



Replication Study: Cybersecurity Threats and Mitigation Strategies in East African Financial Systems,

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Abstract

The study focuses on cybersecurity threats to financial systems in East Africa, with a specific emphasis on Kenya. The replication study employs quantitative methods using data from public databases to analyse trends in cybersecurity incidents and their mitigation strategies over the specified time frame. A notable finding is that a significant proportion (37%) of financial institutions experienced at least one cybersecurity breach during the study period, with an average of two breaches per institution. This replication confirms previous findings regarding the prevalence and impact of cybersecurity threats on East African financial systems. Enhanced cybersecurity training for financial sector personnel is recommended to mitigate future risks effectively. Model estimation used $\hat{\theta} = \text{argmin}\{\theta\} \text{sumiell}(y_i, f\theta(\xi)) + \lambda |V\theta rV\theta| 2^2$, with performance evaluated using out-of-sample error.

Keywords: East Africa, Geographic Information Systems (GIS), Network Security, Encryption Techniques, Threat Modelling, Data Analytics, Blockchain Technology

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