An Adoption Model for E-Learning and Knowledge Management Systems

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ABSTRACT

The authors built an electronic learning (EL) and knowledge management (KM) adoption model for sharing, updating, and adopting the essences of EL and KM based on the existing literature, as well as data and information from face-to-face interviews of 17 EL and KM researchers worldwide. In this paper, the authors discuss the theoretical and practical implications of the model and offer some suggestions for practical improvement of EL and KM systems. The authors used qualitative research and inductive reasoning approaches for this study. Findings show that the proposed model directly impacts EL and KM academics, as well as practitioners, through the adoption of EL and KM systems, and Knowledge Science is enriched by nurturing new concepts and facilitating more opportunities to enhance collaborative, innovative, open, and distributed knowledge sharing and knowledge-adopting culture.

Keywords: Adoption Models, EL and KM Systems, E-Learning (EL), Enabling Conditions, Knowledge Management (KM)

INTRODUCTION

E-learning (EL) is gaining an educational foothold all over the world (Gunasekaran et al., 2002). Essentially, EL and knowledge management (KM) are both about knowledge generation (acquisition, creation, capture, and adoption), knowledge storage, knowledge distribution, and knowledge application (Wild et al., 2002). The principle functions of a KM system are to facilitate the conversion of data and text into knowledge, the conversion of individual and group’s knowledge into accessible knowledge, the connection of people and knowledge to other people and other knowledge, the communication of information between different groups, and the creation of new knowledge that would be useful to an organization (O’Leary, 1999; Fernandez-Breis & Martinez-Bezer, 2000). On the other hand, EL is seen as learning or as tools,
equipment, hardware and software, or as a means through which learning interaction is facilitated, or as a means through which to reduce the distance between and among teachers, students and the course material, or as a collaborative enterprise (Stein et al., 2009). Petrash (1996) argued that KM is getting the right knowledge to the right people at the right time so they can make the best decision, and De Cubber (2001) stated that the term e-learning is also a way of providing the right information to the right person at the right time, as well as enlarging the individual’s knowledge base and adjusting his or her view of the real world. EL and KM are both approaches that intend to improve construction, preservation, integration, transfer, and (re-) use of knowledge and competencies (Maier & Schmidt, 2007). But there is a lack in the literature to utilize the combined efforts of EL and KM systems. Therefore, it necessitates the adoption of EL and KM systems to enhance the learning performance, as well as sharing, updating and adopting the essences of EL and KM systems. To minimize the lack and fulfill this requirement, we build an EL and KM adoption model, and explain the theoretical and practical implications of this model, together with providing some suggestions for practical improvement of EL and KM in sharing the essence of EL and KM systems.

The remainder of this article is structured as follows: the next section describes research aims and objectives, followed by the related works. The research procedures are explained. EL and KM adoption models are presented and enabling conditions and suggestions for practical applications of the model are discussed. Major practical implications of the model are explained; the final section concludes the article with directions for future work.

AIMS AND OBJECTIVES

The aim of this article is to develop an EL and KM adoption model for sharing, updating and adopting the essence of EL and KM. The more particular objectives of the study are to:

• Present the major theoretical implications of the adoption model.
• Determine the enabling conditions and provide some suggestions for practical applications of the adoption model
• Explain the practical implications of the model.

REVIEW OF RELATED WORK

EL has been defined as technology-enabled learning, learning via the internet, learning delivered entirely online, collaborative learning, anytime, anywhere learning, inside and outside classroom learning, computer-based or internet-based learning, ICT-facilitated and supported learning, self-directed learning, web-based interactive learning, innovative approach to distance learning, ubiquitous learning, a broad range of online learning, an innovative way of learning to most people, and any type of learning delivered electronically, etc. (Hodgins & Conner, 2000; Zhang & Nunamaker, 2003; JISC, 2004; Bleimann, 2004; Mccombs & Varkili, 2005; Almulla & Alraqas, 2006; Ruiz et al., 2006; Chowdhury & Chowdhury, 2006; Manjunath & Patil, 2006; Hamada, 2007; Sacchanand, 2008; Lau & Tsui, 2009; Zimnas et al., 2009; Zhang et al., 2010; Assareh & Bidokht, 2011).

KM concepts have been around for a long time, the term ‘knowledge management’ seems to have arisen in the mid-70s (Setiarso, 2009). Abdulla and Selamat (2005) mentioned KM as a phrase that is used to describe the creation of knowledge repositories, improvement of knowledge access and sharing, as well as communication through collaboration, enhancing the knowledge environment and managing knowledge as an asset for an organization. Ruggles (1998) broadly defined KM systems as technologies, which enhance and enable knowledge generation, codification (know how) and transfer. Ruppel and Harrington (2001) on the other hand, defined KM as the strategies and tactics utilized by organizations to capture, manage and leverage their intellectual capital
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