

Chapter 8

Open Innovation and Collaborative Network in Supply Chain: The Case of Open IPTV Forum

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ABSTRACT

This chapter aims to discuss the use of open innovation and collaborative network as a resource to create value and increase competitiveness in supply chain. A case study of Open IPTV Forum was conducted based on documentary and secondary data. The analysis was based on Amit and Zott (2001) model as well as on Carayannis and Wang (2008) innovation networks and knowledge clusters roles. The results indicate the feasibility of joining simultaneously several different actors of a supply chain to develop a new product/service.

INTRODUCTION

The challenge in the innovation process does not rely only on the creation of value. Companies create barriers in order to protect their ideas, innovations and consequently their competitive advantage. Fine (1998) explains that industries behave in different ways to keep themselves com-

petitive in the market place and that differences are related to the industry's clockspeed. Nevertheless, industries with high clockspeed will require different products and services, processes and value chain designs when compared to industries with low clockspeed. Thus, Porter (1985), Fine et al. (2002) and Christensen (2003) recognize that industries and markets evolve, creating new rules and business models as well as new ways to collaborate and cooperate (Hamel et al., 1989).

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In addition, collaborative networks may prevent organizational inertia while promoting environmental adaptation (Doz, 1996). A company collaborative network is composed by its suppliers, distribution players and customers. It can be noted that a limited number of companies dedicate time to articulate relationship resources internally and externally, such as inter-organizational networks. In order to improve innovation and to leverage the business model, firms have invested more in co-development partnerships (Chesbrough & Schwartz, 2007). Amit and Zott (2001) argue that there is a relation between network configuration and value creation and that value creation may be located in the network rather than in the firm.

The perception that external knowledge is a significant element to optimize in-house has been renewed (Chesbrough, 2003). In this context, open innovation is concerned with the opening of the innovation process with two different approaches (Chesbrough and Crowther, 2006): (1) inbound open innovation which is *"the practice of leveraging the discoveries of others"*; and (2) outbound open innovation suggests that *"rather than relying entirely on internal paths to market, companies can look for external organizations with business models that are better suited to commercialize a given technology"*. Once the inbound approach seems to be more adopted by organizations (Spithoven et. al, 2010), Chesbrough and Crowther (2006, p. 235) highlighted that *"many of the outbounded-orientation concepts have not being adopted yet"*. The authors emphasized that adoption of the concepts seems to be in a early stage and suggest a broader applicability of this paradigm.

Once outbounded-orientation approach cares for investigation, Teece, Pisano and Shuen (2007) also build upon the open innovation model, suggesting that innovators can benefit weakening the intellectual property environment and opening the industry architecture, switching the scope of closed innovation to open innovation.

From these perception emerges the research question of the present study: Is it feasible to join

simultaneously several different actors of a supply chain to develop a new product/service? There are few works studying the innovation process and product development throughout all players of a supply chain simultaneously, so this approach seems to be relevant and timely.

The purpose of this chapter is to discuss the use of open innovation and collaborative network as a resource to create value and increase competitiveness into the IPTV value chain. IPTV (Internet Protocol Television) is the new wave of television service, delivered by Internet Protocol over a broadband network, providing a personalized and interactive environment. The Open IPTV Forum was launched in 2007 by seven players in order to provide an open E2E (end-to-end) specifications for IPTV technology. Now, 64 companies (September, 2010), such as telecom, broadcasts, internet providers, electronic industry etc, integrate the forum, joining effort to build next generation of IPTV in a massive way.

To attend the main objective of this study, a case study of Open IPTV Forum was addressed based on a documentary research, which had sought to understand the company's competitive differentials based on Amit and Zott (2001) model and on Carayannis and Wang (2008) innovation networks and knowledge clusters roles. The Amit and Zott (2001) model assessed how value was created within the theoretical view of the value chain framework (Porter, 1985), Schumpeter's theory of creative destruction (Schumpeter, 1942), the resource-based view of the firm (e.g., Barney, 1991), strategic network theory (e.g., Dyer and Singh, 1998), and transaction costs economics (Williamson, 1975). This model discusses the sources of value creation in virtual chains. On the other hand, Carayannis and Wang (2008) referred to the role of the firm in innovation networks and knowledge clusters in order to increase their innovative capability and competitiveness. The effective knowledge sharing among the firms in different types of innovative alliance seems to be crucial, mainly in high clockspeed industry (Fine, 1998).

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