

# Chapter 29

## Identifying the Influential Factors of Knowledge Sharing in E-Learning 2.0 Systems

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### ABSTRACT

*As the E-Learning 2.0 system is a tool to help members manage knowledge in an effective way, this study attempts to verify the constructs of knowledge creation self-efficacy, subjective norms, perceived usefulness, organizational climate, attitudes toward knowledge sharing and the intention to engage in knowledge sharing. A sample of 284 participants from companies in China that have already implemented E-Learning 2.0 systems participated in this study. Structural equation modeling is conducted to test the research hypotheses. Research results show that (1) Knowledge creation self-efficacy, perceived usefulness and organizational climates are found to have positive effects on the intentions toward knowledge sharing in E-Learning 2.0 systems; (2) Meanwhile, system success factors of communication quality and service quality are suggested to influence the perceived usefulness of E-Learning 2.0 systems; (3) As we expected, the intentions toward knowledge sharing in E-Learning 2.0 have positive effects on knowledge-sharing behavior. Therefore, by highlighting the role of the organizational climate, the findings of current research provide practical insights for understanding how organizations should reinforce fairness, innovativeness and affiliation to create a climate of reciprocity.*

### INTRODUCTION

In the current knowledge-based economy, an organization's ability to leverage knowledge strategically has become a crucial factor for global competitiveness. As a consequence, a growing number of organizations, especially in knowledge-intensive industries, have introduced E-Learning communities to use knowledge more effectively and efficiently.

DOI: 10.4018/978-1-7998-0417-8.ch029

The latest Web 2.0 technology has provided more opportunities to develop collaborative E-Learning 2.0 communities for learners to participate in a collaborative learning context to acquire and share knowledge (Jenab & Sarfaraz, 2012). E-Learning 2.0 communities are increasingly perceived as central means to foster and enhance learning, knowledge sharing and integration in organizations (Richard & Archibald, 2010). Based on social constructivism, learners would learn more through the process of sharing experiences and discussion to build their knowledge. Consequently, E-Learning 2.0 communities have played a significant role as one of the most effective methods to create and sustain a competitive advantage for an organization.

The objective of E-Learning 2.0 communities is to enhance learning performance by encouraging participants to exploit or explore knowledge by reciprocal learning as a social process. Whether learners can share knowledge by raising good questions, recommending good articles, providing ideas and helping others resolve problems over E-Learning 2.0 communities becomes critical in enhancing their learning performance. Consequently, knowledge-sharing behavior is the most essential activity for maintaining and developing E-Learning 2.0 communities. For these reasons, most previous studies have focused on online knowledge-sharing behaviors (Fang & Chiu, 2010). However, few studies have empirically tested E-Learning 2.0 communities. Therefore, the purpose of this study is to empirically analyze factors that influence knowledge sharing in E-Learning 2.0 communities.

Because knowledge-sharing behaviors are believed to be the key for the success of virtual communities, researchers have employed varieties of theoretical frameworks to explore the factors that influence such behaviors of individuals. These theoretical frameworks include social exchange theory (Jin et al., 2010), social capital theory (Chow & Chan, 2008), social cognitive theory (Lin & Wang, 2012) and the theory of reasoned action (TRA) (Sohrabi et al., 2012).

Although most of these theoretical frameworks except for social cognitive theory are not motivation theories, most of these studies have also proposed motivational factors as influencing factors on knowledge-sharing behaviors. For example, it was proposed that self-efficacy and enjoyment in helping others are intrinsic motivational factors in knowledge sharing (Kankanhalli et al., 2005). Similarly, reputation was suggested as individual motivations (Wasko & Faraj, 2005). Moreover, anticipated extrinsic rewards, anticipated reciprocal relationships and a sense of self-worth were identified as motivation factors (Bock et al., 2005). While the literature underlines the influence of contextual factors and personal perceptions of knowledge sharing in this subject area (Wang & Noe, 2010), the Theory of Planned Behavior (TPB) has not been actively used as a research framework in this research. TPB has been one of the most influential theories in explaining and predicting behavior and has been shown to predict a wide range of behaviors. In E-Learning 2.0 communities, an individual's knowledge-sharing behaviors can be determined by behavioral intention and perceived behavioral control. Thus, the TPB can be considered an appropriate theoretical framework for this research.

We believe that knowledge sharing in virtual communities is a complex issue that is influenced by a number of variables; therefore, this research has been pursued to promote E-Learning 2.0 communities by solving some of the difficulties that occur in knowledge sharing. In terms of theory building, this study attempts to use the TPB as the underlying framework for developing the research model into the study of knowledge-sharing behavior in E-Learning 2.0 communities, which has not been dealt with previously. Potential applications of this study can be useful for managers to pay more attention to the important variables that influence knowledge sharing, rather than to information technology in E-Learning 2.0 communities.

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