An Empirical Study of Knowledge Sharing Intention within Virtual Teams

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ABSTRACT

Given that many organizational tasks are accomplished by people working as virtual teams, it’s important to understand team members’ knowledge sharing behavior. This study attempts to explore social cognitive factors influencing knowledge sharing in the team-based context. Based on a survey of 183 participants of team projects, this study finds that team climate, sense of self-worth, and past sharing behavior lead to positive attitude toward knowledge sharing. Moreover, attitude toward knowledge sharing and past sharing behavior have a positive impact on knowledge sharing intention. These findings can help managers design work teams to stimulate collaboration and improve performance.

Keywords: Knowledge Sharing, Procedural Justice, Sense of Self-Worth, Sharing Intentions, Team Climate, Virtual Teams

INTRODUCTION

Research indicates that 82% of companies with 100 or more employees use teams (Gordon, 1992), that new collaborative job designs and work practices require teamwork (Capelli & Rogovsky, 1994), and that corporations consider teamwork skills a prerequisite for new hires (Dowd & Liedtka, 1994). As information technology (IT) advances, virtual teams have been widely adopted by organizations as an important structural component to enable collaborations that transcend time, location, and space (Maznevski & Chudoba, 2000). Due to market globalization and the diffusion of outsourcing, virtual teams become particularly imperative, because many jobs have to be accomplished by several parties’ remote cooperation. Prior research shows that the performance of virtual teams is influenced by communications that enable effective knowledge sharing among team members (Jarvenpaa & Leidner, 1999). Thus, it is highly desirable to fully understand individuals’ knowledge sharing in virtual teams.

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Knowledge sharing is a complex phenomenon influenced by a myriad of factors. In many circumstances, individuals show a tendency to “hoard” information or feel reluctant to share knowledge with their peers. As scarcity creates value, the unwillingness to share is stronger whenever information or knowledge is treated as a personal possession (Senge, 1997). If individuals adopt a competitive rather than cooperative viewpoint, they are less likely to share knowledge with colleagues. Effectively communicated knowledge benefits the involved organizational actors by improving their performance and eventually improving financial, marketing, and general outcomes of the organization (Alavi & Leidner, 1999). Yet, in practice, inadequate sharing has been found to be a major impediment to knowledge management (Davenport & Prusak, 1998). To date, factors influencing online knowledge sharing are not well understood (Ardichvili, 2008). Prior research suggests that knowledge sharing is strongly influenced by an individual’s personal perceptions, experiences, and the characteristics of the team environment. Therefore, the specific aim of this study is to investigate how personal and team factors determine individuals’ knowledge sharing in the virtual team context.

RESEARCH MODEL AND HYPOTHESES

Knowledge sharing concerns the willingness and behavior of individuals in an organization to share with others the knowledge they have acquired or created (Gibbert & Krause, 2002). The sharing could be done directly via communication or indirectly via knowledge archives. Willingness is vital for knowledge sharing to occur because knowledge largely resides within each individual. Other than the individual himself or herself, nobody knows exactly what and how much knowledge he or she possesses. It would be practically impossible to force one to share knowledge without knowing what he or she knows (Bock et al., 2005). Thus, knowledge sharing is largely a volitional behavior and can only be encouraged and facilitated (Gibbert & Krause, 2002).

Prior research has identified a number of factors that influence knowledge sharing, among which three factors are highly relevant to our research context: team climate, procedural justice, and an individual’s intrinsic sense of self-worth. Team climate reflects social influences originating from teammates. Procedural justice is concerned with whether the reward allocation process is fair. For example, a member might be reluctant to share knowledge with a teammate who is less competent but receive a higher salary. Sense of self-worth suggests one’s intrinsic motivation to perform knowledge sharing. It is important because not all knowledge sharing behaviors can be monitored and receive extrinsic rewards. In addition, we contend that previous knowledge sharing behavior is likely to nurture a positive attitude toward subsequent knowledge sharing and enhance the intention to share knowledge in the future. Therefore, we develop the following research model to predict knowledge sharing behavior of virtual team members (Figure 1).

Team Climate

It is purported that team climate is one of the most important sources of social influence that affects users’ individual behavior (Hulsheger et al., 2009; Liang et al., 2010; West & Anderson, 1996). Team climate refers to an implicit frame that shapes individual perceptions, attitudes and behaviors within the group context (Seibert et al., 2004). In virtual teams, members working in a team are likely to be affected by team climate when deciding whether to share knowledge with others.

Team represents the immediate social environment with which members interact regularly to perform job-related tasks (Anderson & West, 1998). Since individuals need to be proximal to referent others to be exposed to social influences, Salancik and Pfeffer (1978) suggest that the immediate social environment is an important source of information which individuals use to construct reality and formulate
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