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Knowledge system commitment and knowledge sharing intention: The role of personal information management motivation

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ABSTRACT

Knowledge management systems (KMSs) provide organizations processes and tools to capture, organize, and manage knowledge. A plethora of research has investigated how technical and social aspects of KMSs impact users' intentions and usage behavior. Recent inquiries on KMSs have begun to explore individual related factors such as individual motivation and personal information management practices. This study explores the effect of personal information management motivation (specifically information proactiveness, transparency, and formality) on users' commitment to knowledge systems. Theoretically grounded in the three-component model of commitment, the research model tests the relationships between personal information management motivation and the affective, calculative, and normative dimensions of commitment. Survey results of 78 accounting professionals demonstrate that information formality has the strongest effect on users' knowledge system commitment compared to information proactiveness and transparency. This study contributes to knowledge management research by incorporating and emphasizing the power of "person" in knowledge management.

1. Introduction

Knowledge management systems (KMSs) provide organizations with processes and tools to capture, organize, and manage knowledge. A plethora of research across different disciplines has studied various facets of KMSs (e.g., Argote, McEvily, & Reagans, 2003; Alavi, 2000) applying a rich array of theoretical foundations and methodologies (e.g., He & Wei, 2009; Lin & Fan, 2012; Qian & Bock, 2005). While early KMS research focused on information technology (IT) related topics, in recent years researchers have realized that KMSs are socio-technical systems with both technological and social components across different levels of the organization (Alavi & Leidner, 1999). As a result, much previous research has examined the technical and social aspects of KMSs and their impact on individuals' knowledge sharing intentions and usage behaviors (e.g., He & Wei, 2009; Quian & Bock, 2005; Lin, 2007; Bringula, 2016; Savoy & Salvendy, 2016).

As research on KMSs continues to evolve from multiple perspectives, recent dialogues on knowledge management have started to emphasize the importance of "the individual" and "personal knowledge management" (Pauleen, 2009; Kelly, 2006). In his editorial paper in the European Journal of Information Systems, Baskerville (2017) explained the importance of "individual" information systems (IS). He commented,

> Does a meaningful IS always require an organization? Such a view point overlooks the essential human progress enabled by the ICT now available to individuals. It overlooks the way in which individual IS have evolved into rather a complete and legitimate form of IS. As technological evolution has enabled more-and-more complex individual IS, it seems that these could easily become the most prevalent of all kinds of such systems. Ignoring individual IS within our discipline is an evolutionary oversight that may simply reflect our own assumption that personal, individual IS are uninteresting. (2011, p. 253)

A recent review of the knowledge management literature demonstrates a relative disregard for the individual in previous research while IT oriented concepts are widely represented (Rechberg & Syed, 2012). In addition to system and technical factors, individual motivation and personal information management practices are also relevant and important to the success of KMSs in organizations. The role of the "personal" factors is especially imperative in knowledge-intensive firms such as accounting or law firms where knowledge is embedded in the creative minds of the employees and individuals' willingness to use knowledge systems is paramount to the success of such systems. It is not

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sufficient to focus only on the organizational perspective to examine knowledge management and neglect the influence of the "person" (Pauleen, 2009; Suh, Oh, & Yoon, 2016) because individuals are the originating sources of knowledge. Indeed, employees' individual beliefs and motivations are equally as important to consider as system capabilities or technical functionalities of KMSs (Brazelton & Gorry, 2003; Ko, Kirsch, & King, 2005). Thus, it is instrumental for researchers to integrate the concept of personal information management and how individuals manage work-related information and knowledge into the research agenda.

Due to the increasing emphasis on personal factors in knowledge management research, the aim of this study is to examine the role of personal information management motivation on users' commitment to knowledge management systems in the workplace and their intention to share knowledge. Specifically, we focus on individuals' information proactiveness, transparency, and formality and how these information motivation factors affect affective, calculative, and normative commitment to the knowledge management systems, and consequently how the three dimensions of commitment impact users' intention to share knowledge with others. Theoretically grounded in the three-component model of commitment (Allen & Meyer, 1990), we build and test a research model to further our understanding of the "personal" aspect of knowledge management. Using survey data collected from accounting professionals, the results demonstrate the importance of individuals' information management motivation factors and their strong impact on KMS commitment. Particularly, the results show that information formality exhibits significant and positive influence on all three dimensions of system commitment. Information proactiveness is positively associated with calculative commitment only, while information transparency significantly affects affective commitment. In addition, the results reveal that affective and calculative commitments have a much more significant impact on users' intention to share than normative commitment.

The rest of the paper is organized as follows: Section 2 discusses the conceptual foundation, which leads to the presentation of the research model and hypotheses. Section 3 describes the research methodology, which explains the data collection and survey administration procedures. Then, we discuss the data analysis and results in Section 4. Section 5 discusses the implications of this research and suggestions for future research. Section 6 concludes the paper.

2. Theoretical foundation and hypotheses

2.1. Knowledge system commitment

Previous IS research has demonstrated the significance of system commitment in studying system adoption and continued usage (Hwang, 2010; Li, Browne, & Chau, 2006; Malhotra & Galletta, 2005). Research findings have consistently shown that the success of knowledge management systems depends greatly on users' sustained involvement and participation (He & Wei, 2009; Lin, 2007). Without users' active participation and commitment, organizational effort on knowledge management is unproductive and wasteful. Commitment is an enduring and long-lasting attitude and it is especially relevant in knowledge management research as the use of these systems is often voluntary and not mandated by organizations. Thus, if users develop sustained and long-term positive attitudes toward knowledge systems and commit to using the knowledge systems, these systems are more likely to persevere and continue to add value to organizations.

In this research, we apply the three-component model of commitment developed by Allen and Meyer (1990) to develop the research model. The three components are affective, calculative, and normative commitments, and this commitment framework has been widely applied in research and has been tested and extended to various contexts (e.g., Lin, 2007; Bansal, Irving, & Taylor, 2004). Overall, the three components in organizational commitment generally refer to what individuals want to do, what they need to do, and what they ought to do, respectively. Affective commitment refers to an individual's emotional attachment to, identification with, and involvement with the KMS. In other words, an individual uses a KMS and shares knowledge on the KMS because he or she wants to or desires to. Calculative commitment is the "need" component because an individual weighs the perceived gains and losses of using a KMS. In other words, the user would calculate the cost of not using the KMS and the lack of alternatives to determine their level of calculative commitment. Lastly, normative commitment refers to the internalized pressure or feeling of obligation to continue using the KMS.

In this study, we aim to enrich the current research by investigating how personal information management motivation would affect users' KMS commitment and their intention to share knowledge. We focus on the personal aspect of knowledge management because employees' willingness to use and share knowledge is critical for KMSs to sustain and remain useful. Most organizations do not monitor employees' KMS usage, and much of the failure of KMS implementation stems from lack of employee buy-in, a top-down approach rather than a user-driven approach to managing knowledge (Sinclair, 2007).

2.2. Intention to share knowledge

The major goal of KMS implementation is to enhance knowledge sharing among the users and employees in the organization. Nonaka (1994) also showed that different types of knowledge, such as tacit and explicit knowledge, can be effectively exchanged through technology based KMSs. We expect that calculative commitment toward a KMS is related to the intention to share knowledge as the main goal of the KMS is to share knowledge. Terry, Hogg, & White (1999) also suggested the relationship between affective commitment and attitude of the recycling behavior of community residents. Sun and Zhang (2006) argued that there are several marketing studies that show affective reaction, such as emotion or enjoyment, influences cognitive perceptions or behavioral attitudes. Limayem, Khalifa, & Frini (2000) showed that social norms (family, media, and friends' influences) have direct positive effects on use intention in a Web based information systems environment. However, there are inconsistencies in the results of the test between normative factors and intention (Hwang, 2011). For example, Mathieson (1991) found no significant effect of social norms on intention. Davis (1989) also found that social norms had no significant effect on intention over and above perceived ease of use and usefulness. Although Davis (1989) omitted social norms from the original technology acceptance model, he did acknowledge the need for additional research to investigate the conditions and mechanisms governing the impact of normative influences on usage behavior (Venkatesh & Davis, 2000). We expect that three types of KMS commitment, such as affective, calculative and normative commitment, will influence intention to share knowledge in the organization (see Fig. 1). Thus, we hypothesize that:

H1a. Affective Commitment toward Knowledge Management Systems will positively influence Intention to Share Knowledge.

H1b. Calculative Commitment toward Knowledge Management Systems will positively influence Intention to Share Knowledge.

H1c. Normative Commitment toward Knowledge Management Systems will positively influence Intention to Share Knowledge.

2.3. Personal information management motivation

Motivation research generally defines motivation as one's desire and willingness to perform an act (e.g., Ashford & Black, 1996). Without sufficient motivation, it is less likely to predict human behavior and performance (Hwang, Kettinger, & Yi, 2010). Thus, the study of motivation is both important and relevant in personal knowledge management.