

Chapter 83

Collaborative Networks: Challenges for SMEs

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ABSTRACT

The business landscape has changed dramatically in recent years. Innovative organisations are restructuring their business models. They are moving away from discrete linear value chains towards open innovation models such as networks. Small to Medium Sized Enterprises (SMEs) recognise that in order to survive they must be equipped with the relevant competencies required to design, develop and deploy innovative solutions that meet the needs of the end user. More and more small firms are collaborating with each other in order to create value added products and access new markets. However, the task of working in a collaborative network is not easy. SMEs find it particularly difficult to engage in these activities and experience many challenges in this regard. Moreover, there are very few support structures and systems available to guide successful knowledge sharing and collaboration. This chapter explores the fundamental concepts of collaborative networks and knowledge sharing, synthesises and presents some of the challenges faced by SMEs and identifies some critical success factors that should be considered to help overcome the barriers identified.

INTRODUCTION

Open innovation is a new paradigm that has emerged for managing innovation (Chesbrough, 2003; Gassmann, 2006). It proposes that organizations should exploit external competencies such as knowledge, infrastructure and relationships to help accelerate the generation, development and com-

mercialization of technologies and innovations. Chesbrough (2006) defines open innovation as

The use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation, respectively. (p. 1)

Literature suggests that there are two components that are central to the open innovation model.

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These are 'exploration' and 'exploitation' (van de Vrandea (2009); Lichtenthaler, 2008; Chesbrough & Crowther, 2006; Geiger & Makri, 2006). Exploration can be defined as the search for new knowledge, technology, competences, markets or relations and exploitation can be defined as is the further development of existing knowledge, technology, competences, markets or relations (Li et al., 2008). In light of this, open innovation models comprise a variety of internal and external technology sources and a variety of internal and external technology commercialisation methods (Chesbrough, 2003). Effective knowledge sharing and collaboration is central to the success of open innovation. Collaboration is a process of shared discovery or creation in order to create value (Hardin & Shrager, 1998). It involves two or more individuals with complementary skills interacting with each other to create a shared understanding that neither had previously possessed, nor could have possessed on their own.

Small to medium sized enterprises (SME) are beginning to adopt open innovation models in order to create value added products and services. To do this they must reorganise their operational structures. Consequently, they are forming enterprise networks. Enterprise networks are a coalition of independent organisations with complementary competencies and skills. They enable organisations to share competencies, combine resources and innovate outside of their individual capabilities. However, collaborating in an enterprise network is not easy. It demands that individuals re-orientate their mindset and that leaders create new organizational structures and work processes. SMEs find it particularly difficult to collaborate in networks (Cormican & Dooley, 2007). They fail to understand how they can actively participate and benefit from these endeavours. They also lack the essential resources such as time and skills needed to participate (Bougrain & Haudeville, 2002). Furthermore, much of the discussions on open innovation models and enterprise networks to date have focused on larger organisations. There

has been little debate about or analysis of SME involvement in such initiatives. There is also a lack of support structures and systems available to guide successful knowledge sharing and collaboration in a networked environment.

This chapter aims to provide a better understanding of knowledge sharing in collaborative networks. The networked enterprise is defined; the rationale for establishing a network is presented and the benefits and business case are also explored and discussed. A comparative analysis of traditional organisational structures and the new networked enterprise structure is provided. The characteristics and traits of enterprise networks are identified and discussed. The chapter then discusses the importance of knowledge sharing and what motivates people to share knowledge. The key challenges that SMEs encounter are synthesised and documented. The remainder of the chapter focuses on highlighting critical success factors that should be considered to help overcome these barriers.

THE NETWORKED ENTERPRISE

Traditionally organisations competed across linear supply chains (see Figure 1). These supply chains focused on improving the efficiency and effectiveness of existing product/market combinations. However the business landscape has changed dramatically in recent years. Innovation is radical, product life cycles are shortening, customers are more discerning and prices and margins are falling. Organisations must seek not fractional but exponential levels of improvement to survive. Consequently, progressive organisations are restructuring and reconfiguring their business models. They are moving away from discrete linear supply chains towards value networks. These emerging structures (see Figure 2) seek to support open innovation models by sharing competencies and resources and optimising linkages and relationships.

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