

A model on the use of ubiquitous technology (u-tech) as a learning tool

ABSTRACT

Reviews of related literature reveal that factors, namely the Technology Competency (TC), Performance Expectancy (PE), Effort Expectancy (EE), Behavioural Intention (BI), Facilitating Conditions (FC) and Social Status (SS) influence ubiquitous technology usage.. Thus, the focus of this study was to confirm whether the determined factors contribute towards ubiquitous technology or u-tech such as laptops, smartphones and tablets. At the same time, it also aims to develop a new model on the factors that influence the utilisation of u-tech as learning tools among students in the institutions of higher learning, particularly in Malaysia. This study was based on a quantitative research in which the Structural Equation Modelling using AMOS was employed. The results attained from the analysis produced a reliable model towards u-tech usage. The significant paths that, TC significantly influenced u-tech usage ($\beta = .35, p = .000$), PE influenced u-tech usage ($\beta = .41, p = .000$) and FC influenced u-tech usage ($\beta = .23, p = .000$). Meanwhile, the structural paths for EE ($\beta = .26, p = .000$) and SS ($\beta = .52, p = .000$) towards u-tech usage were mediated by BI. Therefore, from the model, it can be concluded that, 63% of the variance in u-tech usage was described by the five factors. Moreover, this study suggested that the university administration should play an active role in disseminating news that is related to the usefulness of u-tech. Through this approach, students will not feel outmoded as they are provided with the opportunities to progress with the latest technology and be aware on the benefits in utilising these technologies.

Keyword: New model; Structural equation modelling; Ubiquitous technology (u-tech)