

# Chapter 4

## Dimensions of Researches for Open Innovation in SMEs

**Hakikur Rahman**

*Institute of Computer Management and Science, Bangladesh*

### ABSTRACT

*Innovation has been treated as a recognized driver of economic prosperity of a country through the sustained growth of its entrepreneurships. Moreover, the recently coined term open innovation is increasingly taking the lead in enterprise management in terms of value addition and knowledge building. Foci of academics, researchers, and practitioners nowadays are revolving around various innovation models, comprising innovation techniques, processes, and strategies. This chapter seeks to find out open innovation research and practices that are being carried out circumscribing development of entrepreneurships, particularly the sector belonging to the small and medium enterprises (SMEs) through a longitudinal study.*

### INTRODUCTION

Innovation is not any more just a research topics, but it has become a significant driver for prosperity, growth and sustained profitability to global entrepreneurships. Innovation along its route to the current period exhaled new methods or tools in terms of products, processes or organizational management. As far as this literature review and research go, from its early inception inscribing issues of economic development (Schumpeter, 1934; 1942; 1950), patents and licensing (Von Hippel, 1988), organizational networking (Powell, 1990), process innovation (Davenport, 1993), co-opetition (Brandenburger and Nalebuff, 1996), management of intellectual capital (Grindley and Teece, 1997) till the coining up of its features in more familiar ways framing on the utilization of information technologies, such as open innovation (Chesbrough 2003a; 2003b), innovation never stayed stalled. Furthermore, due to opening up the innovation processes and combining internally and externally developed technologies and strategies to create economic value the innovation has crossed the boundary of closed innovation to open innovation (Rahman and Ramos, 2010; 2012).

The perception of open innovation has attracted considerable interest since Henry Chesbrough first coined it to capture the increasing reliance of enterprises on external sources of innovation. Although

DOI: 10.4018/978-1-7998-5849-2.ch004

open innovation has flourished as a topic within innovation management research, at the same time, it has also triggered debates about the coherence of the research endeavors pursued under this umbrella, including its theoretical foundations (Kovacs, Van Looy and Cassiman, 2015). However, we need to endow open collaboration researchers with new datasets that extent different contexts, as well as novel computational models and analytical techniques (Brunswick, Bertino and Matei, 2015).

Enterprises may open up their innovation processes on two dimensions. While inbound open innovation refers to the acquisition of external technology through open exploration processes, outbound open innovation describes the outward transfer of technology through the open exploitation processes. However, prior open innovation researches have focused on the inbound dimension, whereas the outbound dimensions have been relatively neglected (Lichtenthaler, 2009c). The concept of 'open innovation' has received a substantial amount of coverage within the academic literature and beyond. But, much of this seems to have been without sufficient critical analysis of the evidence (Trott and Hartmann, 2009).

Enterprises have to innovate to stay competitive, and they have to collaborate with other entities to innovate effectively. Although the benefits of open innovation have been described in many researches, however, those underlying mechanisms, as how companies can be successful open innovators have not been understood well. Progressively, a growing community of innovation management researchers started to develop different frameworks to understand open innovation in a more systematic method. Vanhaverbeke, Chesbrough & West (2014) provide a thorough assessment of research conducted on open innovation, as well as a comprehensive overview of what will be the most important, most promising and most relevant research topics in this arena. Chesbrough, Vanhaverbeke and West (2006), was the initial initiative to bring open innovation closer to the academic community. Since then, open innovation research has been growing in an exponential way and research has evolved in different and unexpected directions. As the research field has grown, it becomes increasingly difficult for young (and even experienced scholars) to keep an overview of the most important trends in open innovation research, of the research topics that are most potential for the coming years, and of the most interesting management challenges that are emerging in enterprises practicing open innovation.

Traditionally, firms used to prefer the so-called, closed innovation strategies in developing their own products internally, and with limited interactions with the external world (Lichtenthaler, 2011). In recent years, researchers and practitioners are showing interests in open innovation research and practices that are visible during the literature review in various publications, and conference proceedings. This has also been observed in contemporary literatures that innovation researches are shifting from the closed and controlled environment of the corporate entrepreneurs towards more open and flexible model, based on cooperation and coordination among various parties. Knowledge and new technologies are no longer remaining sole properties of major monopoly corporations (Caetano and Amaral, 2011; Westergren and Holmstrom, 2012).

In this aspect, the business sector belonging to the small and small enterprises (SMEs<sup>1</sup>) play important role in networking and making innovation clusters in association with universities and research houses, being recognized as major driving forces in the open innovation paradigm.

SMEs also play a crucial role in raising investments in spin offs, start ups, or research and development (R&D) and making countries more competitive, which is true for not only the European Union but also in other countries (European Union, 2005). Moreover, the majority of the developing and transitional economies have acknowledged that SMEs are the potential engine of economic growth and source of sustainable development, which are essential for industrial reformation, new job creation, and revenue generation of the population at large (Koyuncugil & Ozgulbas, 2009).

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