Chapter 15

Understanding the Continued Usage Intention of Educators toward an e-Learning System

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ABSTRACT

The tremendous development of technologies over recent decades has offered many e-learning systems to faculty educators to support teaching. The advantage of using such systems in connection with on-site courses is that it increases flexibility in teaching/learning by making resources available online. However, there is little empirical evidence to suggest which factors shape educators’ continuance intention to use such systems. This study builds a model, based on the Unified Theory of Acceptance and Use of Technology to identify the factors. The model was tested among university educators who use the popular e-learning system, Moodle. The results suggest that the continuance intention is driven by perceived usefulness and access. Perceived ease of use, perceived behavioral control, compatibility, and social influence do not have a significant direct impact on continuance intention, although perceived ease of use and compatibility significantly affect perceived usefulness. Taken together, the core determinants of the continuance intention explained around 70% of the total variance in intention in this study.

INTRODUCTION

During recent years, e-learning using the Internet has become such a common phenomenon that educational institutions have invested ample resources to build and maintain e-learning environments (Coates et al., 2005). E-learning refers to the use of information and communications technology (ICT) to enhance and/or support teaching/learning. E-learning may provide many benefits, such as reduced education cost, consistency, timely content, flexible accessibility, and convenience (Cantoni et al., 2004; Lee et al., 2009a).

An e-learning environment may be comprised of student learners, educators, and the ICT. Learning may occur without an educator, particularly in an informal learning situation where learners study through the ICT and with other learners.
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However, in a formal teaching situation the educators’ role is visible and they enable or constrain learning. In both situations, e-learning systems are very attractive to educational institutions. Thus, when evaluating an e-learning system, the educators’ perspective must be considered. The success of such system depends on the willingness of the educators to continue utilizing it. If an educator chooses to discontinue his/her use of a particular e-learning technology, the students generally do not have any other choice than to leave the technology and adapt to the educator’s alternative choice.

To do research on the behavior of users in the utilization of e-learning systems, researchers often depend on general Information System (IS) adoption theories (Larsen et al., 2009; Sorebo et al., 2009). IS researchers have been attempting to identify the factors that may explain IS use for decades. Two schools of thoughts have evolved (Larsen et al., 2009). The first addresses the initial use of IS or IS acceptance, while the second addresses the subsequent IS use or IS continuance. Users’ initial e-learning system acceptance is an important first step toward gaining success. But the long-term viability of an e-learning system and its eventual success depend on its continued use rather than its initial acceptance (Bhattacherjee, 2001).

The research on IS continuance is mainly dominated by the expectation-confirmation theory (ECT) (Bhattacherjee, 2001). However, studies built upon other frameworks such as the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), etc. are also found in the literature (Hsu & Chiu, 2004; Lin, 2011). The integration of two or more frameworks in order to aid the understanding of the IS continuance intention has also been extensively studied (Lee, 2010; Liao et al., 2007). One of the most popular integrative frameworks developed for IS acceptance and use is the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). The UTAUT model was developed after synthesizing the previous adoption models. Thus, in this paper, we use the UTAUT model as the basis for our research model for understanding educators’ continuance intention toward utilization of e-learning systems in the university context.

RESEARCH CONTEXT

In order to understand the research context of this study, a brief introduction of the targeted e-learning system and the research environment are presented.

One e-learning system that may support both the traditional teaching and online teaching is a course management system, also known as a learning management system. A course management system is web-based software used for delivery, tracking and managing education/training. It contains features for distributing courses over the Internet and online collaboration. The educators can track the progress of students using such software. The students may also submit their assignments, download course materials, track their grades, etc. by logging on to the system. Course management systems are very widely used in higher education. For example, in 2005, 95% of all higher education institutions in the UK were using course management systems (Browne et al., 2006).

There are many course management systems, such as aTutor, Blackboard, it’s learning, Moodle etc. The target course management system of this study is Moodle. Moodle is an open source course management system or a virtual learning environment. It has become very popular among educators for creating dynamic online course websites for students. Moodle can be used to conduct online courses and also to augment face-to-face courses, the latter is known as blended learning. Moodle provides tools such as forums, databases and wikis to build collaborative learning communities. It also