

FACTORS AFFECTING THE USAGE OF CLOUD COMPUTING SERVICES AMONG UNDERGRADUATES IN SRI LANKAN STATE UNIVERSITIES

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ABSTRACT

Cloud computing provides undergraduates with flexible access to resources, reduces the need for a physical infrastructure, and offers cost-effective solutions. However, despite their potential to enhance education through increased accessibility, collaboration, and efficiency, many students in Sri Lankan state universities lack awareness and understanding of these services. This study examined the factors influencing the adoption and usage of cloud computing services among undergraduates, focusing on awareness, perceived usefulness, ease of use, and security concerns. Data were collected from 384 undergraduate students across various disciplines using a structured questionnaire and purposive sampling. The analysis revealed moderate adoption levels of cloud computing, with significant variations across faculties. Correlation analysis showed that awareness, perceived usefulness, ease of use, and perceived security are key factors influencing usage, with perceived usefulness and ease of use being the most impactful. The regression model further confirmed the influence of these factors on the usage patterns. To improve cloud computing adoption, universities should implement awareness campaigns and training programs that emphasize practical benefits. Enhancing perceived security and simplifying interfaces can encourage adoption. These findings offer valuable insights for educators, policymakers, and cloud service providers seeking to promote cloud computing in higher education.

Keywords: Cloud computing, technology adoption, undergraduates, education, security