

Chapter 19

An Experiment of Information Elaboration in Mediated Knowledge Transfer

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ABSTRACT

Understanding knowledge transfer in computer mediated contexts is becoming essential given that organizations are spread more and more globally. In this chapter, the authors adopt elaboration likelihood theory to investigate knowledge transfer processes in a Knowledge Management System (KMS). They report the results of an exploratory experiment conducted to examine the impact of argument quality, source credibility and validation on knowledge usefulness of a document in a KMS. Their findings indicate that while validation of knowledge in KMS positively affects perceptions of knowledge usefulness, higher argument quality was associated with lower usefulness ratings. Surprisingly, source credibility has no effect on perceptions of knowledge usefulness. The implications of these results for both researchers and practitioners are discussed.

INTRODUCTION

In an effort to exploit their knowledge resources, many companies devote great effort to managing their knowledge capital through centralized knowledge management systems (KMS). The

role of KMS has become increasingly important as knowledge capital stored in the repository is no longer limited to traditional customer and product data, but also includes valuable “best practices” that can be adopted and reused by individual employees through a meaningful knowledge transfer process. KMS can potentially support and enhance knowledge transfer by providing ready

DOI: 10.4018/978-1-60960-555-1.ch019

access to knowledge across personal, departmental, and organizational boundaries. However, implementing KMS alone does not ensure that successful knowledge transfer will occur. Rather, this outcome is realized only to the extent that the knowledge KMS provide is effectively processed, adopted, and utilized by individual knowledge users (Markus, 2001).

Researchers have recognized that KMS success depends on the *quality* of KMS use (Jennex, 2008). However, extant literature lacks studies investigating the mechanisms that govern how individuals adopt and internalize KMS knowledge; thus, little guidance is available for KM practitioners seeking to establish or enhance KMS-enabled knowledge transfer processes within their organizations. This paper addresses this void by presenting the results of an exploratory research study that investigates how individuals in an organization process and perceive the usefulness of knowledge retrieved from a knowledge repository. A survey was conducted in an experimental setting where subjects were asked to use a mock KMS to recommend a solution to a given IT authentication problem. We build and test hypotheses based on theories of information influence (Petty & Cacioppo, 1986; Petty, Cacioppo, & Goldman, 1981) and organizational knowledge transfer in mediated contexts (Sussman & Siegal, 2003) to better understand the process by which knowledge in a KMS is evaluated and used by individuals. The results of our experiment offer actionable insights for KM practitioners and point to several directions for future research in KMS-enabled knowledge transfer.

THEORETICAL BACKGROUND AND HYPOTHESES

KMS and Knowledge Transfer

Knowledge is a justified belief that increases an entity's capacity for effective action, and is

embodied in both tacit (e.g. insights, intuitions, assumptions) and explicit (e.g. documents, recorded solutions, formal analyses) forms (Alavi & Leidner, 2001). Organizational knowledge transfer involves the conveyance of knowledge from a source to where it is needed in the organization, and has been identified as a critical component of successful knowledge management practice (Alavi & Leidner, 2001; Huber, 2001). Knowledge transfer can occur between and among individuals, departments, teams, and organizations themselves (Alavi & Leidner, 2001; Sussman & Siegal, 2003). In many cases, transfer transpires directly between two knowledge-bearing entities, such as one individual verbally imparting knowledge to another. However, in today's distributed work environment, transfer increasingly takes place across mediated channels of communication in which the knowledge source and knowledge recipient are geographically and temporally disconnected. In such cases, the role of the intervening knowledge medium becomes a key enabler of the knowledge transfer process.

Information technology is an ideal vehicle for supporting mediated knowledge transfer. Knowledge from a source can be stored within an information system for later retrieval and use by one or many knowledge consumers. This function constitutes the essence of KMS, defined herein as information technology based systems designed and implemented to facilitate storage, retrieval, transfer, and application of organizational knowledge (Gray & Meister, 2004; Majchrzak, Cooper, & Neece, 2004). KMS enable and enhance these practices by providing a centralized and accessible knowledge repository from which knowledge consumers can draw, invoking internalization of explicit codified knowledge from an external source to an individual's personal consciousness (Nonaka, 1994). However, while KMS can facilitate the transfer process, access to knowledge in a KMS does not guarantee that transfer will take place. After it is retrieved, knowledge must be processed and evaluated in

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