grouped along the following dimensions: relational issues, people, governance, facilitators, resources, strategy and leadership, culture, and process. Durst and Stähle (2013) state that these antecedents enable an open innovation within a start-up. Some of these factors can be influenced and altered by the entrepreneurs. Unfortunately, some other antecedent is related to the relational issues, and are highly depended on the partner selection and hence are difficult to influence. In general, most of the antecedent are factors that start-up can manage and improve, henceforth the chance of successful open innovation practice can increase.

Challenges

Earlier in this paper, the advantages and some challenges of open innovation were discussed. Van de Vrande et al. (2009) concluded that start-ups and SME face numerous challenges; some were already mentioned by Chesbrough et al., (2014). The main barriers for start-ups mentioned illustrated by Van de Vrande et al. (2009) are the organizational and culture-related issues that typically emerge when two companies start working together. Furthermore, the balance between open innovation practices and the day-to-day management tasks have a negative influence on the success of open innovation. Interestingly Van de Vrande et al. (2009) notes that the administrative burdens increase when the start-up receives governmental subsidies or grants. To sum up, every open innovation practice will create its own unique combination of antecedents and challenges between a start-up company and collaborating partners, therefore being able to adapt to challenges may be of use as from the forming of the startup.

CONCLUSION

The purpose of this paper was to clarify the concept of open innovation and to develop insights on how open Innovation can benefit young entrepreneurs who are in the process of creating their own start-up company. Studies in this review employed, show that there is not a generally accepted definition of what open innovation is and how it can be applied to companies in general and start-ups in specific. Additionally, it was noted that most studies in the field have only focused on open innovation using the perspective of the larger company. Very little was found in the literature on the start-up perspective. However, a few writers, for example, Van de Vrande and Vanhaverbeke (2017) have published data focusing on the start-up perspective of open innovation. These studies were helpful in understanding the motives and the advantages and challenges that start-ups face when they think about implementing open innovation practices.

Furthermore, this paper has discussed the reasons and motives of why start-ups are encouraged to adopt open innovation practices. The case-studies published by Usman and Vanhaverbeke were significant examples of how open innovation could work out successfully for small start-ups. Moreover,

the success factors and challenges that start-up face that implements open innovation practices are vital for all entrepreneurs to study as via open innovation start-ups can overcome the initial barriers that most start-ups face. Taken together, the open innovation paradigm should be in the mindset of every entrepreneur right from the start of the development of the business idea and the implementation of the business model, so consequently, the chance of a profitable and sustainable business future will increase for the start-up company.

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