Chapter 14

Innovation Capability in High-Tech Companies: Exploring the Role of Organizational Culture and Empowerment

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ABSTRACT
This chapter analyses the influence of organizational culture components, defined in Hofstede’s (1991, 2001) cultural framework (i.e., power distance, individualism/collectivism, assertiveness focus, and uncertainty avoidance), and empowerment on innovation capability, and examines the differentiations in their influence. The hypotheses are tested by applying Structural Equations Modeling (SEM) methodology to data collected from Information Technology professionals from high-tech companies. Results of the analyses have yielded that power distance is found to be negatively associated with both empowerment and innovation capability, whereas uncertainty avoidance is negatively related to innovation capability, but positively related to empowerment. Collectivism is found to be positively related only to empowerment; yet no significant relationship was revealed between collectivism and innovation capability. In addition, no significant relationship was found between assertiveness focus and empowerment or innovation capability. Empowerment is also found to be significantly and positively related to innovation capability. In terms of managerial practice, the study helps clarify the key role played by cultural dimensions in the process of shaping an empowering and innovative work environment. Findings also reveal that managers should focus on participative managerial practices (e.g. empowerment) to promote innovation capability of high-tech companies by considering the cultural tendencies of employees in the organization.

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INTRODUCTION

In recent years, high technology has captured significant attention in the international business environment, as scholars, policy makers, and investors believe in the crucial role of high-tech companies for economic prosperity in the developed and developing nations. Especially in the last two decades, high-tech companies have become the building blocks of strong economies in different regions in the world (Ujjual, 2008). High-tech companies are among the organizations, which are assumed as the key sources of innovative ideas, products, and processes that are essential to obtain and maintain economic and especially technologic competitiveness (Kodama, 1991).

Internet-enabled information and communication technologies have challenged existing business models in almost all sectors and introduced rapid change in every aspect of the business environment. In this turbulent environment, all organizations are inevitably facing with demands for both radical and incremental change. Moreover, globalization and increasing competition have reinforced in organizations the need for differentiation, encouragement for experimentation and constantly learning about new practices and technologies. In order to be able to cope with this continuous change, an organizational system including organizations’ strategies, structures, processes, and communication practices must be designed so as to encourage innovation and change (Burgelman, et al., 2004; Weil, 2005; Dasgupta & Gupta, 2009). Thus, the innovation capability is considered to represent an important competitive advantage for organizations, given its importance for economic growth, wealth creation, business expansion and technological progress (Wickham, 2004; Beckman & Barry, 2007; Dimov, 2007).

Especially in high-tech industries, as global competition intensifies and product life cycle shortens, high-tech services and products are becoming more and more complex with shorter life-spans. In this climate, considering the fact that sustainable development cannot be achieved and maintained without innovation, the pressure to innovate increases. Hence, high-tech companies are increasingly looking for ways to enhance their ability to innovate effectively. The ability to develop and launch innovative new products by using the latest technology quickly before global competitors, or soon thereafter, is a key factor in gaining first-mover advantages, achieving product success, capturing market share, increasing return on investment and long-term viability (Allocca & Kessler, 2006). Successful innovation for high-tech companies is associated with good performance and related to subsequent growth. The salience of innovation capability for high-tech companies derives from the fact that in an increasingly hostile market environment characterized by rapid change, it represents a means of survival, and not just growth. Sustainable innovation, which leads to competitive advantage of high-tech companies by enhancing their capacity to keep up with, respond to, and initiate technological change on an ongoing basis, requires a systemic and effective management approach (Romijn & Albaladejo, 2002).

Innovation is considered as a value-added activity dealing mainly with the enhancement of existing works (e.g. product, process, service), particularly for higher business value. Innovation capability embraces the formation and development of new ideas, new product development, new manufacturing processes and new services (Brown, 1992). Furthermore, Brown (1992) also indicated that the only way to create a competitive strength for an organization is the capability to innovate. In support of these propositions, many researchers have demonstrated that innovation capability significantly contributes to a company’s performance in ways; such as innovation performance (Cavusgil, et al., 2003), product and process improvement (Wolff & Pett, 2006), innovation rate (Yam, et al., 2004), and company’s general performance (Calantone, et al., 2002). Although it might not be claimed as universally true in
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