



# Quantitative Assessment of Mobile Banking Adoption and Financial Inclusion in Rural Tanzania,

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## Abstract

Mobile banking services have emerged as a critical tool for financial inclusion in rural areas of developing countries. The study employs a mixed-method approach combining quantitative survey data with qualitative interviews. A stratified random sampling strategy was used to ensure representation across different socioeconomic groups in rural Tanzania. Mobile banking adoption rates were notably higher among younger adults (aged 25-34) compared to older generations, indicating the potential for generational diffusion of digital financial services. The findings underscore the importance of targeted interventions to enhance mobile banking accessibility and usage in rural areas, particularly focusing on youth education campaigns. Policy makers should prioritise funding for mobile banking infrastructure development and promote digital literacy programmes among rural populations. Mobile Banking, Financial Inclusion, Digital Economy, Rural Tanzania Model estimation used  $\hat{\theta} = \operatorname{argmin}\{\theta\} \operatorname{sumiell}(y_i, f\theta(\xi)) + \lambda \operatorname{Vert}\theta \operatorname{rVert} 2^2$ , with performance evaluated using out-of-sample error.

**Keywords:** *Quantitative Analysis, Mobile Banking, Financial Inclusion, Rural Development, Survey Research, Geographic Information Systems, Data Mining Techniques*

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