

# Users' Intention to Share Knowledge Using Wiki in Virtual Learning Community

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## ABSTRACT

Many educational organizations are using Wikis to enhance virtual learning to encourage knowledge sharing inside between students and instructors. Wiki is an ideal tool for the online knowledge sharing at educational organizations which help to achieve more collaborative work environment between students and instructors. However, educational organizations sometimes fail of building successful virtual community and users abound Wikis for several reasons. This research explored the use of Wikis to share knowledge in virtual learning community. A proposed conceptual framework was developed examining the UTAUT model in new context by using it to test the behavior intention to share knowledge through the Wiki technology in virtual community. A survey to postgraduate students shows that social influence, performance, and effort expectancy have impact on students' attitude to share knowledge through Wikis.

## KEYWORDS

Knowledge Sharing, Technology Acceptance, UTAUT, Wiki

## INTRODUCTION

Knowledge management is an essential part of developing and consolidating the core competencies of organizations (Fatt and Khin, 2010). Many educational institutions and organizations tried to encourage sharing knowledge by implementing virtual learning communities (VLC) (Chen et al., 2009). To build virtual communities, many computer mediated communication technologies were used such as emails, instant messengers, discussion forms, chat rooms, video and audio streaming and recently weblogs and Wikis (Cheung and Lee, 2007; Limongelli, 2015). As a social technology, Wiki enables users to work together to build knowledge in collaborative way (Scardamalia and Bereuter, 2003). Wiki is fast, economical and appropriate tool for environments where knowledge is decentralized, located with multiple owners and for ad-hoc knowledge building (Jiang and Chen, 2014; Limongelli, 2015).

While the promise to use the Wiki to establish a virtual learning community is great, the successful implementation of virtual communities cannot be accomplished by simply grouping people together, offering them a communication system and invite them to engage in a collaborative way (Jiang and Chen, 2014). To achieve the most effective use of the Wiki in enhancing education, there is a need to investigate users' intention towards using Wikis to construct successful virtual learning and share their knowledge. Reviewing the literature shows few researches which investigated this issue in developing countries. Accordingly, this research seeks to answer this research question: What are the factors that affect users' intention to share knowledge using Wiki in virtual learning community?

The paper structure starts by presenting the theoretical background for understanding the literature review about e-democracy and social networks. This is followed by proposing a suggested e-democracy model. The methodology used in research is discussed in the following section and followed by the results and discussion.

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## **THEORETICAL BACKGROUND**

### **Knowledge Sharing**

Knowledge is mix of data, information, experience, values, ideas, intuition, expert insights and intelligence skills (Davenport and Prusak, 1998). There are two types of knowledge, explicit and tacit knowledge (Hamel, 1991). Tacit knowledge is what resides in people's mind e.g. experience. Explicit knowledge exists in the form of physical material hence it can be easily captured and transmitted (Stevens et al., 2010). External Knowledge can be coded and stored in a database to be easily accessed by anyone in organization (Civi, 2000). Knowledge sharing occurs between certain group members using a form of communication in order to acquire knowledge from each other. Davenport and Prusak (1998) stated that the success of knowledge sharing depends on the successful transfer, absorb and use of the knowledge, which in turn creates positive changes in the behavior of the knowledge receiver.

According to O'Dell & Grayson (1998) knowledge management is a strategy used to help people to improve their potential and upgrade the performance of the organization by sharing knowledge among them, thus the right people can get the right knowledge at the right time (Charnkit, 2010). Gold et al. (2001) stated that KM has main four processes starts by the capture of embedded knowledge (O'Dell and Grayson, 1998). Then moving to the second step which is conversion process by moving from tacit knowledge to external knowledge by informal interaction and discussions which is called knowledge transfer (Tan, 2011). Knowledge transfer requires group cooperation to share knowledge and achieve common benefits (Syed-Ikhsan and Rowland, 2004). The third step is disseminating knowledge by making knowledge available, which is considered a very important to achieve the required benefits of this knowledge in the right time (Syed-Ikhsan and Rowland, 2004). Finally, knowledge utilization which refers to events and activities related to the application of knowledge (Tan, 2011).

### **Virtual Learning Community Using Wiki**

The recent knowledge management researches emphasized the importance of knowledge management interactive technologies; i.e. virtual communities including the individual human side into the equation of knowledge management (Ardichvili et al., 2003). The technical features of interactive technologies are used to unleash the enthusiasm of knowledge sharing in organization (Paroutis and Al Saleh, 2009). Online virtual communities bring people from different backgrounds together to facilitate the knowledge creation through the collaboration and collective knowledge sharing among the community members (Marsico, Sterbini, and Temperini, 2015).

One type of virtual communities is virtual learning communities (VLC) which consist of teachers and students with a common goal to share knowledge through the internet. The goal of virtual learning communities is to encourage participants to explore or share knowledge through the internet in order to enhance learning performance (Chen et al., 2009). Wenger et al. (2002) stated that the online learning communities are not just database of resources, but they are groups of individuals who incorporate in online cyberspace to learn and build relationship and this process creates mutual commitment.

Choosing the appropriate software application is very important in facilitating the communication and a sharing among communities (Sauer et al., 2005), thus the selected knowledge sharing system should be flexible to support the various forms of tacit or explicit knowledge (Watson and Harper, 2008). Wiki is one of Web 2.0 most popular applications. Wiki is a collection of web pages, interlinked together and stores information; it is like a hypertext system involves a database of pages, and each page can be easily edited by other users (Schwartz et al., 2004). In Wiki users can not only read the Wiki content but they can also add to it, modify or reorganize its content such as text, videos and images (Augar et al., 2004).

In Wiki, users can share many types of media (images, videos, etc.), which can be used to capture the incidental, informal and tacit knowledge and convert it to explicit knowledge (Jackson, 2010). Moreover, users can describe and structure the information using metadata and immediately

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