Chapter 17

Impact of Knowledge Management Practices on Task Knowledge: An Individual Level Study

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ABSTRACT

Organizational level studies of knowledge management have been hampered by the lack of measures of individual level knowledge management practices and outcomes that can be used as success criteria to determine whether, or to what degree, specific organizational knowledge management practices enhance individual knowledge creation, sharing, and application at the individual level. This paper explores how the knowledge management practices of individuals are related to the task knowledge they use to complete their work processes. The measures presented can be used as one way to evaluate the success of organizational knowledge management practices. Specifically, the paper explores the individual practices of knowledge creation, knowledge sharing, and knowledge application and how these practices are related to the task knowledge (conceptual, contextual, and operational knowledge) of individuals. A model of the relationships among knowledge management practices and task knowledge components is proposed and tested. Structural equation modeling is used. Results suggest that engaging in knowledge creation enhances an individual’s task knowledge through the practices of sharing and applying knowledge. Knowledge sharing and application enhance operational knowledge indirectly through changes in conceptual and contextual knowledge.

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INTRODUCTION

Knowledge is widely viewed as the critical resource for all organizations (Grant, 1996). Research has highlighted the importance of knowledge creation, sharing, and application for firms in the twenty-first century (Davenport & Prusak, 2000; Nevis, DiBella, & Gould, 1995; Teece, 2004). Understanding what makes up an organization’s knowledge base, how this knowledge base impacts organization’s competitiveness, and what factors contribute to or restrict the utilization of this critical resource is important to the organization’s long-term viability. Despite an emphasis on organizational level studies of knowledge management (Nevis et al., 1995; Huber, 1991; Jennex & Olfman, 2005), there is a lack of a broader understanding of knowledge management (KM) practices and outcomes at the individual level that can potentially hamper the overall research efforts in the KM field (Guo & Sheffield, 2006).

Individuals are the key entities that create new knowledge and then share it with others. The literature acknowledges the importance of individual level knowledge in the implementation and success of project or organizational level KM initiatives (Grant, 1996; Grover & Davenport, 2001). Drucker (1999) observes that the individual’s ability to create and apply new knowledge makes work groups or organizations productive. New ideas are first created by individuals and later shared across networks of individuals (Kim, 1993). Organizations learn through their individual members (Senge, 1990). Insights and innovative ideas occur to individuals – not organizations (Nonaka & Takeuchi, 1995). Knowledge intensive organizations are not productive unless their individual members have the ability to learn and innovate. Based on this individual level perspective, knowledge is created, shared, and applied by individuals within the organization to meet organizational goals and objectives (Grant, 1996; Simon, 1991).

Grant (1996) and Simon (1991) argue that Viewing the organization as an entity that creates, stores, and deploys knowledge obscures the knowledge management processes through which individuals share, create, and apply knowledge. Individual level studies and the development of research models of KM practices and task knowledge may complement the organizational level studies, leading to a more comprehensive understanding of knowledge management. Knowing how the knowledge management practices of individuals contribute to building and utilizing their task knowledge is an important and largely neglected area of study. An organization cannot be viable in the long run unless its individuals are active in creating, sharing, and applying their task relevant knowledge.

The focus of this paper is to explore and test the relationship between individual knowledge management practices and task knowledge components. Nevis et al. (1995) identify three key organizational learning processes consisting of knowledge acquisition, knowledge dissemination (sharing), and knowledge utilization. At the individual level, we conceptualize these three processes as knowledge management practices and refer to them as knowledge creation, knowledge sharing, and knowledge application. Muhammed, Doll, and Deng (2009) identify and provide measures for three types of task knowledge: conceptual (know why), contextual (know who, know where, and know when), and operational (know what and know how). They provide support that these three task knowledge components enhance innovation and performance at the individual level.

Muhammed et al. (2009) contend that task knowledge is enhanced by individual knowledge management practices (IKMPs). In turn, these IKMPs are stimulated by Jennex and Olfman’s (2005) organizational level critical success factors. However, there is no existing empirical evidence of a relationship between individual knowledge