Chapter IV

Knowledge Management

Enablers within an IT Department

Hope Koch
Texas A&M University, USA

David Paradice
Florida State University, USA

Yi Guo
Texas A&M University, USA

Bongsug Chae
Kansas State University, USA

ABSTRACT

In today’s competitive global economy, characterized by shorter product lifecycles, increased employee turnover and ubiquitous information technologies, an organization’s ability to manage knowledge may be the only remaining source of competitive advantage (Drucker, 1995, 1999; Kogut & Zander, 1992; Nonaka, 1994; Winter, 1987). Even though a number of researchers have outlined the importance of adopting knowledge management (KM) practices and many organizations have given lip service to the term,
there is still some ambiguity concerning what KM actually is (Malhotra, 2000b), and little attention has been paid to factors that enable effective KM to occur (Nonaka & Takeuchi, 1995). This research uses technical and human-centric approaches combined with Holsapple and Joshi’s (1998, 2001) Kentucky Initiative to investigate KM within an information technology (IT) department. Based on our case study, modifications to Holsapple and Joshi’s architecture of a KM episode, a model of execution of knowledge manipulation activities and a model outlining factors enabling effective KM are proposed.

INTRODUCTION

In today’s competitive global economy, characterized by shorter product lifecycles, increased employee turnover and ubiquitous information technologies, an organization’s ability to manage knowledge may be the only remaining source of competitive advantage (Drucker, 1995, 1999; Kogut & Zander, 1992; Nonaka, 1994; Winter, 1987). Even though a number of researchers (Drucker, 1995, 1999; Grover & Davenport, 2001; Kogut & Zander, 1992; Nonaka, 1994; Winter, 1987) have outlined the importance of adopting knowledge management (KM) practices and many organizations have given lip service to the term, there is still some ambiguity concerning what KM actually is (Malhotra, 2000b), and little attention has been paid to factors that enable effective KM to occur (Nonaka & Takeuchi, 1995). Some researchers and practitioners hold an information processing view of KM, seeing KM as a computer system that helps an organization manage knowledge; others take a human-centric view seeing KM as primarily a social process. The purpose of this research project is to explore how KM actually occurs within a small information technology (IT) department. A by-product of this investigation is identification of some factors that enable effective KM within the IT department (Table 1) and a model of the execution of knowledge manipulation activities within the IT department (Figure 2).

This project stemmed from discussions between industry representatives on Texas A&M University’s Center for the Management of Information Systems (CMIS) advisory board and researchers. Centering on the KM “buzz,” discussion soon turned to debate as information processing views and human-centric views of KM clashed. The information processing view, which has been popular in the trade press and widely implemented in practice (Davenport, DeLong & Beers, 1998; Hansen, Nohria & Tierney, 1999; Malhotra, 2000c), sees KM as archiving explicit knowledge of individuals in technology-based repositories (Applegate, Cash &
Related Content

Clinical Pathway Analytics
Filip Caron, Jan Vanthienen and Bart Baesens (2014). *Journal of Information Technology Research* (pp. 12-26).
[www.irma-international.org/article/clinical-pathway-analytics/111249/](http://www.irma-international.org/article/clinical-pathway-analytics/111249/)

Findings for Ontology in IS and Discussion
Ahlam F. Sawsaa and Joan Lu (2017). *Ontologies and Big Data Considerations for Effective Intelligence* (pp. 566-584).
[www.irma-international.org/chapter/findings-for-ontology-in-is-and-discussion/177403/](http://www.irma-international.org/chapter/findings-for-ontology-in-is-and-discussion/177403/)

Enabling Strategy Formulation by ICT: A Viable Systems Approach
[www.irma-international.org/chapter/enabling-strategy-formulation-ict/22691/](http://www.irma-international.org/chapter/enabling-strategy-formulation-ict/22691/)

Numbers and Symbols
[www.irma-international.org/chapter/numbers-symbols/76409/](http://www.irma-international.org/chapter/numbers-symbols/76409/)

Bridging the Academic Research and Business Practice with the New Media
[www.irma-international.org/article/bridging-academic-research-business-practice/1208/](http://www.irma-international.org/article/bridging-academic-research-business-practice/1208/)