

CORPORATE STRATEGY BASED ON OPEN INNOVATION

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Abstract

The paper deals with Open innovation (OI) as a powerful tool for corporate strategy development. The goal of the paper was to prepare OI framework that would facilitate OI based corporate strategy elaboration for a professional service company and thus demonstrate viability of this approach.

Based on the conducted research and interviews with the employees and external parties, the authors suggested a framework that consisted of four-step process that enables incorporation of OI into corporate strategy of service-oriented company. The authors arrived at conclusion that the process of corporate strategy development which is based on OI should involve (i) defining clear goals, (ii) forming innovation team, (iii) creation of innovation model and (iiii) involving external parties. In addition, barriers that limit the collaboration between the company and external participants in the innovation ecosystem were also specified. The results were validated on the pattern of regional branch of a global consultancy company.

Key words: Open innovation, innovation strategy, innovation model, open innovation processes

JEL Code: A23, L25.

Introduction

Innovation represents a powerful tool how to pursue customer values to build a competitive advantage. Due to increasing interconnection of the world, human capital is moving around the world, making hard to capture all the innovative values. As a result, the model of purely internal R&D processes changed, and the firms are seeking for new ways to innovate and stay ahead of their competition. The shift away from the close innovation model and allowing access for external ideas is named Open Innovation (OI) (Chesbrough, 2006). The aim of OI is not only to open internal processes, knowledge or intellectual property (IP) to external subjects, but also to enable company departments to cooperate and bring new ideas from outside and by this way push ahead their technology, paths to new markets or innovation processes. Since its discovery, OI has become a standard innovation process. OI concept was adopted by variety of organizations, varying from high tech to consulting companies or from large corporations to

small and medium sized companies. Based on current literature search the authors identified the gap, which rests in the absence of clear identification of factors that influence OI processes. It enabled the authors to formulate following research questions: (1) *What are the factors that influence OI process?* (2) *How can the company leverage OI type when designing OI strategy?* The main contribution of the paper is the analysis and evaluation of current innovation processes and OI factors to be applicable in the company with future integration into the innovation program.

1 Research methods used

The basis for study was a literature review to collect all the necessary information needed to prepare the outline for interviews. Furthermore, ethnographic research was used. Prevalent part of data, which were processed in the study, were collected from interviews with employees of the selected company and representatives of external parties such as start-ups or academic staff. The interview was always conducted between the authors and one respondent in form of an intensive interview. Due to addressing sensitive topics that might be part of the expertise of the company, the form of the interview took place in a form of interview in a quiet and isolated room to preclude from leakage of sensitive information. Average duration of each interview was 50 minutes. The minority of interviews were also conducted through a video-call interview due to remoteness of the interviewees. Additionally, two interviews were conducted off record due to the confidentiality (employees of the company). The interviews with the representatives of the examined company were conducted on the premises of the firm whereas the interviews with external parties were conducted at respondents' workplace. The public data included annual reports, official websites, online articles and interviews with responsible innovation leaders. The data collected were used to define OI key pillars, which might become key building blocks for corporate strategy elaboration. Eventually, the authors applied participative observation thanks to their consultant position in the company. It enabled the authors to observe the processes proceeded within the organization and make their own judgement. Some of the participant were selected according to the snowball principle – several respondents were chosen after conducting an interview with the director who recommended other participants due to their expertise and close cooperation with emerging trends such as Industry 4.0 or working closely with a start-up or similar projects. To avoid bias, the authors decided to select lower as well as higher grades of the employees within the company; therefore, the authors' sample of the current employees included intern, consultant, senior consultant, and manager and director positions. The authors also included a contractor (senior manager grade) in the sample who

simultaneously ran a start-up to see the direct link between an employee of the company and the owner of a start-up. External parties were added to the sampling to fully understand the possible participants of OI process. To exemplify functionality of the model case study taken from actual consultancy practice was used.

2 Open innovation paradigms

R&D activities have changed significantly since the last century due to three important factors (Trott & Harmann, 2009): (i) technology explosion: 90% of our present technology knowledge has been generated during the last 55 years, (ii) shortening technology cycle, (iii) globalization of technology specifically increased technology transfer in form of licensing or strategic alliances.

As a result, OI phenomenon, a term that was first coined by professor Henry Chesbrough (2003, p. 43), has arisen and is defined as: *“OI means that valuable ideas can come from inside or outside the company and can go to market from inside or outside the company as well. This approach places external ideas and external paths to market on the same level of importance as that reserved for internal ideas and paths to market during the Closed Innovation era.”*

Nevertheless, the definition of OI reflects several approaches, as it is a complex developing topic and process and therefore there has not been a coherent definition yet. Beside the first definition posted by Chesbrough in 2003 there has been various ones posted by Chesbrough, Vanhaverbeke & West (2006). Agreed that OI should reflect to use inflows and outflows of knowledge to foster internal innovation and furthermore to grow the market where innovation that is more external could be discovered. The emphasis lies in transforming ideas into knowledge as the main element. Another point of view is pinpointed by West & Gallagher (2006) seeing in as a systematic encouraging and exploring process of internal and external sources for innovation through multiple channels. These innovation opportunities are afterwards integrated into firm capabilities. Subsequently the phenomenon of OI gained attention on both levels academic as well as business (Chesbrough & Brunswicker 2013, Schroll & Mild 2011) due to its increasing potential in pursuing innovation.

2.1 Open innovation process, platforms and ecosystems

The innovation process within a company is a complex and structured action plan ensuring an innovation to run until it is successfully implemented. However, the understanding of the process determines the approach of establishing it. In this subchapter, we shall look how OI influences the innovation process, understand and explain each of the methods. Chesbrough

created the model of innovation funnel with open and closed boundaries of the firm. Gassmann & Enkel (2004) furthermore studied the process and identified three core processes: (i) outside – in process which rests in the integration of external sources (ideas, knowledge, customers or suppliers), (ii) inside – out process to be aimed at introducing own sources to the outside market, monetizing IP and other forms of licensing (iii) couples process to be focused on leveraging both, outside – in and inside – out process which finally creates value within the network. Beside the process, there are platforms, which are tied with the environment where external innovators transform their knowledge when opening the product to external parties. The key point to determine is to set up the right business model to generate revenues from the established platform. As a result, it is necessary to determine who will control the direction of the technology development, the control of financials and the control of end-customer relationships. Boudreau and Lakhani (2009) distinguish between three platform categories: (i) integrator platform model: the company incorporates outside innovations and sells the final products to customers, (ii) product platform model: external innovators build “on top” of the platform and sell the resulting products to customers, (iii) two-sided platform model: external innovators and customers are free to transact directly with one another as long as they also affiliate with the platform’s owner.

Innovation ecosystems play a significant role to increase the value believing that no single firm could have created it by itself. The cooperation of the companies is based on the combination of each firm’s offering with the aim to provide a coherent and customer-oriented solution (Adner, 2006). Depending on others has important strategic implications. The time element determines getting to the market ahead of your rivals just in case if your partners are prepared when launching. Secondly, the aspect of resource allocation must be considered due to critical bottlenecks that may reside outside the own organization. Therefore, the comparison of allocating resources among partners (both externally and internally) is necessary to the project. Yet, collaboration in such an ecosystem creates a dependence on others that might affect the overall success and it bears several risks that the company must take: (i) Initiative risks: familiar uncertainties of managing a project, (ii) interdependence risks, which ensue from the coordination with complementary innovators, (iii) integration risks which refer to adoption process across the value chain. Evaluating ecosystem risks holistically and systematically results in setting more realistic expectations, define a better innovation strategy, leading to more effective implementation and innovation that is more profitable.

2.2 Open innovation strategy

OI encompasses a new model of collective creativity including innovation communities, ecosystems or networks that builds a new approach called open strategy (Chesbrough & Appleyard, 2007). This novel approach constructs a tension with traditional business-level strategies and the key objective is to balance this tension and capture the value from the open initiative. The open initiative is firstly characterized by the reliance on assets outside the firm's boundaries (inclusion) and secondly by (free) access to projects results by outsiders (transparency). When focusing on open strategy, the critical spotlight lies in the firm's dynamic and the ability of companies to remain economically independent while adopting the open approach to innovation (Appleyard & Chesbrough, H. W, 2017). Companies need to evaluate the rents from closed-closed to open-open. While a closed – closed strategy temporary benefits monopoly profits by leveraging intellectual property rights and high barriers to entry, the open – open strategy gains mainly because the companies are not only the creators but typically on the consumer's site of the output. From the top management's perspective, employing OI strategy represents an immense obstacle due to the company's culture and communication of the innovation process within the company where internal sharing should be firstly implemented. One of the most crucial factors influencing OI is to prepare the company on the organizational level and define its competences. This requires a thorough analysis and support from all level of the organization. (Chesbrough & Appleyard, 2007).

2.3 The specifics of OI in Service industry

OI is implementable not only in traditional industries as manufacturing where the focus is more product-oriented or in high-tech industries as IT where innovation is more tangible and visible but also in services industry. Services sector represents more than two-thirds of economic activity and four-fifths of growth in recent years in OECD countries (Delova-Jolevska & Andovski, 2014). The main accent lies rather on innovative service than on the development of new products or technologies. The best way to foster innovation in the service industry is in the form of a partnership: It preferably deals with two types of partnerships: (i) science-based (technological knowledge) and (ii) market-based (better specifying and identifying market requirements and spread costs of innovation process). Concerning science-based partnership, companies might collaborate with universities and research institutions to gain access to basic knowledge, either to better exploit existing capabilities (HR, finance, marketing) or explore new revenues for innovation and growth.

In terms of market-based cooperation, Chesbrough (2011) suggested that companies should cooperate closely with customers to develop new solutions in the innovation of services to

identify where overlapping between the problem to be solved and the provider's expertise is. Nevertheless, since services are intangible in their nature, it may be hard to identify right principles, which may be conducive to effective collaboration in innovation process. This could be tested via pilot project where both parties work closely together. Mina, Bascavusoglu-Moreau & Hughes (2014), also supported the necessity of collaboration, which proceeds between a company and the customer. The result of their study suggested that the service innovation tended to put higher emphasis on human capital factors. They also proved that another important factor referred to appropriate organizational structure. Companies focusing on service offering are more challenging to supervise and monitor on delivery given the character of intangibility and simultaneity. Interestingly, service companies are more relationship-oriented which represents another obstacle to the innovation process.

A special case of service industry companies is knowledge-intensive business services firms (KIBS) which rely heavily on technical or professional knowledge. The term was coined by the European Commission in 1995 where the core business of such companies is defined as providing knowledge-intensive expertise for other organizations (Miles, Kastrinos & Flanagan, 1995). Companies focusing on the product portfolio in R&D, IT or engineering services, represent technological knowledge. The other group of KIBS companies are reliant on traditional professional knowledge – legal, accountancy, and marketing or management consultancy services. The innovation processes of KIBS were further analysed and discussed in the work of Miozzo, Desyllas, Lee & Miles (2016) where the evidence was found that these companies did not consider appropriate mechanism like patents, copyrights or trademarks as essential factors in creation of value from innovation. The emphasis is preferably placed on the innovation collaboration to create knowledge assets regularly and jointly with external partners. Importance of cooperation with clients goes together with the importance of employing formal suitable mechanisms. Two underlying risks like knowledge leakages and the imitation by competitors were identified. The transfer of knowledge should be accompanied by a careful strategy for protecting the firm's knowledge. Moreover, excessively high level of formal appropriability should be reduced to modest level to prevent conflicts of ownership of jointly created knowledge.

3 OI based corporate strategy development

3.1 Company starting position

The analysed company is a well-established global brand that offers services in audit, financial advisory, consulting, risk management, tax, legal and related services to clients in the public

institutions, major companies, fast-growing companies or start-ups. One of its regional organizations in Central Europe is group of separate legal entities that form a regional branch with more than 6 000 employees in 44 offices spread across 18 countries. The company is already applying several modes of OI such that are nicknamed as hackathon (Young Guns Hackathon) or the conference (SingularityU Czech Summit) where the company takes part as the main partner. These initiatives are not organized on a regular basis, as the conference usually takes place in different countries every year and the hackathon were an event built on the conference. Correspondingly, as observed in the company, there is no OI model that would continuously pursue the cooperation with external parties on a long-term basis. One of the managers sees the value of designing an overview of OI model, which would help foster different phases of the innovation process.

3.2 Open innovation framework

OI is increasingly attracting interest of the global Headquarters by providing new customer experiences, utilizing start-ups, cutting edge ideas or leveraging technological developments. However, language and cultural barriers combined with inadequate innovation mechanisms to promote cooperation with external parties made it hard to turn OI into successful initiatives of business strategies. By identifying these challenges, the global Headquarters has defined several key pillars to enhance the adoption of OI practices:

- OI strategy design – based on the latest technological and business trends.
- Technology scouting – research to match start-ups with corporation to match new waves of business cooperation.
- OI organization and process creation – including venture capitals and local incubators.
- Business intelligence and technology monitoring – enabling informed strategic decisions and early disruption identification.

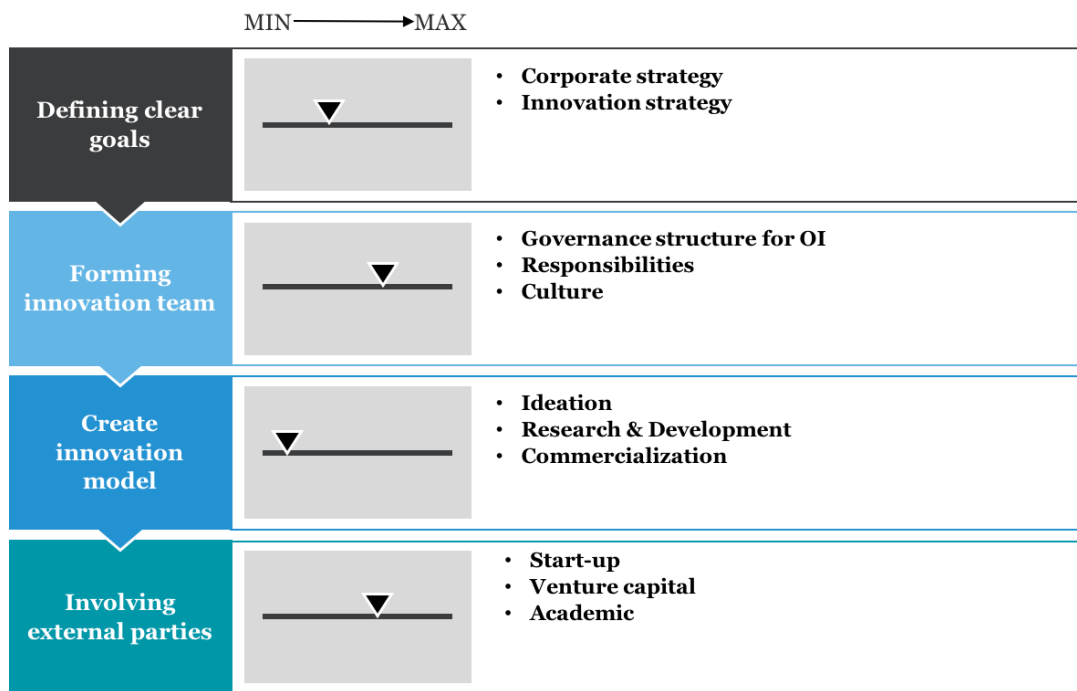
The company strategy for complex collaboration projects is to connect to other companies, align strategy of the partners, define partnership value proposition and validate business case and operational model.

- Connect with other corporations – screen and analyse the environment, identify and contact potential partners. Identify the drivers and key challenges that might occur for OI.
- Align strategy of the partners – develop a clear partnership strategy and realizing synergies.

- Define partnership value proposition – provide valuation, intellectual property and legal support to enhance the partnership and make every involved party satisfied (facilitate a win-win situation). The outcome should be joint value proposition and market approach.
- Validate business case & operating model – align with partners about the financial model and define a structure for cost- and revenue split. Determine terms and conditions of the operating model, set up clear objectives and a roadmap to ensure the implementation.

Fig. 1 outlines key building blocks of OI framework. The Fig. 1 illustrates also the level of each step that the authors observed during the research. The level is shown by a bar indicating the MIN and MAX level showing the current level of each of the suggested element.

Fig. 1: OI framework



Source: Authors' research

3 Results and discussion

The authors made the point to propose a strategy framework that involved OI process. They designed a framework with different insights from the employees and external parties that might be part of the new network. In general, the trigger point of OI initiative has its roots in something new that could improve the current business model or offer clients new ways of perceiving current service offerings. It is mandatory that such an offering must inevitably result in the increase the customer's satisfaction. Typical examples are the improvements in supply chain process optimization, cost reduction or adaptability to external environment change. This is

accomplished by developing new technologies, gaining new information or creating know-how, collaborating with suppliers for complementary products. There are several factors influencing the design of OI strategy, nevertheless, the essential criteria when constructing the strategy appear as the most important: (i) outlined goals, (ii) effective innovation model, (iii) reliable partners as the base for the further collaboration and (iiii) experienced innovation team.

The authors proposed a framework (Fig. 1) that is a combination of data gathering, results categorized according to themes derived from interviews with different representatives and the set of best practices gathered from both regional offices and external companies. The five-step approach offered by the authors provided optimum balance between operability and demandingness of implementation, which made this approach attractive for practical applicability. Fig. 1 also illustrates the level of each step that the authors observed during the research. It showed the strongest part in the innovation team and an already established relationship with external parties. Nevertheless, the lack of a clear and vital innovation model as well as a roadmap were found to be the weakest factors.

Conclusion

The goal of the paper was to propose a framework, which would incorporate OI approach to corporate strategy development. To accomplish this goal the authors conducted study with the aim to propose a strategy supporting the OI initiative. To be able to prepare company innovation strategy, the authors both formulated and responded to research questions: *What factors are influencing the OI process? How can the company leverage this innovation type when designing an OI strategy?* The main factors were to align the innovation goals with the vision and overall strategy of the firm to facilitate a clear understanding of which targets to achieve and how cross-consulting teams could be beneficial and collaborative. The authors suggested to conduct a workshop to align all the elements necessary for the cooperation within the company. Consequently, forming the operable team with a strong leader was essential for the OI process – the authors observed a strong and experienced leader, but lack of more open-minded people not tapped from the environment of large corporation. As a result, identifying the needs and motivations of a creative soul led to the suggestion of approaching more ambitious and creative people outside the company.

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