

# Chapter 11

## Empowerment of SMEs Through Open Innovation Strategies: Life Cycle of Technology Management

**Hakikur Rahman**

*University of Minho, Portugal*

**Isabel Ramos**

*University of Minho, Portugal*

### ABSTRACT

*Adoption of innovation strategies in entrepreneurship is an age old phenomenon, but inclusion of open innovation or collaborative innovation strategies in the business processes is a newly evolved concept. By far, most research reveals that the majority of successful global ventures are adopting open innovation strategies in their business proceedings. However, despite their contribution to entrepreneurship and national economy, the small and medium scale enterprises (SMEs) are well below the expectation level in terms of acquiring this newly emerged trend of doing business. Moreover, not much research is being conducted to investigate SMEs potencies, expectations, delivery channels and intricacies around the adoption, nourishment and dissemination of open innovation strategies. This research proposes a contextual framework leading to an operational framework to explore the lifecycle of open innovation strategy management activities focusing technology transfer (inbounds or outwards). It discusses a few issues on future research in empowering SMEs through utilization of open innovation strategies.*

### INTRODUCTION

While talking about successful entrepreneurship and value addition within an enterprise through open innovation (OI), one could realize that the innovation paradigm has been shifted from simple introduction of new ideas and products to accu-

mulation of diversified actions, actors and agents along the process (Chesbrough, 2003a, 2006a). Furthermore, when the innovation process is not being restricted within the closed nature of it, the process takes many forms during its evolution (Rahman & Ramos, 2010). Definition of open innovation has also adopted many transformations along the path, incorporating innovations within

DOI: 10.4018/978-1-4666-1957-9.ch011

the products, process or service of an enterprise to organizational, marketing, or external entities and relations. Nature and scope of agents and actors even varies widely within the innovation dynamics, when the open innovation techniques are being applied to enterprises, designated as the small and medium enterprises (SMEs) (Schumpeter, 1934, 1982; Davenport, 1993; OECD, 1992, 1996, 2005; De Jong et al., 2007).

Due to the open and collaborative nature of this newly evolved perception, the primary focus of this paper has been kept within open nature of innovation (a more recently evolved terminology, which is better known as crowdsourcing<sup>1</sup> innovation), but not limited to other collaborative innovation, though it is not easy to put a restrictive boundary between them.

Being new in the research arena, on one hand the concept of open innovation has been flourished very progressively within a short span of time (Chesbrough, 2003b; Chesbrough, Vanhaverbeke, & West, 2006; Gassmann, 2006), but at the same time, it has evolved through various growth patterns in diversified directions involving different factors and parameters (Christensen, Olesen, & Kjaer, 2005; Chesbrough & Crowther, 2006; Dodgson, Gann, & Salter, 2006; Gassmann, 2006; Vanhaverbeke, 2006; West & Gallagher, 2006). Furthermore, as this research is related to SMEs<sup>2</sup>, which are the steering factor of economic growth in the European countries, and especially in Europe where they comprise of over 98% (EC, 2008) of the entrepreneurships, the problem statements were constructed following multiple research studies along this aspect, though sufficient works towards the improvement of knowledge factors on SMEs development have not been found.

This research argues that to empower the SMEs through OI strategies, firstly the contextual framework need to be devised and then the operational framework has to be developed. The research also argues that the operational framework revolves around the life cycle of technology management activities that are either inbound to the enterprises

or outbound from them. Depending on nature, scope, transparency and efficiency of the life cycle, the open innovation will grow among and within the entrepreneurships. The more efficient and focused the life cycle will be the growth factor of OI strategies will reach towards fulfilling the operational framework. In this discourse, this paper has tried to discuss the contextual framework in relevance to the OI strategies as the background concept, and to support the main thrust of the paper, which is the life-cycle of technology management, it has tried to develop an operational framework as the entry point.

## **CONTEXTUAL FRAMEWORK**

Innovation is a way of performing something new. It may refer to incremental and emergent or radical and revolutionary changes in thinking, products, process development, or organizational development. Innovation, as seen by Schumpeter (1934) incorporates way of producing new products, new methods of production, new sources of supply, opening of new markets, and new ways of organizing businesses. Oslo manual (1992, 1996, 2005), after several adjustments has come into this argument, that innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations.

However, other scholars and researchers in the field of innovation, has put forward definition of innovation in various formats and perspectives. Some definitions or arguments are being included below:

*The creation of new ideas/processes which will lead to change in an enterprise's economic and social potential. (Drucker, 1998, p. 149)*

This research will look into the economic and social aspect of open innovation process, but at the

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