



Management Factors Influencing Open Innovation Integration and Appropriation of Returns

Esmail Moayed

Doctors of philosophy, Industrial Management, University of Rockhampton, Malaysia.

Abstract: *With innovation becoming the source of growth for major businesses, there has been a strong debate among the academic and the industrial fraternity relating to managing different channels of innovation. This thesis attempts to recognize the different managerial factors associated with realizing the benefits from open innovation. The research focuses on the different strategies of handling open innovation process in different organizations, trying to gain profits from innovation. A broad qualitative study has been attempted to understand the different factors playing a role in this regard and finally a set of guidelines are proposed to improve / maximize the utilizing open innovation.*

Keywords: *Open Innovation, Management Factors, Firms*

INTRODUCTION

Open innovation concept has been coined based on the principle that the firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology (Chesbrough, 2003). As the name implies, it demands an open mindset to view beyond the considered organizational boundaries. Though the currently most popular widely practiced closed innovation model has different set of rules, they exist in practice in most of companies and still payoff for their efforts.

In this economically challenging business environment, even large organizations are reluctant to make huge investments in their internal R&D, because the results of innovations made are not successful as expected or the results achieved from the R&D are quite different from that forecasted (Pisano, 2006).

These extensive studies on the theoretical implications have left the practical implementation studies of open innovation and understanding of how to benefit from open innovation remain under researched (Christensen et al, 2005).

Problem Description

Most of the companies, even today believe that Intellectual Property rights (IPs) is the primary source for realizing returns from the environment made for innovations. It is still true but open innovation concept has the difficulty in maintaining the IPs, because of its collaborative nature and the inability to find the real owner of innovation (Nelson, 2004). To be clearer, consider the examples of open innovation platforms such as Yet2.com, Incentive and NineSigma, in which, the companies will post their problems which will be solved by the knowledgeable users from all around the world. In this case, the creation of advantage through IPs is highly difficult for the companies using these innovations, as the idea has been developed by both internal and external researchers. Hence the realization potential of the companies from these innovations reduces drastically (Utterback et al., 1993). Hence the realization potential of companies from these innovations

reduces drastically. There is no clear understanding of how to realize benefits from open innovation and measure the profitability of such processes. Also, historically there has been scarce attention given to the managerial implications of open innovation (Chiaroni et al., 2010), the adoption of open innovation practices into the process of research and development which leads to the insufficient understanding of how to realize returns from open innovation practices. It is of high need to adopt the open innovation practices into R&D since the high investment R&D hubs and innovation centers demonstrated the insufficiency to develop idea for the rapidly changing competitive environment (Utterback, 1994). Hence the companies are keen to adopt open innovation practices into R&D and understand the realization of returns from open innovation without generating any internal conflicts. Hence in this context we define appropriability as the ability of a company to successfully integrate the open innovation process and closed internal processes thereby realizing return from open innovation processes and closed internal process thereby returns from open innovation (Winter, 2006). The object of this paper is to identify the factors associated with the integration of open innovation and closed internal process that affect appropriation of returns from the investment made on open innovation. The process of open innovation has to be clearly understood to synthesize the factors that can affect and favor the realization of returns (Eisenhardt et al., 2007). Moreover, the process of implementing open innovation has problems with the intellectual property rights, managing external resources and the processes that will integrate the open innovation and closed internal practices (Maula et al, 2006). While some factors are vital for new knowledge sourcing and generation, some other factors are keys for appropriating returns from open innovation. Hence a clear understanding of the need for appropriating from open innovation, sustaining the innovation and thereby enhancing the returns from it is necessary (Perkmann et al., 2007). Though open innovation is a concept dealing with the use of resources from outside the organization may cause conflicts. There is demand for the organizations to develop process that will integrate the open innovation process with the closed internal process so as to maximize the acceptance and thereby benefits (West et al., 2006). But the integration of open innovation practices and closed internal processes and its managerial implications will demand understanding of the internal processes of company (Almirall et al., 2010). To be specific, the article aims to answer the following research question:
How the factors associated with the integration of open innovation and closed internal processes influence firms on appropriating returns from open innovation?

Research Methodology

This paper uses the inductive reasoning approach as the research methodology. This research concentrates on qualitative analysis of a small sample of organizations, across different industries, which are deemed to be innovative by the realms of the paradigm set by us. The qualitative approach is the suitable method for inductive approach, since the observations are the prime source for inductive research methodology. The interview has been semi-structured and mostly had open ended questions to get the broadest perspective possible with the study. We have interviewed persons who have worked with a wide range of industries to get a panoramic view of the subject. The definition of returns with respect to this thesis is prime importance to understand the analysis of the data collected from the interviews. The term realizing returns in this case refers not only to obtaining sufficient profits from the open innovation, which can be implied as:

1. Achieving gain or profit from the investment made on open innovation
2. Sustaining the innovator capability to realize continuous returns
3. Surviving the market competition and followers

Open ended questions allowed the interviewer to probe deeper into the initial responses to gain more detailed answer for questions (Wimmer et al., 1997).

Result

According to our understanding of the returns and the research on appropriating the value from open innovation, we conclude that the following factors are essential.

1. The recipient attitude towards accepting and valuing the open innovation ideas.
2. A real understanding of the complementary assets, includes upstream (manufacturing, design etc) and downstream innovation processes (marketing and distribution).
3. A clear innovation strategy, which defines the approach towards open innovation.
4. The ability to communicate and share the tacit knowledge not only within the domains but also between the companies. Hence bridging of knowledge management and open innovation is crucial for the successful appropriation of returns from open innovation.
5. Appropriability regimes, either right or weak- depends on the strategy of company.

Though the theories mentioned in the literature review explains the appropriation process, some of them miss the information technology revolution in this twentieth century. These factors will help to fill those missing gaps in theories and lineate the findings, taking into consideration technological changes and the change in attitude of organizations.

Finally, we wish to provide some implications for the managers practicing innovation. If the company is looking for ideas with the development of already existing product, then the level of considering open innovation should be limited, unless the product is directly related to the customers. It is logical that internal resources have developed the product and should have better understanding of the products and its development. But on the other hand, if the company feels that internal resources are not sufficient creating new ideas for the product then open innovation is an ideal choice. Also the companies should be aware that communicating the already existing technologies and products will be difficult and requires tremendous effort. So if the companies are looking for radically new ideas then open innovation users will provide different perspectives that the company will never foresee.

This idea with regard to the new ideas for products can be extrapolated to the business model innovation and diversification opportunities. It will be extremely difficult for the companies to consider the business model innovations while performing the practices of organization. In that case, outsider view will definitely provide a tremendous opportunity to identify new businesses and opportunities. These guidelines may or may not be suitable for different kind of industries. But we suggest that these principles will help achieve appropriation of the value from open innovation, provided the open innovation practices are tailored to the needs and capabilities of company.

References

1. Almirall.E, Casadesus.R, 2010, open versus closed innovation: a model of discovery and divergence, *Academy of Management Review*, vol. 35, pp. 27-47.
2. Chesbrough.H, 2003, open innovation: the new imperative for creating and profiting from technology, Harvard Business School press.
3. Chiaroni.D, Chiesa.V, Frattini.F, 2010, unravelling the process from closed to open innovation: evidence from mature, asset intensive industries, *R&D Management*, Vol.40, pp.222-245.
4. Christensen.J, Olsen.M, Kjeer.J, 2005, the industrial dynamics of open innovation – evidence from the transformation of customer electronics, *Research Policy*, vol.34, pp. 1533 – 1549.
5. Eisenhardt.K, Greabner.M, 2007, Theory building from case studies: opportunities and challenges, *Academy of Management Journal*, vol.50, pp.25-32.
6. Maula.M, Keil.T, Salmenkaita.J, 2006, open innovation in systemic innovation context, in: Chesbrough, H, Vanhaverbek, W and West, J, open innovation: Researching a New paradigm, Oxford: Oxford university press.
7. Nelson.R, 2004, The market economy and the scientific commons, *Research Policy*, 455-471.

8. Perkmann.M, Walsh.K, 2007, university industry relationships and open innovation: towards a research agenda. *International Journal of Management Reviews*, Vol.9, pp.259-280.
9. Pisano.G, 2006, *profiting from innovation*.
10. Utterback.J, 1994, *Mastering the dynamics of innovation*, Harvard University Business School Press, Boston, MA.
11. Utterback.J, Suarez.F, 1993, innovation, competition and market structure, *Research Policy*, Vol.22, pp.1-21.
12. West.J, Gallagher.S, 2006, Challeng of open innovation: the paradox of firm investment in open source software, *R&D Management*, Vol.36, pp.319-331.
13. Wimmer.R, Joseph.D, 1997, *Mass Media Research: an introduction*. Belmont, MA, Wadsworth.
14. Winter.SG, 2006, the logic of appropriability: from Schumpeter to Arrow to Teece, *Research Policy*, Vol.35, pp.1100-1106.