

A Conceptual Model of E-Learning based on Cloud Computing Adoption in Higher Education Institutions

Qasim AlAjmi^{1,2}, Ruzaini Abdullah Arshah¹, Adzhar Kamaludin¹, Ali Safa Sadiq^{1,3} and Mohammed A. Al-Sharafi¹

¹Faculty of Computer Systems & Software Engineering, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26300 Gambang, Kuantan, Pahang Malaysia.

²Faculty of Computer Science & MIS, Oman College of Management & Technology, Oman, Barka.

³School of Information Technology, Monash University, 47500 Bandar Sunway, Malaysia.

qasim.alajmi@omacollege.edu.om, ruzaini, adzhar, alisafasadiq{@ump.edu.my}, ma_shrafi@yahoo.com

Abstract— Cloud computing refers to adopting advanced virtualized resources for high scalability that can be shared with end users. Utilization of this technology is expediting in the world to intensify the potential of cloud computing based on E-learning in higher education institutions. Due to various apparent reasons, some higher education institutions are disinclined to relocate internal services to cloud services. To develop a model for utilizing E-learning based on cloud computing is the focal point of this paper, which is based on two prominent theories: The Fit-Viability Model and Diffusion of Innovation, in addition to information culture factors. The main purpose of this model is to investigate the significant factors to exploit the cloud in the enhancement of E-learning in higher education institutions.

Keywords: Cloud Computing, E-learning, Fit-Viability model, Diffusion of innovation, Information culture