Chapter 6.13
An Exploratory Analysis of Information and Knowledge Management Enablers in Business Contexts

Karen Nelson
Queensland University of Technology, Australia

Michael Middleton
Queensland University of Technology, Australia

ABSTRACT

This chapter explores the factors limiting organizational information and knowledge management (IKM) through the perceptions of IKM practitioners. The authors propose that a number of organisational factors – which for them are enablers – have the ability to influence IKM project outcomes. It follows that explication of these enablers in an integrated framework could, therefore, be beneficial for practitioners. This chapter itemises 10 candidate enablers identified from a review of the literature and explored in previous research work. The authors discuss the findings of two exploratory surveys, which indicated that all ten enablers were perceived as important to the performance of IKM. However, the amount of management attention required by each enabler appears to be IKM project specific.

INTRODUCTION

Information systems, business professionals and academics have become increasingly fascinated with a seemingly new phenomenon1, knowledge management. While some authors believe KM to be merely a reinterpretation of information

management (IM), and others believe it to be just another management fad2, independent writers with a business focus, such as Senge (1990), Peters and Waterman (1992) and Drucker (1993), and the IT research organisation – Gartner – have articulated sensible reasons to explain why organisations should embark on knowledge management (KM) projects. The reasons given for these projects are based on a premise that knowledge and the capability to manage it are the most crucial elements in sustaining or improving organisational performance.

Regard for knowledge as a strategic resource is well documented (for example, von Krogh, Roos, Kleine, 1998) and corroborates Nonaka and Takeuchi's 1995 theoretical framework, which as Magalhaes (1998, 101-102) puts it, is based on an understanding that business advantage arises from the ability of an organisation to create new knowledge. Several case studies have been reported that show support for this idea, [for example, the Skandia AFS case (Marchand, 1998) and Nonaka, Umenoto and Sasaki (1998)]. Although the overall number of empirical studies in KM is low, recent quantitative evidence has further substantiated these cases by showing a direct relationship between effective information and knowledge management (IKM) practices and corporate performance (Marchand, Kettinger, Rollins, 2000). Furthermore, well-organised IM and KM are seen to be complementary (Blumentritt, Johnston, 1999; Marchand, 1998) with both required to operate effectively to ensure adequate supply of both "old and new knowledge" (Stephens, 2000).

The purpose of this chapter is to present the results of some exploratory research that aimed to understand which organisational factors IKM practitioners believe are enablers for IK activities. This work is part of a larger research project, which aims to develop a multidimensional integrated framework for IM and KM, and to test the application of this framework within business contexts.

BACKGROUND

Integrated Information and Knowledge Processes

The relationship between data, information and knowledge existing at various points along a continuum (leading to wisdom) has been discussed and debated for some time. Although there is some confusion in the use of these terms, most authors agree that knowledge is the ultimate result of the capture of raw facts (data), applying specific context and purpose to it to produce information, and finally applying one's own terms of reference to produce knowledge within the minds of individuals. Tuomi (1999) challenges this view, and proposes that knowledge comes first and is used to create data. His view is that individual knowledge is represented in the design of databases and, as such, information is derived from the data contained within these repositories.

Some authors find that making a distinction between the three information stages is unwarranted and does not provide any benefit. Others, although they agree that making a distinction is largely unnecessary, create boundaries for their work in a specific area by providing definitions. Still others (including the authors of this paper) believe that effective IM and KM activities rely on a sound understanding of these stages and what they mean. We have, therefore, adopted definitions from Marchand (1998) for this paper:

- Data are context free and can always be shared because the receiver cannot or does not interpret them (e-mail is data to those who do not share the context for its interpretation).
- Information includes all documents and verbal messages that make sense or can be interpreted by organisational members and is never context or value-free. Information always encompasses an act of transfer or sharing among people and involves inter-