

## Chapter 4.24

# Knowledge Management Systems Diffusion in Chinese Enterprises: A Multistage Approach Using the Technology–Organization–Environment Framework

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### ABSTRACT

With the recognition of the importance of organizational knowledge management (KM), researchers have paid increasing attention to knowledge management systems (KMS). However, since most prior studies were conducted in the context of Western societies, we know little about KMS diffusion in other regional contexts. Moreover,

even with the increasing recognition of the influence of social factors in KM practices, there is a dearth of studies that examine how unique social cultural factors affect KMS diffusion in specific countries. To fill in this gap, this study develops an integrated framework, with special consideration on the influence of social cultures, to understand KMS diffusion in Chinese enterprises. In our framework, we examine how specific technologi-

cal, organizational, and social cultural factors can influence the three-stage KMS diffusion process, that is, initiation, adoption, and routinization. This study provides a holistic view of the KMS diffusion in Chinese enterprises with practical guidance for successful KMS implementation.

## INTRODUCTION

Organizational knowledge has been recognized as the primary driver of an enterprise's long-term growth and its sustained competitiveness (Bock, Zmud, Kim, & Lee, 2005; Miller & Shamsie, 1996; Wasko & Faraj, 2005). Hence, enterprises are becoming more interested in taking up knowledge management (KM) initiatives to manage their knowledge assets (Kankanhalli, Tan, & Wei, 2005). A common practice is adopting knowledge management systems (KMS) to "support and enhance the processes of knowledge creation, storage/retrieval, transfer, and application" (Alavi and Leidner, 2001, p. 114). A research from KPMG (2000) reports that a considerable number of enterprises in Europe and the U.S. have initiated KM with adoption of the relevant technologies.

Like their Western counterparts, more and more Chinese enterprises recognize the importance of KM and show great interest in KMS implementation (Burrows, Drummond, & Martinsons, 2005; Xiao, 2005; Zhou, Hu, & Pang, 2005). However, the overall KM maturity of Chinese enterprises may still be in its infancy. For example, Mainland Chinese enterprises have seldom been listed in the Asian Most Admired Knowledge Enterprises (Teleos, 2003, 2004, 2006, 2007; Voelpel & Han, 2005). Failing to take advantages of KM due to technical limitations is one of the main difficulties they face (Zhou et al., 2005). In particular, many enterprises fail to maximize employees' effective usage beyond the initial adoption of KMS (Burrows et al., 2005). Therefore, many Chinese enterprises simply post-

pone their decision on KMS adoption, pondering whether their current organizational conditions are ready for KMS implementation. Thus, it will be both interesting and useful to examine the entire process of KMS diffusion, from initiation to routinization, in Chinese enterprises so as to provide practical guidance to Chinese managers for their KMS implementation.

Our literature review substantiates that most of the existing research in the KM field has been conducted in Western countries or highly developed countries, such as the U.S., Western Europe, and Japan (Voelpel & Han, 2005). Since "national environments (e.g., economic development, cultural expectations, organizational structure) shape the practice of KM" (Geng, Twonley, Huang, & Zhang, 2005, p. 1031), key findings from the context of these countries may only partially or even inaccurately apply to the context in China (Chow, Deng, & Ho, 2000; Geng et al., 2005; Michailova & Hutchings, 2006; Ramasamy, Goh, & Yeung, 2006). According to Selmer (2005), due to the large cultural distance between China and Western countries, China is frequently regarded by Westerners as "the most foreign of all foreign places" (p. 78). Moreover, Chinese enterprises are highly embedded in the Chinese traditional cultural context, such as Confucian cultural values, with regard to their management practice, business process, and organizational structures (Ramasamy et al., 2006). As Burrows et al. (2005) pointed out, KM practice within a Chinese enterprise will also be strongly influenced by such cultural values. Therefore, we aim to fill this cultural gap of the literature in investigating organizational KM initiative and providing practical guidance for KMS diffusion within Chinese enterprises. To achieve this, we set up the following research objectives: (1) To develop an integrated framework that enables a holistic perspective to investigate potential factors that can affect the entire KMS diffusion process within Chinese enterprises; (2) To generate high-level propositions from the framework developed so that future studies can

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