On Emerging Mobile Learning Environments

av

Edgar Napoleon Asiimwe

Akademisk avhandling

Avhandling för filosofie doktorsexamen i Informatik, som kommer att försvaras offentligt tisdagen den 28 Mars 2017 kl. 13.00, Rum P201, Örebro universitet

Opponent: Professor Mohamed Ally
Athabasca University
Canada

Örebro universitet
Handelshögskolan
70182 ÖREBRO
Abstract


This thesis investigates issues pertaining to the implementation of mobile learning and particularly the use of learning content management systems and mobile devices in university education. The thesis is positioned at the intersection of the research areas of information systems and education. The general view of technology is grounded in the field of information systems, but it is connected to the field of learning using the framework for the rationale analysis of mobile education (FRAME). The point of enquiry was chosen based on the fact that the number of people who use mobile devices today is higher than the number of people who use desktop computers. This presents an opportunity for higher education institutions to increase the reach of education services by means of delivering them on mobile devices. This, of course, also presents challenges.

The thesis is situated in the interpretive paradigm and the methodological approach was action research. Data was collected through review of literature, interviews, focus group discussions, observations and online surveys. Findings suggest that mobile learning cannot replace existing forms of learning in least developed countries but blended learning is a feasible alternative. Three units of analysis were used and found to be significant for studying and evaluating mobile learning, the technical artefact, the social artefact and the informational artefact, together making up the information systems artefact. The thesis contributes to theory by discussing how mobile learning can be seen to be constructed as an information systems artefact through these three constructs. Advancements in virtual learning technology may bring a new wave of learning management systems. The nature of the next generation of learning content management systems is a topic for further research.

Keywords: Mobile learning, LCMS, Mobile phones, FRAME, Emerging Mobile Learning Environments, IS artefact, Action research, CAR, LDCs.

Edgar Napoleon Asiimwe, School of Business
Örebro University, SE-701 82 Örebro, Sweden, edgar.asiimwe@oru.se