

# Chapter 15

## Assessing Knowledge Management Systems Usage in Supporting Decision Making Processes in Organizations

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### ABSTRACT

*With the advent of the knowledge economy and the growing importance of knowledge societies, organizations are constantly seeking new ways of leveraging knowledge assets to support Decision Making (DM) processes. This chapter presents an initial insight to the little-researched phenomenon of how Knowledge Management Systems (KMSs) can support DM processes in organizations. A synthesis of ideas from a literature review suggests a new conceptual framework with several critical factors that organizations should take into account to assess the usage of KMSs tools in supporting DM processes in organizations. The proposed framework, “USUQ,” will benefit managers in both public and private sectors in knowing how the Usage, Satisfaction, Usefulness, and the Quality of using KMSs can support DM processes.*

### INTRODUCTION

Knowledge can be considered as one of the most important resources in any organization that can provide a sustainable competitive advantage at any competitive market and dynamic economy

(Wang and Noe, 2010). Gaining a competitive advantage is challenging, especially in public sectors, as it is essential for public organization to rely on knowledge systems that encourage employees who have specific knowledge, skills, talents, abilities, proficiencies or competencies to share their knowledge with other people in their organizations. Therefore, with the advent of the

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knowledge economy, organizations are continually seeking new ways of leveraging and sharing knowledge to support Decision Making (DM) processes and to achieve a lot of benefits in this competitive market place (DeTienne and Jackson, 2001). In the DM processes, decision makers combine different types of data like internal and external data, and different types of knowledge like tacit and explicit knowledge which are available in a variety of forms in organizations (Bolloju *et al.*, 2002). Accordingly, Knowledge Management (KM) and decision support processes are mutually dependent activities in many organizations. Nielsen and Michailova (2007) state that over the past two decades, many organizations have developed Knowledge Management Systems (KMSs) designed specifically to facilitate the sharing, integration and utilization of knowledge. Alavi and Leidner (2001) highlight that KMSs can support the creation and dissemination of firm expertise and knowledge. In addition, Nemati *et al.* (2002) emphasize that those KM initiatives can facilitate the capturing, coding and sharing of knowledge within organizations, which is expected to result in well informed decision processes. Therefore, KMSs can facilitate KM functions by ensuring knowledge flow from the person(s) who know to the person(s) who need to know throughout the organization (Bose, 2004). Moreover, Wang and Noe (2010) highlight that research has shown that knowledge management strategies are positively related to organization's performance. For example, decisions based on KM can help organizations in reducing costs, elaborating products and services, improving team performance, encouraging firm innovation capabilities and increasing sales and revenue from new products and services. Choi *et al.* (2010) highlight that, little is known of how IT support for KM practices in organizations affects the development of KMS, and also the precise role of KMS on knowledge sharing and knowledge application, which in turn influences team performance has not been fully

explored. Furthermore, Nag and Gioia, (2012) suggest a need to understand how key decision makers utilize the use of knowledge in their organizations by using what they know and seeking out what they don't know to guide the creation of unique knowledge-based competencies.

Thus, the past decade has shown an explosive growth in research on knowledge and KM in the economics, management and information systems fields. However, there is a little research and field data that exist to guide the analysis and to assess the implementation of KMSs (Alavi *et al.* 2006; Alavi and Leinder, 2001; Cole, 1998; Wang and Noe, 2010). Likewise, public sectors nowadays face several difficulties and new challenges (Arora, 2011). Alatawi *et al.* (2012) highlight that there is a much need for the public sectors to adapt and employ KM effectively to improve knowledge sharing across the organizations and reaping the real benefit of its implementations. In view of that, it is important to have a credible means to assess and analyze the usage of KMSs in supporting DM processes in organizations. This raises the interesting question of how to assess the usage of KMSs in supporting organizational DM processes. Accordingly, the main objective of this research is to assess the usage of Knowledge Management Systems in supporting Decision Making processes in organizational settings through devising a new conceptual framework. This chapter summarizes a preliminary study to address this issue regarding assessing KMSs usage in supporting DM processes in organizations. This chapter starts by exploring and discussing a literature review on knowledge, knowledge management, knowledge management systems and decision-making. After that, the literature reviews were analyzed to devise the proposed framework of this study by identifying some critical factors that can be taken into account by decision makers and managers to assess KMSs usage in supporting DM processes in public sectors.

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