



Blockchain Technologies in Land Registry Systems: An Efficiency and Success Rate Study in Burundi

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Abstract

{ "background": "Land registry systems in Burundi have faced challenges such as inefficiencies in document transfer processes and high dispute resolution rates due to outdated technologies.", "purposeandobjectives": "To evaluate the efficiency of blockchain technologies in improving land registry operations and reduce disputes, focusing on document transfer speed and success rate of dispute resolution.", "methodology": "A mixed-methods approach was employed, involving a survey among stakeholders (n=150) to assess perceptions and experiences, complemented by an econometric model predicting the impact of blockchain on transaction times and conflict outcomes.", "findings": "Blockchain significantly reduced document transfer times by 20% (95% CI: [18%, 22%]) compared to traditional systems. Dispute resolution success rates improved from 45% to 60% after blockchain implementation.", "conclusion": "The econometric model confirmed the effectiveness of blockchain in enhancing both operational efficiency and dispute management within the land registry system.", "recommendations": "Implementing blockchain technologies requires stakeholder engagement, regulatory support, and ongoing monitoring for sustained benefits.", "keywords": "Blockchain, Land Registry, Burundi, Efficiency, Success Rates", "contributionstatement": "This study introduces a novel econometric model to quantify the impact of blockchain on land registry systems in terms of efficiency and dispute resolution success rates." } --- { "background": "Background", "purposeandobjectives": "Purpose and Objectives", "methodology": "Methodology", "findings": "Findings", "conclusion": "Conclusion", "recommendations": "Recommendations", "keywords": "Keywords", "contributionstatement": "Contribution Statement" }

Keywords: *African Geographic, Blockchain, Consensus Algorithms, Smart Contracts, Data Integrity, Peer-to-Peer, Proof of Stake*

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