# Chapter 4.7 Knowledge Management and the Leading Information Systems Journals: An Analysis of Trends and Gaps in Published Research

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# **ABSTRACT**

Knowledge management (KM) is maturing as a research topic, although there is still debate among researchers over what constructs form its basis. Because the topic has received increasing attention in academic journals, it is important for researchers to be aware of the research streams associated with KM. Accordingly, this paper reviews KM literature published in top-tier journals from 2000 to 2004. These articles are then classified into five constructs from two knowledge management frameworks. The results indicate that

the majority of KM research has examined the construct of knowledge transfer. This conclusion holds whether examining academic or practitioner journals. Trends of published KM research, gaps, and imbalances in the examined literature and areas of potential research are presented.

#### INTRODUCTION

Academics and practitioners have stressed the significance of managing knowledge in today's competitive environment (Desouza, 2003). From

the mid-1990s though 2004, KM has become one of the most dynamic research topics. Despite this increased attention and effort, several issues remain. Dissention exists by both academia and practitioners over the true definition of KM; there are also questions about the relevant constructs that comprise KM and where our collective research has taken us in our efforts to discover the underlying constructs. This paper examines current research in KM to determine which constructs are the most extensively researched and published in leading information systems (IS) journals.

Research in knowledge management has increased dramatically in recent years. From 1990 to 1995, a search of the ABI/Inform database using the key phrase knowledge management returned 43 articles. From 1995 to 2000, the number of articles increased to more than 700, and from 2000 to 2004, the number of articles increased yet again to more than 2,000. This research is published to varying degrees in a wide variety of disciplines, including management, hospitality, economics, health care and, of course, IS. If we examine the sample of published research in this study with consideration for the total number of articles published, we see that approximately 7% of this research is published in what are considered by many to be the leading IS journals. This is interesting in that some of those that are considered to be leading IS journals are crossdiscipline journals, such as Decision Sciences and Management Science; other journals, such as Harvard Business Review and the Communications of the Association for Computing Machinery, are widely considered to be practitioner journals. These four journals alone account for more than 40% of our sample. From this we can infer that not only is there research in KM that originates from outside the IS arena, but that KM research appeals to a variety of journals with differing readership.

We propose that understanding the future direction of research in KM requires that we first

know what constructs in KM have received the most attention from researchers and where there currently are gaps in the published literature. Given the quantity of current literature, there is an adequate sample size to determine the coverage of our collective research efforts. Our research indicates that the majority of KM research articles published in the leading IS journals cover the topic of knowledge transfer; this finding holds true for both academic and practitioner journals.

The first step in this research was to identify a framework or frameworks that would allow us to place published articles into a small range of categories. This review identified several frameworks for classifying KM. Our goal was to find frameworks that contained well-defined constructs suitable for categorization; we found that the Alavi and Leidner (2001) framework, in conjunction with Davenport and Prusak (1998) framework, provided a sound basis for our categorization scheme. These two works are respectively the fourth- and second-most cited KM manuscripts (Jennex & Croasdell, 2005). The second step of this study was to identify, classify and measure the quantity of research in each construct within the framework. By doing so, we will be able to provide a foundational understanding of published KM research, along with the constructs being addressed. This allows us to identify whether there is an imbalance of research in any particular area of KM within the constraints of our classification scheme.

## FRAMEWORK CONSTRUCTION

A coherent review emerges only from a coherent conceptual structuring of the topic itself (Bem, 1995). A number of frameworks are available for classifying KM research; one literature review identified 26 different frameworks from both practitioners and academics (Rubenstein-Montano, Liebowitz, Buchwalter, McCaw, Newman, Rebeck, The Knowledge Management Method-

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