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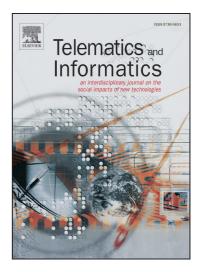
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An exploratory study for investigating the critical success factors for cloud migration in the Saudi Arabian higher education context

Abdulrahman Alharthi^{a, b,*}, Madini O. Alassafi^a, Robert J Walters^a and Gary B Wills^a

Abstract

Saudi universities have at their disposal a huge number of low cost IT resources to aid in teaching, research and learning. By migrating to cloud services, Saudi universities will be moving data and programs from local servers to the internet, thereby providing users with the ability to access and share information at any time from multiple devices. The migration to cloud-based IT resources is not yet widespread in Saudi universities due to several challenges including security, legal policies and implementation. At present, there is lack of research and guidance for Saudi universities on how to overcome these challenges and how contextual factors can influence the successful migration to the educational clouds.

This research presents a framework for the successful migration to cloud technology in the Saudi Arabian universities. In this research, a set of key critical success factors (CSFs) were identified by synthesizing components from studies concerned with the migration of cloud for higher education and factors identified from the successful implementation of WBL (Web Based Learning) and ERP (Enterprise Resource Planning) on higher education in Saudi Arabia. Based on this knowledge, the proposed framework was evaluated via expert review and a survey by IT specialists from the Saudi universities. The initial CSFs were updated based on the expert reviews and the results were analysed. Based on the findings at this stage, additional CSFs were added to the framework as suggested by the experts. Subsequently, in order to confirm the reviewed CSFs, additional investigation via a structured online questionnaire was conducted and the outcome was analysed via one-sample t-test with the data integrity analysed via Cronbach's alpha. The outcome indicated the majority of CSFs to be statistically significant except the Physical Location CSF. Potential future study and contributions are discussed.

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