End User Adoption of Enterprise Systems in Eastern and Western Cultures

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ABSTRACT

Enterprise systems are gaining interest from both international practitioners and researchers, and this paper investigates enterprise systems management and implementation issues comparing Eastern and Western end users. This issue is important because currently enterprise systems involve end-users with different cultural backgrounds in the East and West. Thus, this paper applies enterprise systems adoption issues to cross-cultural end user perspectives in Japan (East) and the U.S. (West), based on the innovation diffusion theory, the self-determinant theory, and Hofstede’s cultural dimensions. Academic and practical implications are discussed in the paper based on empirical findings found deeper in this paper.

Keywords: Cross Cultural Study, Enterprise Systems, Intrinsic Motivation, Personal Innovativeness in Information Technology, Self Determination Theory

INTRODUCTION

Enterprise systems are usually large systems involving different types of stakeholders as end users in the organization (Akkermans & van Helden, 2002; Burns, Jung, & Hoffman, 2009). Enterprise systems are gaining interest from both practitioners and researchers because these systems are essential to organizational and individual user’s productivity. Although the direct influence of enterprise systems on firm performance has been debated in the Information Systems (IS) community for a long time, the importance of systems adoption by the end users is consistently emphasized for the successful implementation of enterprise systems (Davison, 2002). Furthermore, given the implementation environment of enterprise systems with globalization involving Europe (Hanseth, Ciborra, & Braa, 2001) and Asia (Martinsons, 2004; Liang, Xue, Boulton, & Byrd, 2004), the complexity inherent in the adoption of these systems becomes an important issue for international communities.

Specifically, there is a research stream that investigates enterprise systems management and implementation issues which compares different country end users based on cultural differences. For example, Martinsons (2004) found that ERP projects in the East almost invariably failed to be completed within the scheduled time frame, but only rarely did they

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exceed the planned budget. Additional people and materials were often reallocated to the projects during implementation, but this was usually done on an informal basis. Official budgets were unaffected. Secondly, ERP projects rarely improved cycle times or customer satisfaction in the East. Instead, the major benefits were reductions in unit labor costs and/or inventory levels. The Eastern organizations implementing ERP often reorganized task responsibilities and/or consolidated key processes. However, they were rarely able to improve their responses to customer needs. These outcomes raise questions about the value of ERP in dynamic environments that reward flexibility rather than efficiency. The third similar outcome provides a cautionary note for all IT specialists: projects initiated by IT personnel (such as the CIO or IT manager) were much less likely to be successful than those begun by general management—the big boss in the hierarchical Eastern organization. Many studies have looked into IT adoption (including ERP adoption) in various countries/regions, explicitly or implicitly suggesting that culture plays an important role and different cultures demonstrate different adoption patterns (e.g., Van Everdingen & Waarts, 2003). These issues are important because currently enterprise systems involve end users with different cultural backgrounds in the East and West. Thus, this paper applies the enterprise systems adoption issue to the cross-cultural end user perspectives in Japan (East) and the U.S. (West).

IS researchers have been investigating the implementation and adoption issues of enterprise systems based on organizational IS management perspectives. Self-determination theory (Deci & Ryan, 1985; Korpelainen, Vartiainen, & Kira, 2010) showed that all individuals have natural, innate, and constructive tendencies to develop an ever more elaborate and unified sense of self. It focuses on how individuals develop a coherent sense of self through regulation of their behavioral actions that may be self-determined, controlled, or motivated. Self-determination theory emphasizes an individual’s intrinsic motivation (perceived enjoyment) as a main behavioral mechanism in general social behavior. Rogers’ (1983) innovation diffusion theory shows that diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Moore and Benbasat (1991) extended the set of perceptions proposed by Rogers (1983) to include seven perceived characteristics of an innovation as predictors of IT adoption behavior. Agarwal and Prasad (1998) also provided Personal Innovativeness in IT (PIIT), the willingness of an individual to try out any new information technology, as a trait and a relatively stable predictor of individuals that is invariant across situational considerations. They provided valid measures of PIIT and showed that PIIT has an effect between perceptions about new IT (relative advantage, PEOU and compatibility) and intention to use new IT, such as enterprise systems.

Specifically, this paper applies enterprise systems adoption and implementation to intrinsic motivation and personal innovativeness in IT, with the additional consideration of culture. Cultural considerations in enterprise systems adoption have been widely investigated within the cross-cultural setting based on Hofstede’s (1980) cultural dimension or case-based research. Martinsons (2004) showed that there are clear differences between state-owned enterprise and private ventures in China in implementing enterprise systems. She found that hands-on leadership mainly demonstrates commitment in private ventures, whereas state enterprises show a tendency to delegate enterprise systems responsibilities, even though these companies are in the same country. Liang et al. (2004) also argued, based on global enterprise systems implementation cases, that enterprise systems strategies must address cultural differences and localized strategies. There are also several studies of European cases in enterprise systems implementation that emphasize globalization and cultural dimensions with respect to adoption. For example, Hanseth et al. (2001) showed that enterprise systems implementation should be interpreted as globalization rather than tight control by technologies, using the case of
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