Development of M-learning Application based on Knowledge Management Processes

Mostafa Al-Emran, Vitaliy Mezhuyev, Adzhar Kamaludin
Faculty of Computer Systems and Software Engineering, Universiti Malaysia Pahang, Gambang, Malaysia
malemran@buc.edu.om, vitaliy@ump.edu.my, adzhar@ump.edu.my ,

Maryam ALSinani
Information Technology Department, Al Buraimi University College, Al Buraimi, Oman
mjuma14@gmail.com

Abstract

The wide spectrum use of mobile devices has brought numerous opportunities to develop and design Mobile Learning (M-learning) applications that will assist learners in their studies. From the M-learning perspective, in order to improve the learners' capabilities through the use of mobile devices, Knowledge Management (KM) processes (Knowledge Acquisition, Knowledge Sharing, Knowledge Application, and Knowledge Protection) should be incorporated in M-learning applications. The literature shows that several research studies were carried out with the aim of developing M-learning applications. Due to the lack of literature on examining the impact of KM processes on M-learning acceptance theoretically and practically, the main objective of this study is to develop a M-learning application that enables KM processes (Acquisition, Sharing, Application, and Protection). Moreover, the paper describes the M-learning application framework that was developed based on KM processes. In addition, the paper deliberates the implementation of the application in two different universities in two different regions, namely: Universiti Malaysia Pahang (UMP) in Malaysia, and Al Buraimi University College (BUC) in Oman. Other implications and discussions are also presented in the paper.

Keywords: M-learning; knowledge management processes; mobile application