Chapter 77
Open Innovation: Opportunities and Challenges for SMEs

Hakikur Rahman
University of Minho, Portugal

ABSTRACT
With the advent of innovative technologies and multi-dimensional researches along the setting of entrepreneurship development, philosophy, context and business handling has been transformed from being traditional to innovative. Depending on diversity and nature of the transformation, innovation has been shifted from closed to open to crowdsourcing innovation. Ranging from small entrepreneurs to corporate business houses are being immensely benefited by the innovation techniques, especially utilizing information and communication technologies. However, the road to innovation, despite being a paradigm shift is not smooth and ready for many, particularly the small and medium enterprises who mainly deal with the clients at the outer peripheries of the social circle. This chapter synthesizes issues of opportunities and challenges for small and medium enterprises by carrying out a broad literature review and synthesis. Furthermore, the chapter will provide a few research hints to be applicable for researchers and research institutions.

INTRODUCTION
Innovation relates to transformation of processes, products or services (BlessingWhite, 2006; Chason, 2008) to create additional value and wealth (Beacham, 2006; Vaitheeswaran, 2007; Barker, 2008) leading to the benefit of community (Cox, 2008). In this aspect, the real growth of the importance of innovation activities has been linked with several simultaneously affecting societal phenomena, such as easier familiarization with the globalization, obtaining benefits from deregulation and liberalization of markets, utilizing the benefits from the ICT revolution, and adopting themselves with the dynamic changes in the demand patterns (Schienstock & Hämäläinen, 2001).

However, along the roadmap of innovation, inclusion of open contexts are becoming popu-
lar day by day. Success stories such as those of Google, Skype and Microsoft teach us at least one lesson – no one could ever know where the next big idea will be coming from! Experience shows that innovative ideas thrive when different disciplines or mindsets come together (Oxford Business School, 2008). Moreover, the contribution of the innovation systems approach to the open innovation perspective has been emphasizing the importance of external linkages for innovative success and the importance of innovation diffusion together with innovation creation. Studies on service innovations have confirmed the versatility of innovation sources. These studies have also brought up the significance of new patterns of thought and models of operation, in addition to technological innovations (Toivonen, 2004).

Business establishments have come to realize the importance of innovation for survival in a world of global competition (Sullivan, 1998; Hage, 1999). Furthermore, it has long been recognized that small and micro businesses have a vital role to play in the economy (Stanworth & Gray, 1991) with small business accounting for 99% of all businesses in the UK, and an estimated 3.7 million active businesses in 1998. Collectively, small and medium enterprises (SMEs) are responsible for 65% of employment and 57% of Gross Domestic Product within the UK (Madsing, 1997; Tonge, 2001).

The scenario is the same in other European countries. SMEs in Europe comprises of about 23M€ investment market that account for 99% of all businesses and represent 2/3rd of the total employment (Renaud, 2008). But, in spite of being key contributor to the global economy accounting for approximately 50% of local and national GDP, 30% of export and 10% of FDI² most of the SMEs communities are lagging behind promoting their products at the national level, and at the global level (OECD, 2006).

Innovation has many effects on SMEs in various school of thoughts in terms of economics. It lead them to evolutionary economics, institutional economics, new regional economics, the economics of learning and knowledge and the economics of innovation (Lundvall, 1999). Successful innovation is crucial for business success and SME growth through innovation underpins any region’s long term economic prosperity (Roper & Hewitt-Dundas, 2004). Innovation in SMEs leads to product innovation, as well as process innovation including providing impact in employment system. However, this proxy is relatively challenging, since the importance of innovations is not only due to the impact they have on employment, but also depend on other variables. Innovations have effects on other variables, such as turn-over, economic growth etc. Firms may also have made more than one innovation where the innovation-induced employment changes are counteractive, which result in little visible employment change (Nählinger, 2005).

A pioneer survey reveals that, when innovation is reported by SMEs themselves, and defined more widely in terms of service as well as manufacturing innovations, including process as well as product innovations, the frequency of product innovations seem lowest among peripheral SMEs, in aggregate form and even for both manufacturing and services treated separately (Keeble, 1997). It is a continuing debate about the role of SMEs in introducing fundamentally novel innovation than the large firms (Storey & Sykes, 1996), but they do have a greater ability to take incremental role in open innovation to niche themselves in better ambiance (Storey, 1994). Furthermore, SMEs can be a starting place of important innovations, which would then be commercialized by large firms, rendering to employment generation (Smallbone, North & Vickers, 2003).

In recent years, the contribution of SMEs to economic growth, job creation, innovation and promotion of enterprise has been widely recognized. While SMEs are important in terms of their overall share of GDP, it is also believed that many smaller firms lack both managerial and technical skills, which inhibits their effectiveness. Therefore, improving the competitive advantage