Paper 175 – Technology



THE EXTENDED TECHNOLOGY ACCEPTANCE MODEL IN THE ADOPTION OF SERVER VIRTUALIZATION BY HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

The central purpose of this study was to build a model by extending Technology Acceptance Model to identify and explain the factors that are perceived to affect the decision to adopt server virtualization by higher education institutions in a new environment (the Philippines). The dependent variable was server virtualization adoption and the independent variables were: management support, decision-making process, resource availability index, and awareness. Second, it will try to provide higher education institution administrators and key IT decision makers with a list of factors that can significantly affect the adoption of server virtualization. A combination of online and face-to-face survey was done to collect data for this study. A total of 150 IT directors of higher education institutions in the Philippines completed the survey. Structural Equation Modeling with AMOS was implemented on the data gathered. The results indicate that server virtualization adoption is primarily influenced by perceived usefulness. It was found that resource availability index influences server virtualization adoption through management support (r[115] = .24), perceived ease-of-use (r[115] = .14), and perceived usefulness (r[115] = .11). It was also found that management support influences server virtualization adoption mediated through perceived ease-of-use (r[115] = .58), and perceived usefulness (r[115] = .44). This study is useful for practitioners and server virtualization developers who want to increase and boost adoption of server virtualization. In order to achieve higher server virtualization adoption, developers should develop strategies to increase the perception of potential users towards its usefulness. This study focuses on perceptions of respondents (IT directors) from higher education institutions in the Philippines. For better validity, a study in other settings such as corporate organization is needed. Recommendations for future studies include assessing additional external factors such as perceived risks or uncertainty avoidance and perceived need. It is also recommended that future study could consider using intention to use as the dependent variable to be able to predict and not just explain the adoption of server virtualization.