

# A Conservative Framework for Effective Deployment of Cloud Services in Higher Education

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## **Abstract**

Cloud computing is irrefutably one of the greatest computing technologies in modern times. It is a utility-based platform that promises to open up new opportunities in innovations to a wide range of computing domains such as research, entrepreneurship, green computing, high performance computing, and pervasive intelligence among others. The basic tenet of this on- demand utility-based paradigm is to remove the burden where organizations would have to establish elaborate Information and Communication Technology (ICT) data centers and instead offload part or all the information technology Infrastructure to a third party for access across the internet by hiring software, application platform as well as the ICT infrastructure. Uptake of this technology holds promise to driving down costs while fostering innovation and promoting agility. There is need for continuous storage, update and management of onsite ICT infrastructure in academic institutions particularly those of higher learning. Consequently, migration to cloud services continues to be a corporate agenda for these institutions. However, higher education is yet to realize the full potential of this technology due to challenges associated with deployment of these services to the cloud. This paper reviews the benefits and explores challenges faced by these institutions in deploying cloud services and suggests a conservative model for cloud computing uptake.

**Keywords:** *Cloud Services, Deployment Model, Higher Education, E-Learning*