



Cyber Threats and Mitigation Strategies in Ugandan Financial Systems: A Replication Study

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Abstract

Cyber threats have become a critical concern for financial systems worldwide, including those in East Africa like Uganda's. The methodology employs a mixed-method approach combining quantitative surveys with qualitative interviews to analyse the effectiveness of current cybersecurity measures. A proportion (38%) of surveyed institutions reported experiencing cyber attacks, and the most common type was phishing emails. Interviews revealed significant gaps in staff training and outdated security protocols. The findings underscore the need for enhanced cybersecurity education and investment in modern technologies to protect financial systems from evolving threats. Ugandan regulators are encouraged to mandate regular cybersecurity audits, provide training programmes for financial institution staff, and promote industry-wide collaboration on threat intelligence sharing. Model estimation used $\hat{\theta} = \text{argmin} \{ \theta \} \text{sumiell} (y_i, f\theta (\xi)) + \lambda | \text{Vert} \theta |$, with performance evaluated using out-of-sample error.

Keywords: *Geographic, East Africa, Cybersecurity, Threats, Mitigation, Models, Analytics*

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