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Improving knowledge sharing behaviour within organizations: towards a model

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Knowledge management is the process of capturing, storing, sharing and using organizational knowledge with the aim of improving organizational performance. A necessary precursor for successful knowledge management initiatives is knowledge exchange between employees. This exchange is voluntary and highly dependent on an individual's willingness to share his/her knowledge. It thus becomes important to identify the factors motivating employees to share their knowledge. This research in progress draws on Locke and Latham's Goal Setting Theory (1990) to propose a model explaining knowledge sharing behavior.

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IMPROVING KNOWLEDGE SHARING BEHAVIOUR WITHIN ORGANIZATIONS: TOWARDS A MODEL

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Abstract

Knowledge management is the process of capturing, storing, sharing and using organizational knowledge with the aim of improving organizational performance. A necessary precursor for successful knowledge management initiatives is knowledge exchange between employees. This exchange is voluntary and highly dependent on an individual's willingness to share his/her knowledge. It thus becomes important to identify the factors motivating employees to share their knowledge. This research in progress draws on Locke and Latham's Goal Setting Theory (1990) to propose a model explaining knowledge sharing behavior.

Keywords: Knowledge Management, Motivation, Goal Setting Theory, Goal Commitment, Feedback, Task Complexity, Social Cognitive Theory, Job Design Theory

1.   Introduction

Knowledge sharing can be considered as one of the most important knowledge management processes in organizations (Alavi, 2001; Bock et al, 2005). As such, mechanisms should be introduced to encourage and motivate individuals and groups to improve knowledge sharing activities and behavior in organizational settings. Organizations often attempt to motivate knowledge sharing behavior (KSB) using extrinsic motivators such as monetary incentives (e.g. performance-related pay or bonuses); promotions (Bock et al., 2005); better work assignments; job security (Kankanhalli et al., 2005); training opportunities (Franco et al., 2002) or combinations of motivators (Bock et al., 2005, Franco et al., 2002). Even when it is not explicit that financial incentives are used to promote higher productivity, the underlying philosophy of many organizations is that these highly individualistic tournament incentive systems are significant determinants of an individual's behavior, resulting in intense competition among employees (Lai, 2009, Von Krogh, 1998, Menton and Pfeffer, 2003). In this instance, an individual's unique knowledge may provide increased influence and power (Von Krogh, 1998) and/or secure his/her position in the organization (Zack, 1999). Consequently, there is a reluctance to share knowledge (Lai, 2009) and the company becomes increasingly dependent on individual expertise (Von Krogh, 1998). This dependence on individual expertise is often undesirable for the organization's overall performance (Von Krogh, 1998) as strategically the ability to share knowledge is required for problem solving and exploiting opportunities (Zack, 1999).

A large part of the knowledge sharing literature focuses on people-to-people sharing of knowledge (Chiu et al., 2006, Swan et al., 1999, Wasko and Faraj, 2000) while there is a gap in terms of research that investigates knowledge sharing behavior through codification. Knowledge codification is an inherently complex activity and Cohendet and Steinmueller (2000) claim that much higher priority needs to be assigned to mechanisms and processes that extend and improve individual knowledge codification efforts. As extrinsic motivators can place the organization in an unattractive position, it is important to consider other factors that influence an individual's degree of willingness to exert and maintain an effort towards achieving organizational goals (Franco et al., 2002). This research explores knowledge sharing goals by investigating the influence of goal commitment, feedback and task complexity on KSB through codification. It draws on the existing theories of Job Design Theory (JDT), Social Cognitive Theory (SCT) and Goal Setting Theory (GST). Section 2 discusses these theories and introduces the KSB model followed by a discussion of contributions of the model in Section 3.

2.   A Model of Knowledge Sharing Behaviors in Organizations

Literature suggests that the effectiveness of an organization is increasingly dependent on the organization's ability to facilitate the utilization and sharing of knowledge (Nonaka and Takeuchi, 1995). There is a growing body of research that suggests that organizations are more productive if successful conditions for knowledge sharing are created. A deeper examination of these conditions has highlighted the critical role of motivation on knowledge sharing and utilization processes (Alavi and Leidner, 2001, Hansen et al., 1999, Szulanski, 1996, 2000). It is therefore important to further explore motivation and unpack the motivational factors that underpin knowledge sharing behavior. Motivational factors are usually categorized into intrinsic and extrinsic. Intrinsic (intangible) motivation refers to the inherent pleasure and satisfaction derived from performing an action

(Venkatesh and Speier, 1999). Situationalists such as Job Design Theorists (JDT) believe that the job and the organization design are the primary determinants of employee behavior and by focusing on the social and psychological influences on individuals in a job, factors that contribute to motivation to perform a job (Oldham and Hackman, 2010) can be identified.

In a similar vein, Latham (2007:162) states that "… *to believe that motivation is solely a function of the person or solely a function of the job is naïve…*". Rather it is a combination of many factors, including the employee's environment (the job and organization) and the interaction this environment has with the individual that affects and is in turn affected by a person's needs, personality and values (Franco et al., 2002). A theory that explains behavior based on the interaction of different factors is Social Cognitive Theory (SCT) which explains behavior as a triadic, dynamic and reciprocal interaction of the person, the environment and the behavior. SCT has been widely used in Information Systems (IS) literature to improve computer use and internet behavior (Hsu et al., 2007) and recently several studies have drawn upon SCT in order to explain knowledge sharing behavior (e.g. Chiu et al., 2006, Lin and Huang, 2008).

On the basis of these previous studies, this research proposes a model based on Locke and Latham's (1990) Goal Setting Theory (GST). GST is highly compatible with SCT and became popular towards the end of the 20th century both in the literature and as a valid and practical theory of employee motivation within an organization (Latham, 2007). "A goal is the object or aim of an action" (Locke and Latham, 2002:705). This theory asserts that there is a linear relationship between degree of goal difficulty and performance. The function is linear until the subjects reach the limits of their ability (at high difficulty goals) and then the function plateaus (Locke and Latham, 1990). Goals affect action through three direct mechanisms; an *energizing* function, *persistence* and a *direction* of both behavioral and cognitive attention and effort toward goal related activities. Goals also indirectly influence action by leading to the discovery, arousal and/or use of task relevant knowledge and strategies.

The objective of this research is to investigate how KSBs can be increased in organizations. Knowledge sharing can either occur via codification or via person-to-person contact (Hansen et al., 1999). *Codification* refers to the persistence of knowledge by means of documentation (Alavi and Leidner, 2001). It entails individuals contributing knowledge to populate document databases and individuals seeking knowledge from these databases for reuse (Hansen et al., 1999). The aim is to put organizational knowledge into a form that makes it accessible to those who need it and give permanence to knowledge that may otherwise only exist in the individual's mind (Davenport and Prusak, 1998). Organizations that adopt a *codification strategy* obtain a competitive advantage via the reuse of this high quality and reliable knowledge (Hansen et al., 1999).

Knowledge can also be viewed as closely tied to the person who developed it and within this view it is shared mainly through direct person-to-person contact. A *personalization strategy* emphasizes the linkage among people and the transfer of knowledge via this relationship. The organization that adopts this strategy obtains competitive advantage through inventive and analytic advice on high-level strategic problems through the channeling of individual expertise (Hansen et al., 1999). According to GST, behavioral performance is moderated by goal commitment, feedback and task complexity. These together with a set of corresponding hypotheses are described in the sections that follow.

2.1.   Goal commitment

When individuals are committed to their goals, the goal-performance relationship is strongest (Locke and Latham, 2002). Goal commitment is influenced by two factors namely importance and self efficacy. Importance refers to those factors that make goal attainment important to an individual such as the outcomes that are expected and can be influenced by increasing the importance of the task including participation in decision making and goal setting (Locke and Latham, 2002). It is also suggested that an increase in an individual's self efficacy will increase goal commitment. Self-efficacy refers to the belief that one can attain his/her goal. Organizations can influence an individual's self-efficacy by providing training; role modeling and through positive communications that the goal is achievable (Locke and Latham, 2002). In previous studies where self-efficacy was considered, a positive relationship between self-efficacy and KSB was found (e.g. Hsu et al., 2007). Therefore we expect that:

Hypothesis 1: *Goal commitment positively influences the effect of knowledge sharing goals on knowledge sharing behavior*

2.2.   Feedback

Feedback can be defined as "...a special case of the general communications process in which some sender (hereafter referred to as a *source)* conveys a *message* to a *recipient* (Ilgen et al., 1979:350). In this instance, the message comprises of information about the recipient and feedback can be considered as information about the recipient's past performance. The value of the information is dependent on the incremental increase in knowledge about performance that it provides (Annett, 1969). Feedback in itself does not have the power to motivate but rather through its relationship with goal setting. For goals to be effective, individuals need summary feedback that reveals progress in relation to their goals. If the individual has no information on his/her performance, it is difficult or impossible to adjust their level of or direction of performance and performance strategies in order to achieve the goal. Feedback can cognitively affect performance by revealing what the individual is doing correctly or incorrectly or what task strategies are helping or hindering (Locke and Latham, 1990). Therefore we predict that:

Hypothesis 2: *Feedback positively influences the effect of knowledge sharing goals on knowledge sharing behavior*

2.3.   Task Complexity

Task complexity influences the amount of knowledge, skill and effort required to perform the task (Wood, 1986). There are numerous tools and technologies developed to foster collaboration, the sharing of knowledge (Alavi and Leidner, 2001) and an increase in organizational learning by capturing internal knowledge and making it available to employees for reuse (Lin and Huang, 2008). As there are many different ways of creating artifacts and as each is different, their complexity may impact KSB.

There are different ways of classifying tasks. Locke and Latham (1990) use Wood's (1986) definition of task complexity to classify tasks. Wood's (1986) definition describes tasks based on three types of complexities, specifically compontent complexity, coordinative complexity and dynamic complexity. Component complexity is a function of the number of distinct acts that are required to be performed and the number of information cues that need to be processed in order to complete the task. The nature of the relationship between task inputs and task products is captured in coordinative complexity and at a more specific level will influence the timing, frequency, location and intensity

requirements for performing a given task. Dynamic complexity refers to the changes in the states of the world that in turn affect the coordinative and component complexities. These changes can affect skills and knowledge required to complete the task (Wood, 1986) therefore we predict that.

Hypothesis 3: *Task complexity negatively influences the effect of knowledge sharing goals on knowledge sharing behavior*

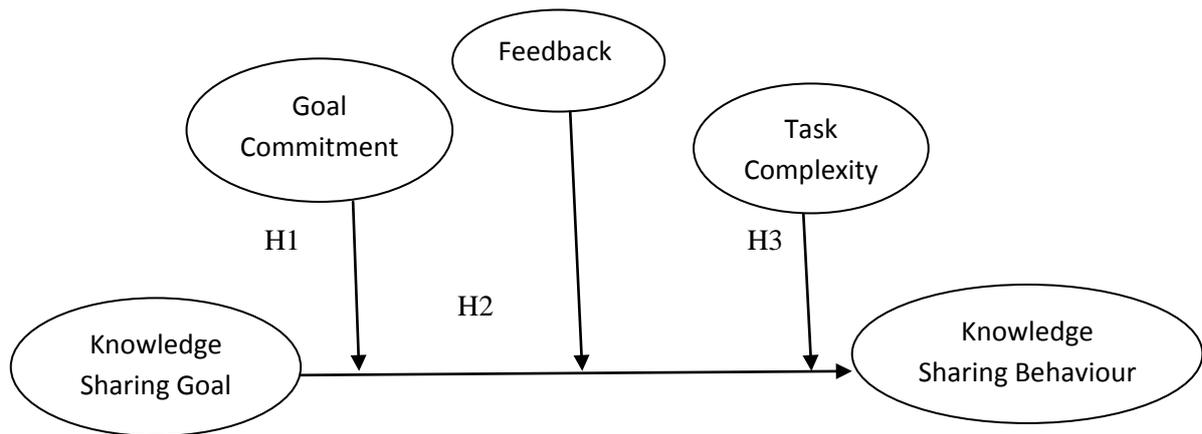Based on the preceding hypotheses, the KSB model therefore is

Figure 1   Model of knowledge sharing behavior

3.   Contributions

Organizations implementing knowledge management initiatives face a critical hurdle of finding ways to encourage employees to share knowledge (Nahapiet and Ghoshal, 1998, Hansen et al., 1999, Zack, 1999). KSB cannot be controlled or enforced as this behavior is essentially *voluntary* and the sharer has the option of passing on the knowledge that he/she possesses (Davenport and Prusak, 1997). Therefore there is a requirement to consider the factors that positively and negatively influence KSB. Drawing on a well developed theory of motivation described by Locke and Latham (1990), a model of KSB is presented. This model describes the effects of goal commitment, feedback and task complexity on KSB (Locke and Latham, 1990).

Practically, this research aims at enabling organizations to more effectively promote worker motivation and to identify managerial interventions that can foster KSB. This has implications for organizational resources including human resources and technology. Within the organizational system, human resource management (HRM) is responsible for mobilizing and motivating employees (Franco et al., 2002) and therefore motivating KSB would fall under the responsibilities of HRM. Furthermore, results of this research may provide key insights to team and unit managers on how tasks should be designed and managed to promote KSB. Technology also plays a role in KSB (Hansen et al., 1999) as it is used to capture and disseminate knowledge. This has implications for the designers and implementers of knowledge management systems. The next stage of this research in progress will involve the testing of the hypotheses by conducting a series of experiments.

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