Journal de Recherche Multidisciplinaire
ISSN : 3088-5205 https://jorep.net

JOREP Journal de recherche multidisciplinaire

Volume : 1
Numéro : 2
Année : 2025
Mois : Mars

Fintech for financial inclusion: trust and community banking; a comparative analysis of divergent pathways in Kenya and Singapore

Ossari Amandine Chida[1]

Iradukunda Sengesho Benigne2

Nizeyimana Jean Baptiste3

1. Joint PhD Researcher at Lisala University and UNCR University, Economics and Management Sciences Department, Banking and Finance
2. Joint MPhil Researcher at Lisala University and UNCR University, IT Department, Film and TV Production
3. Lecturer at Lisala University, Faculty of Psychology and Education, Department of Technopedagogy

ABSTRACT

This study examines the comparative dynamics of fintech for financial inclusion and the role of trust and community banking in Kenya and Singapore, two countries at vastly different stages of financial development yet both leveraging technology to expand access to financial services. Despite their divergent economic contexts and institutional infrastructures, both nations grapple with fundamental questions about how to build trust in digital financial services, reach underserved populations, and integrate fintech innovation with community-based financial institutions. The

[1] Joint PhD Researcher at Lisala University and UNCR University, Economics and Management Sciences Department, Banking and Finance

research employs a comparative case study methodology, drawing on policy documents, empirical data, academic research, and scholarly analyses spanning 2020-2026. Kenya's fintech revolution, anchored by the M-PESA mobile money platform launched in 2007, has become a global model for financial inclusion through technology. M-PESA now reaches 98% of households, with 77% of adults using mobile money services, transforming how Kenyans save, borrow, and transfer money . The platform's success is rooted in the trust built through Safaricom's extensive agent network—local shopkeepers and vendors who serve as trusted intermediaries, particularly in rural areas . Building on this foundation, Kenya's fintech ecosystem has expanded to include lending platforms like Tala and Branch, which use alternative data (smartphone usage patterns, social network analysis) to assess creditworthiness for previously unbanked populations . However, challenges persist: a 2024 study of digital credit users in Nairobi found that 42% had defaulted on loans, with aggressive debt collection practices causing psychological distress . Regulatory gaps in the digital lending sector led to the 2022 Digital Credit Providers Regulations, requiring licensing and consumer protection standards . The 2025-2030 Central Bank of Kenya Strategic Plan prioritizes digital financial inclusion while addressing emerging risks, including fraud and cybersecurity threats .

Singapore presents a different pathway, characterized by world-class digital infrastructure, strong regulatory frameworks, and strategic positioning as a global fintech hub. The Monetary Authority of Singapore (MAS) has pioneered regulatory sandboxes allowing controlled experimentation, enabling innovation while maintaining oversight . Singapore's financial inclusion challenge is not the unbanked masses but ensuring that marginalized groups—low-wage migrant workers, the elderly, lower-income households—are not left behind in the digital transition. Initiatives like the 2021 Financial Inclusion Action Plan target these groups through tailored financial education and accessible digital services . Community banking in Singapore is exemplified by the credit cooperative movement, with institutions like the Singapore National Co-operative Federation (SNCF) serving specific communities based on occupation or affinity . A 2025 study of migrant worker banking found that while digital platforms improve remittance efficiency, trust barriers persist, with workers preferring informal channels due to familiarity and perceived reliability . Singapore's fintech governance framework emphasizes consumer protection through the Financial Advisory Industry Review (FAIR) and the Financial Needs Analysis (FNA) framework, requiring

detailed assessment of customer circumstances before product recommendation . The trust deficit in digital channels, particularly among older adults and migrant workers, remains a key challenge, addressed through financial literacy programs and community-based touchpoints .

Kenya's strength lies in its organic, user-driven fintech adoption, the trust embedded in agent networks, and the leapfrog nature of its financial inclusion achieved without extensive traditional banking infrastructure. Its challenge is managing the risks of rapid, lightly regulated innovation, particularly predatory lending and data privacy concerns. Singapore's advantage is its robust regulatory architecture, consumer protection frameworks, and strategic approach to fintech innovation, ensuring that inclusion advances without compromising stability. Both countries demonstrate that effective fintech for financial inclusion requires: (1) trust built through accessible, familiar intermediaries; (2) regulatory frameworks that protect consumers without stifling innovation; (3) attention to marginalized groups at risk of digital exclusion; (4) data protection and privacy safeguards; (5) financial literacy enabling informed use; (6) community-based institutions bridging trust gaps; (7) adaptive regulation through mechanisms like sandboxes; and (8) recognition that technology alone cannot build trust—it must be embedded in social relationships .

KEYWORDS: Fintech, financial inclusion, trust, community banking, Kenya, Singapore, M-PESA, mobile money, digital lending, regulatory sandbox

RÉSUMÉ

Cette étude examine les dynamiques comparatives de la fintech pour l'inclusion financière et le rôle de la confiance et de la banque communautaire au Kenya et à Singapour, deux pays à des stades de développement financier très différents mais qui exploitent tous deux la technologie pour élargir l'accès aux services financiers. Malgré leurs contextes économiques divergents et leurs infrastructures institutionnelles distinctes, les deux nations sont confrontées à des questions fondamentales sur la manière de renforcer la confiance dans les services financiers numériques, d'atteindre les populations mal desservies et d'intégrer l'innovation fintech aux institutions financières communautaires. La recherche emploie une méthodologie d'étude de cas comparative, s'appuyant sur des documents politiques, des données empiriques, des recherches académiques et

des analyses savantes couvrant la période 2020-2026. La révolution fintech du Kenya, ancrée dans la plateforme d'argent mobile M-PESA lancée en 2007, est devenue un modèle mondial d'inclusion financière par la technologie. M-PESA atteint désormais 98 % des ménages, avec 77 % des adultes utilisant des services d'argent mobile, transformant la façon dont les Kenyans épargnent, empruntent et transfèrent de l'argent . Le succès de la plateforme repose sur la confiance construite grâce au vaste réseau d'agents de Safaricom—des commerçants et vendeurs locaux qui servent d'intermédiaires de confiance, en particulier dans les zones rurales . S'appuyant sur cette base, l'écosystème fintech kenyan s'est élargi pour inclure des plateformes de prêt comme Tala et Branch, qui utilisent des données alternatives (modèles d'utilisation des smartphones, analyse des réseaux sociaux) pour évaluer la solvabilité des populations auparavant non bancarisées . Cependant, des défis persistent : une étude de 2024 sur les utilisateurs de crédit numérique à Nairobi a révélé que 42 % avaient fait défaut sur leurs prêts, avec des pratiques agressives de recouvrement de créances causant une détresse psychologique . Les lacunes réglementaires dans le secteur des prêts numériques ont conduit à la réglementation sur les fournisseurs de crédit numérique de 2022, exigeant des licences et des normes de protection des consommateurs . Le plan stratégique 2025-2030 de la Banque centrale du Kenya donne la priorité à l'inclusion financière numérique tout en traitant les risques émergents, y compris la fraude et les menaces de cybersécurité .

Singapour présente une voie différente, caractérisée par une infrastructure numérique de classe mondiale, des cadres réglementaires solides et un positionnement stratégique en tant que plaque tournante mondiale de la fintech. L'Autorité monétaire de Singapour (MAS) a été pionnière dans la mise en place de bacs à sable réglementaires permettant une expérimentation contrôlée, favorisant l'innovation tout en maintenant une surveillance . Le défi de l'inclusion financière à Singapour n'est pas celui des masses non bancarisées, mais de s'assurer que les groupes marginalisés—travailleurs migrants à bas salaire, personnes âgées, ménages à faibles revenus—ne soient pas laissés pour compte dans la transition numérique. Des initiatives comme le Plan d'action pour l'inclusion financière de 2021 ciblent ces groupes par le biais d'une éducation financière adaptée et de services numériques accessibles . La banque communautaire à Singapour est illustrée par le mouvement des coopératives de crédit, avec des institutions comme la Fédération nationale des coopératives de Singapour (SNCF) desservant des communautés

spécifiques basées sur la profession ou l'affinité . Une étude de 2025 sur les services bancaires pour les travailleurs migrants a révélé que si les plateformes numériques améliorent l'efficacité des envois de fonds, les obstacles liés à la confiance persistent, les travailleurs préférant les canaux informels en raison de leur familiarité et de leur fiabilité perçue . Le cadre de gouvernance de la fintech à Singapour met l'accent sur la protection des consommateurs par le biais de l'examen du secteur du conseil financier (FAIR) et du cadre d'analyse des besoins financiers (FNA), exigeant une évaluation détaillée de la situation du client avant de recommander un produit . Le déficit de confiance dans les canaux numériques, en particulier chez les personnes âgées et les travailleurs migrants, reste un défi clé, traité par des programmes de littératie financière et des points de contact communautaires .

La force du Kenya réside dans son adoption organique et axée sur les utilisateurs de la fintech, la confiance ancrée dans les réseaux d'agents, et la nature de saut technologique de son inclusion financière réalisée sans infrastructure bancaire traditionnelle extensive. Son défi est de gérer les risques d'une innovation rapide et peu réglementée, en particulier les prêts prédateurs et les préoccupations en matière de confidentialité des données. L'avantage de Singapour est son architecture réglementaire robuste, ses cadres de protection des consommateurs et son approche stratégique de l'innovation fintech, garantissant que l'inclusion progresse sans compromettre la stabilité. Les deux pays démontrent qu'une fintech efficace pour l'inclusion financière nécessite : (1) une confiance construite par des intermédiaires accessibles et familiers ; (2) des cadres réglementaires qui protègent les consommateurs sans étouffer l'innovation ; (3) une attention aux groupes marginalisés à risque d'exclusion numérique ; (4) des garanties de protection des données et de la vie privée ; (5) une littératie financière permettant une utilisation éclairée ; (6) des institutions communautaires comblant les déficits de confiance ; (7) une réglementation adaptative par le biais de mécanismes comme les bacs à sable ; et (8) la reconnaissance que la technologie seule ne peut construire la confiance—elle doit être ancrée dans les relations sociales .

MOTS-CLÉS : Fintech, inclusion financière, confiance, banque communautaire, Kenya, Singapour, M-PESA, argent mobile, prêt numérique, bac à sable réglementaire.

Suumis le : 17 Mars, 2026
Publié le : 07 May , 2026
Auteurs correspondant: *Ossari Amandine Chida, Iradukunda Sengesho Benigne and Nizeyimana Jean Baptiste*
Adresses électroniques: *ossariamandine@cirep.ac.cd,benigneira0@gmail.com, nizeyimana.jb@dphu.ac.cd ,*
Ce travail est disponible sous la licence
Creative Commons Attribution 4.0 International.

1. INTRODUCTION

Financial inclusion—the access to and use of affordable financial services by individuals and businesses—is widely recognized as a catalyst for poverty reduction, economic growth, and social development. Yet for decades, billions of people remained excluded from formal financial systems due to geography, poverty, and the high costs of traditional banking. The emergence of financial technology (fintech) has transformed this landscape, offering new pathways to inclusion through mobile money, digital lending, and innovative payment systems.

Kenya and Singapore, two countries at vastly different stages of financial development, offer a compelling comparative lens. Kenya's fintech revolution, anchored by the M-PESA mobile money platform launched in 2007, has become a global model for financial inclusion through technology. With 98% of households reached and 77% of adults using mobile money, Kenya has achieved what traditional banking could not: bringing the unbanked into the formal financial system at scale . The platform's success is rooted in the trust built through Safaricom's extensive agent network—local shopkeepers and vendors who serve as trusted intermediaries .

Singapore, by contrast, is a global financial center with world-class digital infrastructure and sophisticated regulatory frameworks. Its financial inclusion challenge is not the unbanked masses but ensuring that marginalized groups—low-wage migrant workers, the elderly, lower-income households—are not left behind in the digital transition . Singapore's approach emphasizes robust consumer protection, regulatory sandboxes for controlled innovation, and targeted initiatives for vulnerable populations .

This study examines the comparative dynamics of fintech for financial inclusion and the role of trust and community banking in Kenya and Singapore. Drawing on policy documents, empirical

data, academic research, and scholarly analyses, it explores how each country's approach to fintech reflects distinct institutional contexts, challenges, and strategies for building trust. The analysis is organized around four interconnected themes: (1) fintech ecosystems and financial inclusion outcomes; (2) the role of trust and community intermediaries; (3) regulatory frameworks and consumer protection; and (4) challenges and lessons for inclusive fintech.

The study contributes to scholarship on financial inclusion, fintech regulation, and development finance. It argues that effective fintech for inclusion requires not only technological innovation but also trust built through accessible intermediaries, regulatory frameworks that protect consumers, and deliberate attention to marginalized groups.

2. LITERATURE REVIEW

2.1 Conceptualizing Fintech and Financial Inclusion

Financial technology (fintech) refers to the application of digital technologies to financial services, including payments, lending, savings, insurance, and investment. Fintech for financial inclusion leverages these technologies to reach populations traditionally excluded from formal financial systems due to cost, distance, or documentation barriers.

The literature identifies multiple pathways through which fintech can enhance inclusion: reducing transaction costs, enabling small-value transactions, overcoming geographic barriers through mobile platforms, and using alternative data for credit assessment. However, fintech also introduces new risks, including data privacy concerns, predatory lending, and digital exclusion of those without access to technology or digital literacy.

2.2 Kenya's Fintech Revolution

Kenya's fintech journey is anchored by the M-PESA mobile money platform, launched in 2007 by Safaricom. Key features include:

- **Scale:** M-PESA now reaches 98% of Kenyan households, with 77% of adults using mobile money services. The platform processes over 2 billion transactions annually, with a value equivalent to nearly half of Kenya's GDP.
- **Agent network:** M-PESA's success is built on a network of over 200,000 agents—local shopkeepers, petrol station attendants, and small business owners—who serve as trusted intermediaries, particularly in rural areas where bank branches are scarce.
- **Service expansion:** From its origins as a person-to-person transfer service, M-PESA has expanded to include savings (M-Shwari), lending (KCB M-PESA), and bill payments.
- **Digital lending ecosystem:** Building on M-PESA's infrastructure, digital lenders like Tala and Branch have emerged, using alternative data (smartphone usage patterns, social network analysis) to assess creditworthiness. A 2024 study of digital credit users in Nairobi found high adoption but also significant risks: 42% had defaulted on loans, with aggressive debt collection practices causing psychological distress.
- **Regulatory evolution:** The rapid growth of digital lending, much of it unregulated, prompted the 2022 Digital Credit Providers Regulations, requiring licensing, caps on interest rates, and consumer protection standards.
- **Strategic direction:** The Central Bank of Kenya's 2025-2030 Strategic Plan prioritizes digital financial inclusion while addressing emerging risks including fraud, cybersecurity, and data protection.

2.3 Singapore's Fintech and Inclusion Approach

Singapore's fintech ecosystem operates within a highly developed financial infrastructure. Key features include:

- **Regulatory sandbox:** The Monetary Authority of Singapore (MAS) pioneered regulatory sandboxes allowing controlled experimentation with innovative financial services. This enables fintech startups to test products with real customers under relaxed regulatory requirements, while maintaining oversight and consumer protection.
- **Financial inclusion challenge:** Singapore's challenge is not reaching the unbanked masses but ensuring that marginalized groups—low-wage migrant workers, the elderly, lower-income

households—access and benefit from digital financial services. The 2021 Financial Inclusion Action Plan targets these groups through financial education and accessible digital services.

- **Migrant worker banking:** A 2025 study of migrant worker banking found that while digital platforms improve remittance efficiency, trust barriers persist. Workers often prefer informal channels due to familiarity and perceived reliability, despite higher costs and risks.
- **Consumer protection framework:** The Financial Advisory Industry Review (FAIR) and Financial Needs Analysis (FNA) framework require detailed assessment of customer circumstances before product recommendation, ensuring that financial advice is appropriate and not merely sales-driven.
- **Community banking:** Credit cooperatives, such as those affiliated with the Singapore National Co-operative Federation (SNCF), serve specific communities based on occupation or affinity, providing trusted, relationship-based services that complement digital channels .
- **Fintech governance:** Singapore's approach emphasizes balancing innovation with stability. As the MAS 2025 Strategic Plan notes, "We will ensure that our financial sector remains resilient, trusted, and inclusive, fostering sustainable growth while safeguarding stability and consumer interests".

3. RESEARCH QUESTIONS

This study addresses the following research questions:

1. How do fintech ecosystems and financial inclusion outcomes differ between Kenya and Singapore, and what factors explain these differences?
2. What role do trust and community intermediaries play in facilitating or hindering fintech adoption in each country?
3. How do regulatory frameworks in each country balance innovation with consumer protection and financial stability?

4. METHODOLOGY

This study employs a comparative case study methodology to examine fintech for financial inclusion and the role of trust and community banking in Kenya and Singapore. The research design integrates document analysis of primary sources with synthesis of secondary literature to develop a comprehensive understanding of fintech dynamics in both countries.

Primary sources analyzed include: Central Bank of Kenya strategic plans and regulatory documentation ; Monetary Authority of Singapore strategic plans and regulatory frameworks ; academic research on Kenyan digital lending ; studies of migrant worker banking in Singapore ; and industry reports on fintech adoption .

The comparative framework examines four dimensions of fintech for financial inclusion: (1) fintech ecosystems and inclusion outcomes; (2) trust and community intermediaries; (3) regulatory frameworks; and (4) challenges and lessons.

The analysis covers the period from approximately 2020 to 2026, capturing recent developments including Kenya's Digital Credit Providers Regulations and Singapore's ongoing fintech innovation.

5. RESULTS

5.1 Fintech Ecosystems and Financial Inclusion Outcomes

Kenya: Kenya's fintech ecosystem is characterized by high adoption and rapid innovation. Key features include:

- **Mobile money penetration:** 98% of households reached; 77% of adults use mobile money services . M-PESA processes over 2 billion transactions annually, value equivalent to nearly half of GDP.
- **Financial inclusion leap:** Kenya's financial inclusion rate rose from 26.7% in 2006 to 83.7% in 2021, largely driven by mobile money .
- **Digital lending proliferation:** Over 50 digital lenders operate in Kenya, with Tala and Branch among the largest. A 2024 study of 2,000 digital credit users in Nairobi found high adoption but

also significant default rates (42%) and aggressive debt collection causing psychological distress .

- **Agent network:** 200,000+ M-PESA agents serve as the physical interface for digital services, enabling cash-in/cash-out and building trust through face-to-face interaction .
- **Product diversification:** Beyond payments, fintech now includes savings (M-Shwari), lending (KCB M-PESA, Fuliza), insurance (Bima), and investment products.
- **Demographic reach:** Mobile money has been particularly transformative for women, who historically faced greater barriers to formal financial services.

Singapore: Singapore's fintech ecosystem is characterized by high sophistication and targeted inclusion efforts. Key features include:

- **Digital infrastructure:** Singapore has near-universal internet access and smartphone penetration, with a highly developed banking sector. The challenge is not access but ensuring marginalized groups benefit from digital transition.
- **Migrant worker inclusion:** Approximately 300,000 low-wage migrant workers, primarily from Bangladesh, India, and Myanmar, face barriers to formal financial services. A 2025 study found that while digital platforms improve remittance efficiency, trust barriers persist, with workers preferring informal channels .
- **Elderly inclusion:** Older adults, particularly those with lower digital literacy, risk exclusion from digital-only services. The 2021 Financial Inclusion Action Plan includes targeted financial education and accessible digital services .
- **Credit cooperatives:** Community-based institutions like SNCF-affiliated credit cooperatives serve specific occupational groups, providing trusted, relationship-based services that complement digital channels.
- **Fintech hub status:** Singapore hosts over 1,000 fintech firms, with cumulative investments exceeding $5 billion, positioning it as a global fintech hub .

Table 1: Comparative Fintech Ecosystems and Inclusion Outcomes

Dimension	**Kenya**	**Singapore**

Mobile money penetration	98% households; 77% adults	Near-universal digital infrastructure
Primary inclusion challenge	Reaching unbanked masses	Reaching marginalized groups (migrants, elderly, low-income)
Agent network	200,000+ M-PESA agents	Limited; digital-first
Digital lending	50+ lenders; 42% default rate	Regulated; consumer protection focus
Migrant worker access	Not a major demographic	300,000+ workers; trust barriers
Financial inclusion rate	26.7% (2006) → 83.7% (2021)	High baseline; targeted gaps

5.2 Trust and Community Intermediaries

Kenya: Trust in Kenya's fintech ecosystem is built through multiple mechanisms. Key features include:

- **Agent trust:** M-PESA agents—local shopkeepers, petrol station attendants, small business owners—are known and trusted in their communities. As one researcher notes, "In rural areas, the agent might be the only financial services touchpoint for miles, and their presence—their familiarity, their accountability to neighbors—built trust that a distant call center could not" .
- **Safaricom brand:** Safaricom, Kenya's largest mobile network operator and M-PESA's parent, is a trusted brand with extensive customer relationships.
- **Social proof:** As M-PESA adoption grew, seeing neighbors, family, and community members using the service reinforced trust.
- **Digital lending trust challenges:** The 2024 study found that aggressive debt collection practices eroded trust in digital lenders, with borrowers reporting harassment and psychological distress .
- **Regulatory response:** The 2022 Digital Credit Providers Regulations aim to rebuild trust through licensing and consumer protection standards .

Singapore: Trust in Singapore's fintech ecosystem operates through different mechanisms. Key features include:

- **Regulatory trust:** Trust is placed in institutions—MAS, the financial regulator—rather than interpersonal networks. MAS's reputation for robust oversight provides a foundation for confidence in regulated fintech products.
- **Community-based trust:** For migrant workers, trust is often placed in informal channels—friends, family, community networks—rather than digital platforms. The 2025 study found that workers prefer informal remittance channels despite higher costs due to familiarity and perceived reliability .
- **Credit cooperatives:** Community-based institutions like credit cooperatives build trust through shared identity (occupation, affinity) and relationship-based service. These complement digital channels for populations that value personal interaction.
- **Financial literacy:** Trust in digital financial services requires understanding. Singapore's Financial Inclusion Action Plan emphasizes financial education to build informed trust.
- **Consumer protection frameworks:** FAIR and FNA frameworks ensure that financial advice is appropriate and not merely sales-driven, building trust through protection .

Table 2: Comparative Trust and Community Intermediaries

Dimension	**Kenya**	**Singapore**
Primary trust mechanism	Agent networks; social proof	Regulatory institutions; consumer protection
Key intermediaries	200,000+ M-PESA agents	Credit cooperatives; community networks
Trust in digital lending	Eroded by aggressive collections; regulatory rebuilding	High for regulated entities; trust in MAS oversight
Migrant worker trust	Not applicable	Prefer informal channels despite higher costs
Community institutions	Less prominent in fintech	Credit cooperatives serve specific groups

Trust-building through	Familiarity; face-to-face interaction	Regulation; consumer protection; education

5.3 Regulatory Frameworks

Kenya: Kenya's regulatory framework for fintech has evolved rapidly in response to innovation. Key features include:

- **Central Bank of Kenya (CBK):** Primary regulator for financial services, including mobile money and digital lending.
- **National Payment System Act (2011):** Provided legal framework for payment service providers, including M-PESA.
- **Digital Credit Providers Regulations (2022):** Response to unregulated digital lending, requiring licensing, caps on interest rates, and consumer protection standards. All digital lenders must be licensed by CBK and comply with data protection and fair lending requirements .
- **Data Protection Act (2019):** Establishes framework for personal data protection, including financial data.
- **CBK 2025-2030 Strategic Plan:** Prioritizes digital financial inclusion while addressing emerging risks: "We will enhance oversight of digital financial services to ensure they contribute to inclusive growth without compromising stability or consumer protection" .
- **Regulatory challenges:** Rapid innovation has outpaced regulation, leading to consumer harm before intervention. The 2022 regulations address this but require ongoing adaptation.

Singapore: Singapore's regulatory framework is characterized by proactive, innovation-friendly oversight. Key features include:

- **Monetary Authority of Singapore (MAS):** Integrated regulator for all financial services, with mandate to promote fintech innovation while ensuring stability and consumer protection.
- **Regulatory sandbox:** First introduced in 2016, the sandbox allows controlled experimentation with innovative financial services under relaxed regulatory requirements. This enables fintech startups to test products with real customers while maintaining oversight .

- **Payment Services Act (2019):** Provides a forward-looking, activity-based regulatory framework for payment systems and payment service providers, covering both traditional and innovative services.
- **Financial Advisory Industry Review (FAIR):** Enhances professional standards and disclosure requirements for financial advisers, ensuring appropriate product recommendations .
- **Financial Needs Analysis (FNA):** Requires detailed assessment of customer circumstances before product recommendation, preventing mis-selling .
- **MAS 2025 Strategic Plan:** Emphasizes "balanced and forward-looking regulation" that "supports innovation while safeguarding trust and stability" .
- **International cooperation:** MAS actively engages with international regulators to harmonize standards and address cross-border fintech challenges.

Table 3: Comparative Regulatory Frameworks

Dimension	**Kenya**	**Singapore**
Primary regulator	Central Bank of Kenya (CBK)	Monetary Authority of Singapore (MAS)
Key legislation	National Payment System Act (2011); Digital Credit Providers Regulations (2022)	Payment Services Act (2019)
Regulatory approach	Reactive; addressing emerging harms	Proactive; innovation-friendly; sandboxes
Consumer protection	Digital Credit Providers Regulations; Data Protection Act	FAIR; FNA; robust disclosure
Strategic plan	CBK 2025-2030; focus on digital inclusion and risk management	MAS 2025; balanced innovation and stability
Sandbox mechanism	Not formalized	Pioneered regulatory sandbox (2016)

Data protection	Data Protection Act (2019)	Personal Data Protection Act

5.4 Challenges and Lessons

Kenya: Kenya's fintech success has been accompanied by significant challenges.

Challenges:

- **Digital lending harms:** 42% default rate; aggressive debt collection causing psychological distress; limited recourse for borrowers .
- **Regulatory lag:** Innovation outpaced regulation, allowing consumer harm before intervention.
- **Data privacy:** Digital lenders collect extensive personal data, including smartphone usage and contacts, raising privacy concerns.
- **Over-indebtedness:** Easy access to digital credit can lead to multiple borrowing and debt spirals.
- **Fraud and scams:** As fintech adoption grows, so do fraudulent schemes targeting users.

Lessons:

- **Trust is fragile:** The erosion of trust in digital lenders demonstrates that fintech success built on M-PESA's trust foundation cannot be taken for granted.
- **Regulation must evolve:** The 2022 Digital Credit Providers Regulations show that regulatory frameworks can catch up, but earlier intervention would have prevented harm.
- **Consumer protection is essential:** The harms documented in the 2024 study underscore that inclusion without protection is not progress.

Singapore: Singapore's fintech approach faces distinct challenges.

Challenges:

- **Migrant worker trust deficit:** Despite efficient digital platforms, workers prefer informal channels, perpetuating exclusion .

- **Digital divide among elderly:** Older adults with lower digital literacy risk exclusion from digital-only services.
- **Regulatory complexity:** Balancing innovation with protection requires sophisticated oversight that may be resource-intensive.
- **Cybersecurity risks:** As a global fintech hub, Singapore faces sophisticated cyber threats targeting financial institutions.

Lessons:

- **Trust requires more than regulation:** Regulatory trust alone is insufficient for populations with limited formal financial experience; community-based touchpoints matter.
- **Targeted inclusion efforts are needed:** The Financial Inclusion Action Plan's focus on specific groups recognizes that blanket digital strategies miss marginalized populations.
- **Community institutions complement digital channels:** Credit cooperatives and other community-based institutions bridge trust gaps that digital-only services cannot.

Table 4: Comparative Challenges and Lessons

Dimension	**Kenya**	**Singapore**
Key challenges	Digital lending harms; regulatory lag; data privacy; over-indebtedness	Migrant worker trust deficit; elderly digital divide; cybersecurity
Notable failures	42% default rate; aggressive collections	Informal remittance channels persist despite digital options
Regulatory response	Digital Credit Providers Regulations (2022)	Payment Services Act; sandbox; FAIR
Trust lessons	Trust can be eroded; protection essential	Regulation alone insufficient; community touchpoints needed
Inclusion lessons	Access must be paired with protection	Targeted strategies needed for marginalized groups

5.5 Summary of Comparative Findings

Table 5: Comprehensive Comparative Analysis

Dimension	**Kenya**	**Singapore**
Fintech ecosystem	M-PESA-led; mobile money dominant	Diversified; global fintech hub
Key platform	M-PESA (launched 2007)	Multiple regulated platforms
Adoption	98% households; 77% adults	Near-universal digital access
Primary inclusion challenge	Reaching unbanked masses	Reaching marginalized groups
Key intermediaries	200,000+ M-PESA agents	Credit cooperatives; community networks
Trust mechanism	Agent networks; social proof	Regulatory institutions; consumer protection
Digital lending	50+ lenders; 42% default rate	Regulated; consumer protection focus
Regulatory approach	Reactive; addressing harms	Proactive; innovation-friendly; sandboxes
Key legislation	Digital Credit Providers Regs (2022)	Payment Services Act (2019)
Consumer protection	Licensing; data protection	FAIR; FNA; robust disclosure
Migrant worker access	Not applicable	300,000+ workers; trust barriers
Financial inclusion rate	26.7% (2006) → 83.7% (2021)	High baseline; targeted gaps
Key strengths	Organic adoption; agent trust; leapfrog inclusion	Robust regulation; consumer protection; innovation ecosystem
Key challenges	Digital lending harms; regulatory lag	Migrant trust deficit; elderly digital divide

Key lessons	Access without protection harms; trust must be earned	Regulation alone insufficient; community matters

6. DISCUSSION OF RESULTS

6.1 Explaining Divergent Pathways: Development Stage and Institutional Context

The differences between Kenya's and Singapore's fintech ecosystems reflect fundamentally different development stages, institutional contexts, and inclusion challenges.

Kenya's fintech revolution emerged in a context of limited traditional banking infrastructure, high mobile phone penetration, and urgent need for affordable payment systems. M-PESA succeeded because it solved a real problem—sending money across distances without bank accounts—through a platform that leveraged existing mobile infrastructure and built trust through accessible agents . The leapfrog nature of Kenya's inclusion—from 26.7% to 83.7% in 15 years—demonstrates the transformative potential of technology when it meets genuine need .

Singapore's fintech ecosystem operates within a highly developed financial system with near-universal access. The challenge is not reaching the unbanked but ensuring that digital transition does not exclude vulnerable populations. Singapore's approach emphasizes regulatory sophistication, consumer protection, and targeted inclusion strategies that address the specific barriers faced by migrant workers, the elderly, and lower-income households .

6.2 The Centrality of Trust

Both countries' experiences underscore that trust is foundational to financial inclusion. However, the sources and mechanisms of trust differ dramatically.

In Kenya, trust is built through interpersonal relationships—the local shopkeeper who serves as an M-PESA agent, the neighbor who demonstrates the service, the brand reputation of Safaricom.

This trust is earned through face-to-face interaction and social proof. The erosion of trust in digital lenders through aggressive collections demonstrates that trust, once broken, is difficult to restore .

In Singapore, trust is primarily placed in institutions—MAS, the regulatory framework, licensed financial institutions. The regulatory sandbox model enables innovation within a trusted framework, ensuring that new services meet standards before wide deployment. However, for migrant workers, institutional trust is insufficient; they rely on community-based trust built through informal networks .

The implication is that fintech strategies must build trust through channels that resonate with target populations. For some, that means regulation and consumer protection; for others, it means accessible agents, community intermediaries, and social proof.

6.3 The Agent Network Advantage

Kenya's agent network is perhaps its most significant fintech innovation. By embedding financial services in existing retail infrastructure, M-PESA created thousands of accessible touchpoints that built trust through familiarity. The agent is not a bank teller but a neighbor—someone known, accountable, and approachable.

This model has implications for other contexts. While Singapore's high digital penetration might seem to make agents unnecessary, the migrant worker trust deficit suggests that community-based touchpoints remain valuable. Credit cooperatives serve a similar function, providing relationship-based services that complement digital channels.

6.4 Regulatory Approaches: Reactive vs. Proactive

Kenya's regulatory evolution—from light-touch oversight of M-PESA to reactive intervention in digital lending—reflects the challenges of regulating rapid innovation. The 2022 Digital Credit Providers Regulations represent an important step, but the harms documented in the 2024 study might have been prevented with earlier action .

Singapore's proactive approach, including the regulatory sandbox introduced in 2016, enables controlled experimentation while maintaining oversight. This allows innovation to proceed within boundaries, reducing the risk of consumer harm.

The comparison suggests that developing countries may need to adapt regulatory approaches to their contexts. Kenya's light-touch approach enabled rapid adoption but allowed harmful practices to develop. Singapore's sophisticated framework may be resource-intensive but provides stronger protection. Finding the balance between enabling innovation and protecting consumers is the central regulatory challenge.

6.5 The Persistent Challenge of Marginalized Groups

Both countries face challenges in reaching marginalized populations, though the groups differ. Kenya's digital lending harms disproportionately affect low-income borrowers who are most in need of credit but also most vulnerable to predatory practices . Singapore's migrant workers and elderly face exclusion despite the availability of digital services .

The implication is that inclusion is not a binary state (banked vs. unbanked) but a continuum. Even in highly included populations, certain groups may be left behind. Targeted strategies—financial education, accessible services, community intermediaries—are needed to address specific barriers.

6.6 Implications for Policy and Practice

The findings have significant implications for fintech policy and inclusive finance.

*First, trust must be designed into fintech systems***.** Whether through agent networks, regulatory oversight, or consumer protection, trust cannot be assumed—it must be built.

*Second, regulation must evolve with innovation***.** Kenya's experience shows that regulatory lag allows consumer harm; Singapore's sandbox model offers a proactive alternative.

*Third, marginalized groups need targeted attention***.** Digital-first strategies will not automatically reach migrant workers, the elderly, or other vulnerable populations. Community-based intermediaries and financial education are essential complements.

Fourth, data protection is essential. Digital lending's collection of extensive personal data raises privacy concerns that must be addressed through robust frameworks.

*Fifth, consumer protection must keep pace with innovation***.** The harms documented in Kenya's digital lending market underscore that inclusion without protection is not progress.

Sixth, community institutions complement digital channels. Credit cooperatives, agent networks, and other community-based intermediaries build trust that digital-only platforms cannot replicate.

*Seventh, regulatory sandboxes enable controlled innovation***.** Singapore's experience demonstrates that sandboxes can foster innovation while maintaining oversight.

*Eighth, financial literacy enables informed use***.** Users need understanding to navigate digital financial services safely.

7. CONCLUSION

This comparative analysis of fintech for financial inclusion and the role of trust and community banking in Kenya and Singapore reveals two distinct pathways shaped by different development stages, institutional contexts, and inclusion challenges. Kenya's M-PESA revolution has become a global model for financial inclusion through technology, reaching 98% of households and transforming how Kenyans save, borrow, and transfer money . The platform's success is rooted in trust built through an extensive agent network—local shopkeepers and vendors who serve as trusted intermediaries . Building on this foundation, Kenya's fintech ecosystem has expanded to include digital lending, though rapid growth has brought challenges, with a 2024 study finding 42% default rates and aggressive debt collection practices causing psychological distress . The 2022 Digital Credit Providers Regulations and the Central Bank of Kenya's 2025-2030 Strategic Plan aim to address these risks while advancing inclusion .

Singapore's pathway is different, characterized by world-class digital infrastructure, strong regulatory frameworks, and strategic positioning as a global fintech hub. The inclusion challenge is not reaching the unbanked masses but ensuring that marginalized groups—low-wage migrant workers, the elderly, lower-income households—are not left behind in the digital transition . The Monetary Authority of Singapore has pioneered regulatory sandboxes enabling controlled innovation while maintaining oversight . The 2021 Financial Inclusion Action Plan targets vulnerable groups through tailored financial education and accessible services . A 2025 study of migrant worker banking found that while digital platforms improve remittance efficiency, trust barriers persist, with workers preferring informal channels .

Several cross-cutting conclusions emerge from this analysis.

First, trust is foundational to financial inclusion. Kenya's agent-based trust and Singapore's regulatory trust both demonstrate that users must have confidence in financial services. Without trust, even the most sophisticated technology will fail.

Second, community intermediaries build trust where digital channels cannot**.** Kenya's agents and Singapore's credit cooperatives both serve as trusted touchpoints that complement digital services.

Third, regulation must balance innovation with protection**.** Singapore's proactive, sandbox-enabled approach offers a model for controlled experimentation; Kenya's reactive intervention demonstrates the costs of regulatory lag.

Fourth, marginalized groups need targeted attention. Digital-first strategies will not automatically reach migrant workers, the elderly, or other vulnerable populations. Community-based approaches and financial education are essential.

Fifth, consumer protection must keep pace with innovation**.** Kenya's digital lending harms underscore that inclusion without protection is not progress.

Sixth, data privacy is essential for long-term trust**.** As fintech collects ever more personal data, robust privacy frameworks are needed.

Seventh, financial literacy enables informed use**.** Users need understanding to navigate digital financial services safely.

For Kenya, the path forward involves implementing the Digital Credit Providers Regulations effectively, addressing the consumer harms documented in research, and building on M-PESA's trust foundation to expand inclusive fintech. The Central Bank's 2025-2030 Strategic Plan provides a framework, but execution will determine outcomes.

For Singapore, the priority is addressing the migrant worker trust deficit through community-based approaches, ensuring that the elderly are not excluded from digital transition, and maintaining the regulatory sophistication that has made Singapore a global fintech hub.

For the broader global community, the experiences of Kenya and Singapore demonstrate that fintech for financial inclusion is not a one-size-fits-all proposition. Kenya's leapfrog success offers lessons for developing countries seeking to reach the unbanked; Singapore's regulatory sophistication offers lessons for managing innovation in developed financial systems. Both remind us that technology alone is insufficient—trust, built through accessible intermediaries, robust regulation, and consumer protection, is the essential ingredient for inclusive finance.

8. LIMITATIONS OF THE STUDY

This study has several limitations that should be acknowledged. First, the comparative analysis relies primarily on secondary sources and published research rather than primary data collection. Direct fieldwork in both countries, including interviews with fintech users, agents, regulators, and community banking representatives, would strengthen comparative insights.

Second, data availability differs between the two countries. Kenya benefits from extensive research on M-PESA and digital lending, including the detailed 2024 study of digital credit users . Singapore's evidence base includes policy documentation and studies like the 2025 migrant worker research, but less independent academic research on fintech adoption.

Third, the study captures Kenya at a moment of regulatory transition (post-2022 regulations) and Singapore at a moment of established sophistication, but cannot fully capture the dynamic evolution of either ecosystem.

Fourth, the voice of fintech users—particularly those who have experienced harm from digital lending or those excluded from digital services—is mediated through research rather than captured directly.

9. ACKNOWLEDGMENTS

The author acknowledges the foundational contributions of institutions and researchers whose work enables this comparative analysis. The Central Bank of Kenya's 2025-2030 Strategic Plan provides essential policy direction . The Monetary Authority of Singapore's strategic plan and sandbox documentation illuminate regulatory approaches . The 2024 study of digital credit users in Nairobi, published in the Journal of Financial Regulation and Compliance, provides critical evidence on consumer harms. The 2025 study of migrant worker banking in Singapore, from the Singapore Management University, documents trust barriers. GSMA's mobile money research provides comparative data. The author also acknowledges the countless M-PESA agents, fintech users, and community banking members whose daily experiences shape financial inclusion in both countries.

10. AUTHOR CONTRIBUTIONS

The author conceived the study, designed the comparative framework, conducted the literature review and document analysis, synthesized findings across countries, and drafted the complete manuscript. The author takes full responsibility for the accuracy of information presented and interpretations offered.

11. COMPETING INTERESTS

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential competing interest.

12. AUTHORS' CONTRIBUTIONS

As sole author, I performed all roles including conceptualization, methodology development, investigation, formal analysis, writing, review, editing, and project administration.

13. FUNDING INFORMATION

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

14. DATA AVAILABILITY

All sources analyzed in this study are publicly available documents, including strategic plans, regulatory frameworks, academic articles, and research reports. Primary sources are cited in the references and accessible through the referenced publications and organizations.

15. DISCLAIMER

The views expressed in this article are solely those of the author and do not necessarily reflect the views of any institution or organization with which the author may be affiliated. The analysis is provided for scholarly purposes and should not be construed as policy guidance or investment advice. Fintech for financial inclusion and trust dynamics are subject to change, and readers should consult current official sources for specific information about Kenya, Singapore, and fintech policy.

16. REFERENCES

1. Central Bank of Kenya. (2025). Strategic Plan 2025-2030. Nairobi: CBK.
2. Monetary Authority of Singapore. (2025). MAS Strategic Plan 2025: Building a Resilient, Innovative, and Inclusive Financial Sector. Singapore: MAS.
3. Omwenga, J., & Mutua, J. (2024). Digital credit, default, and consumer protection in Nairobi: A study of fintech lending outcomes. *Journal of Financial Regulation and Compliance*, 32(2), 145-168.
4. Tan, L., & Rahman, S. (2025). Migrant worker banking and remittance behavior in Singapore: Trust, technology, and informal channels. *Singapore Management University Working Paper Series*, 2025-01.
5. GSMA. (2024). State of the Industry Report on Mobile Money 2024. London: GSMA.
6. Central Bank of Kenya. (2022). The Digital Credit Providers Regulations, 2022. Legal Notice No. 45. Nairobi: Government Printer.
7. Monetary Authority of Singapore. (2016). FinTech Regulatory Sandbox Guidelines. Singapore: MAS.
8. Monetary Authority of Singapore. (2021). Financial Inclusion Action Plan. Singapore: MAS.
9. Republic of Kenya. (2019). Data Protection Act, No. 24 of 2019. Nairobi: Government Printer.
10. Republic of Singapore. (2019). Payment Services Act 2019. Singapore: Government Gazette.