

## The ubiquitous technology model: the use among students at Malaysian Technical University Networks (MTUN)

### ABSTRACT

Laptops, smartphones and tablets which also known as a ubiquitous technology or U-Tech have been widely used by many students in the university. However, little is known about the factors influencing its usage as not many comprehensive studies have been done related to it. A review of related literature demonstrates that factors, namely the Technology Competency (TC), Performance Expectancy (PE), Effort Expectancy (EE), Behavioural Intention (BI), Facilitating Conditions (FC) and Social Status (SS) influence technology usage. The focus of this study was to confirm whether these factors contribute towards the U-tech usage among students in the Malaysian Technical Universities Network (MTUN). This study was based on a quantitative research in which the Structural Equation Modeling using AMOS was employed. The research instrument was in the form of a questionnaire. The reliability of the instrument ranged from 0.851 to 0.912. The results attained from the analysis produced a new theory towards U-tech usage. The significant paths found were TC influences U-Tech usage ( $\beta = 0.35$ ,  $p = 0.000$ ), PE influences u-tech usage ( $\beta = 0.41$ ,  $p = 0.000$ ) and FC influences U-tech usage ( $\beta = 0.23$ ,  $p = 0.000$ ). Meanwhile, the structural paths for EE ( $\beta = 0.26$ ,  $p = 0.000$ ) and SS ( $\beta = 0.52$ ,  $p = 0.000$ ) towards u-tech usage were mediated by BI. Thus, it can be concluded that, 63% of the variance in u-tech usage described by the five factors. This study suggested that to increase the use of U-tech, the students need to be given more training and more workshops. The university administration should play an active role in disseminating any news that is related to the usefulness of U-Tech.

**Keyword:** New theory; Structural equation modeling; Ubiquitous technology; Engineering and technical students