African Political Communication (Media/Politics/Social)

# Blockchain Cryptocurrency in Microfinance: An Evaluation Among East African Women Entrepreneurs

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## Abstract

Blockchain technology has gained traction in various sectors including microfinance, offering potential for improved transaction security and efficiency. A mixed-method approach was employed, combining quantitative survey data with qualitative interviews to gather insights from a sample of 100 women entrepreneurs across three Nigerian states. Women entrepreneurs reported an average increase in transaction success rate by 25% when using blockchain-based cryptocurrencies compared to traditional methods, though concerns about initial setup costs remained significant. Blockchain technology shows promise for enhancing microfinance transactions among East African women entrepreneurs but requires addressing affordability issues and regulatory frameworks. Government bodies should collaborate with tech firms to subsidize the cost of blockchain infrastructure in underserved regions. Educators can play a role by training women on digital financial literacy. Model estimation used $\hat{\{\theta\}} = argmin\{\theta\} sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2$, with performance evaluated using out-of-sample error.

**Keywords:** *African geography, Blockchain technology, Cryptocurrencies, Microfinance, Peer-to-peer transactions, Survey methodology, Women entrepreneurs*

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