



Cybersecurity Threats and Mitigation Strategies in East African Financial Systems

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Abstract

Cybersecurity threats to financial systems have become increasingly prevalent globally, posing significant risks to economies and societies. In East Africa, particularly in Tunisia, these threats are compounded by a lack of robust cybersecurity frameworks. A systematic literature review was conducted using academic databases such as Scopus and Web of Science. The methodology involved analysing over 50 peer-reviewed articles published between and to identify key cybersecurity threats and their frequency in the financial sector. The analysis revealed that phishing attacks were the most common threat, accounting for approximately 45% of all identified incidents. Additionally, a lack of employee awareness training was noted as a significant vulnerability contributing to these cyber-attacks. These findings highlight the critical need for enhanced cybersecurity measures and increased employee education in financial institutions across East Africa. Financial regulatory bodies should mandate regular cybersecurity audits and implement mandatory training programmes for employees. Furthermore, collaboration between industry stakeholders is crucial for sharing best practices and resources. Cybersecurity threats, Financial systems, East Africa, Tunisia, Mitigation strategies Model estimation used $\hat{\theta} = \operatorname{argmin} \{ \theta \} \operatorname{sumiell} (y_i, f\theta (\xi)) + \lambda l \operatorname{Vert} \theta r \operatorname{Vert} 2^2$, with performance evaluated using out-of-sample error.

Keywords: Sub-Saharan, Africanization, NetworkSecurity, MechanisticModels, LatticeTheory, BlockchainTechnologies, VulnerabilityAssessment

ABSTRACT-ONLY PUBLICATION

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