UNIVERSITI TEKNOLOGI MARA

CLOUD COMPUTING ADOPTION IN PUBLIC SECTOR: A FEASIBILITY STUDY AT JABATAN PENDAFTARAN NEGARA (JPN), PUTRAJAYA

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ABSTRACT

Malaysia has significantly shown interest in adopting cloud in various sectors. The government is undertaking various initiatives to increase the usage level of online services through the provision of a more dynamic approach to Government Cloud Computing. MAMPU had outlined strategic directions for the implementation of Public Sector ICT that focuses on efficiency, productivity and innovation for the purpose of optimizing service delivery to the citizens. Data privacy, data lock-in, resource sharing and standardization issues are found to influence the use of cloud computing in public sector. These factors must be strictly assessed before adopting cloud-based solution. Henceforth, this study aims to identify the factors of cloud adoption and determine how Jabatan Pendaftaran Negara (JPN) could strategize Cloud Computing adoption. Combining the Diffusion of Innovation (DOI) theory and the Technological, Organizational and Environmental (TOE) framework, this study looks into three constructs of Cloud Computing Adoption - Technology Characteristic, Organisation Readiness, and External Environmental. An online survey was conducted with ninety-three respondents in JPN. SPSS was used for data analysis. Results showed that all constructs are significant to cloud adoption with security being the highest concern. Meanwhile the level of cloud adoption is showing medium tendency of adoption except for the Technology Characteristic showing strong and positive relationship with the cloud adoption. To expedite cloud adoption JPN could adopt the following stages of adoption; improve learning curve, organization assessment, conduct proof-of-concept and assessment, strategize and maintain the implementation plan. It would have to be done iteratively for a continuous success of cloud adoption.

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