Chapter 59
Knowledge Management and Systematic Innovation Capability

Marianne Gloet
The University of Melbourne, Australia

Danny Samson
The University of Melbourne, Australia

ABSTRACT

This qualitative research examined the relationship between knowledge management (KM) and systematic innovation capability in 16 Australian manufacturing and service organizations that exhibited both successful innovation and robust KM practices. A review of the literature indicated a number of areas where KM enhances and supports innovation capability. Using a multiple cross-case analysis methodology and applying a framework of systematic innovation capability, in-depth interviews were conducted with managers of the case study organizations. The analysis of the data revealed the main contributions of KM to systematic and sustained forms of innovation. Areas in which KM could contribute more to sustained innovation capability are also discussed.

INTRODUCTION

Competitive advantage in today's advanced economies is driven by innovation and the ability to manage ever-increasing forms of knowledge on a sustained basis. Knowledge intensive industries compete primarily on their capacity to innovate and thrive on cutting-edge knowledge, which drives both research and innovation. Indeed, knowledge intensive organizations (KIOs) constantly seek to reinforce sustainable links between forms of knowledge and modes of innovation. In such a dynamic environment, the proactive management of knowledge assets is essential to achieving both innovation capability and innovation performance (Kim, Lee, Chun and Benbasat, 2014; Taherparvar, Esmaeilpour and Dostar, 2014; Kuusisto and Meyer, 2003; Miles, 2007). Since KIOs play a significant role in value creation through innovation (Ye, Jha and Desouza, 2015; Muller and Doloreux, 2009; Van der Aa and Elfring,

DOI: 10.4018/978-1-5225-9273-0.ch059

2002), the ways in which organizations approach knowledge management (KM) influences innovation and becomes a source of competitive advantage (Freeze and Kulkarni, 2008). As such, KM emerges as an essential management and organizational capability in the drive to create value through knowledge.

Arguably, as a neutral construct, knowledge achieves consequence through human action. In this context, the human values and assumptions underpinning the learning process reveal the considerable power of not only knowledge but also the processes associated with its management (Alavi, Kayworth and Leidner, 2006; Ibrahim and Reid, 2009; Nonaka and Takeuchi, 1995). Currently, many people consider knowledge as the determining factor in economic growth (Oyelaran-Oyeyinka and Sampath, 2009). For example, Storey and Barnett (2003, p. 146) describe knowledge as the "key competitive sustained resource" and an organization's most important asset. Knowledge is also a primary factor of production on which competitive advantage rests (Beijers, 1995; Halawi, Aronson and McCarthy, 2005). As Davenport and Prusak (1998, p. 161) note, the successful management of knowledge requires a particular ''combination of human, technical and economic skills", highlighting that it is neither a haphazard nor an unmanaged process. With this growing awareness of the need to manage an organization's knowledge effectively and engender a particular arrangement of people, technology and skills, KM emerged as a distinct field of study.

Since knowledge and innovation are inextricably linked, a growing body of literature focuses on the ways in which KM can enhance and support the innovation process (Jensen, Johnson, Lorenz and Lundvall, 2007; Du Plessis, 2007; Goh, 2005). However, there are challenges associated with organizational efforts to develop innovation as a core competency (Kandampully, 2002) because of the complexity of the innovation process, the diversity of knowledge assets and a broad range of approaches to KM (Malhotra and Morris, 2009; Freeze and Kulkarni, 2008). Moreover, different markets place different values on knowledge assets (Gibbons et al, 1994). This complexity combined with the interdependence that characterizes global competition compels organizations to acquire, develop and consume knowledge assets in order to achieve competitive advantage (Badaracco, 1991; Murray, 2002). Although the management of knowledge should be prioritized to the same degree as the management of an organization's human, financial and physical resources, this is not always the case. Many senior managers fail to appreciate fully the value of KM as not only a discrete management function but also a unique skill (Stewart, 1997). Indeed, KM has been found to be a significant catalyst in organizational value creation (Kianto and Ritala, 2014; Krentz, Basmer, Buxbaum-Conradi, Redlich and Wulfsberg, 2014; Weaven, Grace, Dant and Brown, 2014).

This exploratory study seeks to examine the ways in which KM is manifested across a range of organizations in both the manufacturing and service sectors, with a view to determining more clearly the relationship between KM and innovation. A further objective of this study is to investigate the extent to which KM can contribute to systematic and sustained forms of innovation within organizations. While literature in the field has been dominated in the past by a focus on the role of innovation in the manufacturing sector, there is a growing interest in service sector innovation (Kindstrom, Kowalkowski and Sandberg, 2013; Gallouj and Djellal, 2010; Gonzales, 2016). As such, this research investigates the relationship between KM and innovation across both the manufacturing and service sectors and explores the likelihood that intangible assets contribute to innovation in different ways depending on the setting (Hendry et al, 2008).

This study is based on the view that without knowledge, there can be no innovation (Jorna, 2006), and is significant because it highlights the role of knowledge and its management in the innovation process (Tidd and Bessant, 2014). The management of knowledge may indeed hold the key to increasing