



Received: 26-07-2026
Accepted: 06-09-2026

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Building and Eroding Digital Trust among Rural Microentrepreneurs in East Africa: A Socially Embedded Conceptual Framework

Dennis Mabeya Mamboleo

Department of Geography, Kisii University, Kenya

DOI: <https://doi.org/10.62225/2583049X.2026.6.5.6876>

Corresponding Author: Dennis Mabeya Mamboleo

Abstract

Mobile platforms have expanded access to financial services, markets and business information among rural microentrepreneurs in East Africa. However, access does not always lead to safe, confident or continued use. Existing studies often explain mobile platform adoption through usefulness, ease of use, security and reliability, with less attention to the social conditions that shape digital trust. This paper examines how technological, personal, service and social factors build or erode digital trust among rural microentrepreneurs. It uses a theory-synthesis approach that brings together the Technology Acceptance Model, trust theory and social embeddedness. The analysis shows that reliable transactions, strong security, transparent services, digital literacy and positive user experiences can build trust. Fraud, privacy concerns, transaction failure, weak customer

support and unclear complaint procedures can erode it. Gender influences device access, privacy, financial control and opportunities to gain digital skills. Kinship networks can strengthen trust through information and practical support, but they can also spread distrust and encourage dependence on informal arrangements. The paper develops a Socially Embedded Digital Trust Framework that links these factors to four possible outcomes: confident use, cautious use, dependent use and platform rejection. The framework shows that mobile platform use cannot be fully understood by separating technology from the social setting in which it is used. The paper recommends that digital inclusion policies focus on safe, independent and confident use rather than mobile ownership and account registration alone.

Keywords: Digital Trust, Mobile Platforms, Rural Microentrepreneurs, Gender, Digital Literacy, Kinship Networks, East Africa

1. Introduction

Digital technologies have changed how businesses communicate, receive payments, reach customers and manage daily activities. Mobile phones, mobile money, social media and online marketplaces have reduced transaction costs and opened new opportunities for small businesses in developing countries (Aker & Mbiti, 2010; Donner & Tellez, 2008) ^[1, 7]. These technologies are particularly important in rural areas where access to banks, formal markets and business support services may be limited.

Kenya is widely known for the rapid growth of mobile money. Since the introduction of M-Pesa in 2007, mobile money has enabled individuals and businesses to send, receive and save money without relying on conventional banking services. It has also supported financial inclusion, reduced the cost of transferring money and strengthened informal systems of financial support (Jack & Suri, 2011; Jack & Suri, 2014) ^[18, 19]. Small businesses also use mobile phones and social media to communicate with customers, advertise products, place orders and receive payments.

However, access to digital platforms does not always lead to their full or continued use. Users must have confidence that a platform is secure, reliable and able to protect their money and personal information. Digital trust refers to a user's confidence in the reliability, security and integrity of a digital platform and its service provider (McKnight *et al.*, 2002; Gefen *et al.*, 2003) ^[22, 10]. Trust is built when transactions are completed successfully, charges are clearly explained, customer complaints are resolved and users feel that their personal information is protected. It is weakened by fraud, transaction errors, poor network connections, hidden charges, privacy concerns and weak customer support.

These problems can have serious effects on rural microentrepreneurs. Many small businesses operate with limited capital and cannot easily recover money lost through fraud or failed transactions. Fear of financial loss may cause users to avoid digital

services, withdraw money immediately after receiving it or depend mainly on cash. Such responses reduce the benefits that digital platforms can offer to businesses.

Digital trust is also shaped by social relationships. In rural communities, relatives, friends and other trusted people often help individuals learn how to use mobile platforms, select reliable service providers and respond to suspected fraud. These kinship networks provide information, financial support and practical help. However, they may also encourage dependence on familiar informal arrangements instead of formal digital services. Economic decisions are therefore influenced not only by individual choice but also by the social relationships within which people live and conduct business (Granovetter, 1985; Fafchamps, 2004) [12, 9].

Gender is another important part of digital trust and platform use. Women may have less access to mobile devices, financial resources and opportunities to develop digital skills. Some may use phones or accounts controlled by spouses or other family members. These conditions may limit privacy, independent decision-making and confidence in digital transactions (Gillwald *et al.*, 2010; Wyche & Olson, 2018) [11, 29]. Men and women may therefore experience digital platforms differently, even when the same services are available within their communities.

Previous studies have examined mobile money, financial inclusion and technology adoption in developing countries. Others have shown that perceived usefulness, ease of use, security and reliability influence the adoption of digital technologies (Davis, 1989; Gefen *et al.*, 2003) [6, 10]. However, fewer studies have examined how gender and kinship networks work together to build or erode digital trust among rural microentrepreneurs. There is also limited evidence from smaller rural business centres where digital platforms operate alongside strong informal social and financial networks.

This study addresses this gap by examining digital trust and mobile platform use among rural microentrepreneurs in Masaba North Sub-County, Nyamira County, Kenya. It focuses on the experiences that build or erode trust and considers how gender, digital literacy and kinship networks shape platform use. The study contributes to digital inclusion research by showing that access to technology is only one part of meaningful digital participation. The social setting in which people use digital platforms is equally important.

1.1 Problem Statement

Digital platforms offer rural microentrepreneurs opportunities to receive payments, communicate with customers, advertise products and access financial services. However, providing access to these platforms does not guarantee that people will trust or continue using them. Users may limit or avoid digital transactions when they fear fraud, loss of money, misuse of personal information, unreliable networks or poor complaint resolution. These concerns can prevent small businesses from gaining the full benefits of digital services.

These challenges are particularly significant among rural microentrepreneurs, whose limited capital constrains their capacity to absorb financial losses. Failed or fraudulent transactions may disrupt the purchase of stock, payment of suppliers, and fulfilment of household needs. Consequently, digital distrust has broader implications for enterprise

continuity, financial inclusion, and participation in the digital economy.

Trust in digital platforms is influenced by the social contexts within which economic activities occur. Kinship networks may facilitate knowledge of digital services, identification of reliable agents, and responses to suspected fraud, while also reinforcing reliance on cash and informal financial arrangements. Gender norms may shape access to mobile devices, control over financial resources, privacy, and acquisition of digital skills. Thus, digital trust cannot be adequately explained solely by security, perceived usefulness, and ease of use.

Existing studies have examined mobile money adoption, perceived usefulness, system reliability and financial inclusion. However, limited attention has been given to how gender and kinship networks work together to build or erode digital trust among rural microentrepreneurs. Evidence is particularly limited in smaller rural business centres, where formal digital platforms operate alongside strong family and community networks.

Insufficient empirical evidence on these social and technological factors may limit digital inclusion policies by overlooking the conditions that shape adoption, reliance on cash transactions, and participation in digital financial services. This study therefore examined the factors that contributed to the development and erosion of digital trust among rural microentrepreneurs in Masaba North Sub-County, Nyamira County, Kenya. It further assessed how gender, digital literacy, and kinship networks influenced the adoption and continued use of mobile platforms.

1.2 Purpose and Guiding Questions

The paper examines how technological, individual, and social factors contribute to the development or erosion of digital trust among rural microentrepreneurs in East Africa. It draws on the Technology Acceptance Model, trust theory, and social embeddedness theory to provide an integrated framework for understanding the adoption and continued use of mobile platforms within rural business contexts.

The paper is guided by three questions:

- Which technological and service-related factors build or erode digital trust among rural microentrepreneurs?
- How do gender, digital literacy and kinship networks shape digital trust and mobile platform use?
- How can these relationships be combined into a socially embedded framework for explaining the adoption and continued use of mobile platforms in East Africa?

The paper argues that access, perceived usefulness, and ease of use do not fully account for the use of mobile platforms. Digital trust develops through users' experiences with technology and service providers, as well as through the social relationships within which business transactions occur.

1.3 Significance of the Study

This study contributes to digital inclusion scholarship by demonstrating that access to mobile technology does not necessarily result in sustained use. It therefore examines how trust influences rural microentrepreneurs' regular and confident engagement with digital platforms.

The study incorporates a social dimension into explanations of technology adoption, which have largely emphasised usefulness, ease of use, security, and reliability. It examines how gender, digital literacy, and kinship networks build or

erode digital trust, providing a broader understanding of how technological and social factors shape mobile platform use in rural settings.

The findings are relevant to mobile service providers, banks, mobile money agents, and other organisations involved in the provision of digital services. Evidence on factors that strengthen or undermine trust may inform measures to enhance transaction security, customer support, complaint resolution, and communication, with implications for the sustained use of digital platforms among rural microentrepreneurs.

The study is relevant to national and county governments, development organisations, and financial inclusion programmes. Its findings may inform digital literacy initiatives, consumer protection measures, and gender-responsive interventions. These efforts need to extend beyond the provision of mobile devices and network infrastructure to address the social and practical constraints that limit meaningful participation in the digital economy.

Finally, the study provides empirical evidence from Masaba North Sub-County, which has received limited scholarly attention in studies of digital trust. The experiences of rural microentrepreneurs may provide useful insights into other rural contexts where digital platform use occurs within established family and community networks.

2. Literature Review

2.1 Digital Trust in Mobile Transactions

Digital trust refers to the confidence users place in a digital platform, the organisation providing the service, and the processes through which transactions are carried out. In digital financial transactions, this confidence rests on the expectation that the system will function as intended, that funds will reach the correct recipient, and that personal and financial information will be handled securely. It also involves the belief that, when errors, delays or disputes occur, the service provider will respond appropriately and provide a fair means of resolving the problem. Trust is particularly important in digital transactions because much of what happens during a transaction is not visible to the user. Once money is sent or personal information is submitted, users depend on the platform and its underlying systems to complete the process correctly. Their willingness to continue using such services therefore depends considerably on whether they regard the platform as reliable, secure and trustworthy (McKnight *et al.*, 2002; Gefen *et al.*, 2003) [22, 10].

Trust influences both the initial adoption and continued use of digital platforms. Users are more likely to adopt a platform when they perceive it as useful, easy to use and secure, while continued use is shaped by previous experiences, particularly successful transactions and the effectiveness with which service providers address users' concerns (Davis, 1989; Venkatesh & Davis, 2000) [6, 27]. Digital trust is therefore not fixed but develops through ongoing interaction with a platform. Positive experiences, including reliable transactions, effective communication and responsive customer support, can strengthen trust over time, whereas fraud, transaction failures, poor communication and inadequate support can erode it. Digital trust thus reflects users' accumulated experiences of the reliability, security and responsiveness of a digital platform.

Research on mobile payment systems indicates that reliability, security and ease of use are important determinants of user confidence. Although these systems can reduce transaction costs and broaden access to financial services, concerns about privacy, fraud and system failure may discourage their adoption (Dahlberg *et al.*, 2015) [5]. Users' confidence may also decline following unsuccessful transactions, unexpected charges or delays in resolving complaints, potentially reducing their willingness to continue using a platform.

In Kenya, M-Pesa has become an important component of the mobile money system, providing users with access to financial transactions through a network of mobile money agents. Studies associate its use with increased financial inclusion, lower transaction costs and improved transfer of financial resources between households and businesses (Jack & Suri, 2011; Jack & Suri, 2014) [18, 19]. Mobile money also facilitates household responses to financial shocks by enabling individuals to receive financial support from relatives and other social networks across geographical distances (Suri & Jack, 2016) [25].

The widespread adoption of mobile platforms does not necessarily imply uniform levels of trust among users. In rural areas, confidence in these platforms may be influenced by unreliable network coverage, limited digital skills, inadequate access to service points and difficulties in obtaining customer support. These challenges may be particularly significant for small businesses, where failed or fraudulent transactions can disrupt cash flow, reduce working capital and interfere with routine operations. Digital distrust may therefore have greater consequences for microentrepreneurs with limited financial reserves and a reduced capacity to absorb transaction-related losses.

Digital trust extends beyond confidence in technology to include the institutions and individuals involved in transactions. Users must assess the reliability of mobile network operators, financial institutions, agents, sellers and other participants. McKnight *et al.* (2002) [22] distinguish between institutional trust, trust in service providers and confidence in technology. These dimensions may vary independently; for instance, a user may regard the M-Pesa system as reliable while remaining cautious about a particular agent, online seller or mobile message. Digital trust is therefore shaped by both the functioning of the system and the credibility of those involved in its use.

Most studies of digital trust have concentrated on individual perceptions of security, usefulness and ease of use. While these factors remain important, they provide a limited account of how trust is formed and sustained within rural social contexts. Digital trust should therefore be examined as both a technological and social process influenced by personal experience, interactions with service providers, gender relations, digital skills and kinship networks. This broader perspective informs the present study of rural microentrepreneurs in Masaba North Sub-County.

Most studies of digital trust have concentrated on individual perceptions of security, usefulness and ease of use. While these factors remain important, they provide a limited account of how trust is formed and sustained within rural social contexts. Digital trust should therefore be examined as both a technological and social process influenced by personal experience, interactions with service providers,

gender relations, digital skills and kinship networks. This broader perspective informs the present study of rural microentrepreneurs in Masaba North Sub-County.

2.2 Mobile Platform Adoption among Rural Microentrepreneurs

Mobile technologies have become important tools for conducting business in developing countries. They allow entrepreneurs to communicate with customers, receive payments, compare prices, advertise products and maintain contact with suppliers. Mobile phones have also reduced the cost of obtaining information and completing financial transactions, particularly in areas where formal banking and business services are limited (Aker & Mbiti, 2010; Donner & Tellez, 2008) ^[1, 7].

The Technology Acceptance Model explains that people are more likely to adopt a technology when they believe it is useful and easy to use (Davis, 1989) ^[6]. The model was later extended to include social influence and other factors that shape users' decisions (Venkatesh & Davis, 2000) ^[27]. In the case of rural microentrepreneurs, usefulness may include the ability to receive payments quickly, avoid travelling with cash, contact customers and manage business transactions from a mobile phone.

However, perceived usefulness and ease of use alone do not fully account for the adoption of digital services. Users also consider the costs, risks and reliability associated with a platform. A digital service may be useful and relatively easy to operate, yet concerns about fraud, financial loss or the misuse of personal information may discourage its use. Trust therefore influences whether access to digital technology translates into actual adoption and continued use (Gefen *et al.*, 2003) ^[10].

Mobile money has had a major influence on business and household transactions in Kenya. M-Pesa has enabled people without conventional bank accounts to send and receive money through mobile phones and local agents (Jack & Suri, 2011) ^[18]. It has also reduced transaction costs and strengthened financial support between households and social networks (Jack & Suri, 2014) ^[19]. For microentrepreneurs, mobile money provides a convenient way to receive customer payments, pay suppliers and separate some business transactions from cash-based activities.

Mobile platforms such as WhatsApp and Facebook have expanded the opportunities available to small businesses by enabling entrepreneurs to advertise products, communicate with customers and exchange information without maintaining formal websites. At the same time, their use may expose businesses to misinformation, false identities, fraudulent sellers and limited consumer protection. Platform adoption should therefore be distinguished from trust in the interactions that occur within it, since regular use does not necessarily indicate confidence in every service, message or individual encountered through the platform.

The use of digital platforms also differs across individuals and businesses. Factors such as education, income, age, digital literacy, network quality and previous experience can influence adoption (Duncombe & Boateng, 2009; Asongu & Nwachukwu, 2016) ^[8, 2]. Entrepreneurs who have experienced successful transactions may expand their platform use, while those who have experienced fraud or system failure may become cautious or return to cash transactions.

Access, initial adoption and continued use represent distinct stages of engagement with digital platforms. Access concerns the availability of the necessary device, network or platform, while adoption refers to the decision to begin using the service. Continued use depends on subsequent experience, including the platform's usefulness, reliability and trustworthiness. This distinction enables the present study to examine not only whether rural microentrepreneurs use mobile platforms, but also the factors that influence their decision to maintain, reduce or discontinue such use. Evidence from East Africa further indicates that mobile money can support entrepreneurial activity by facilitating access to digital savings and credit, although these benefits vary across users and geographical contexts (Koomson *et al.*, 2023) ^[20].

2.3 Gender and Digital Trust

Gender influences access to mobile phones, control over financial resources and the ability to use digital services. Although mobile technologies have expanded across Africa, women are still less likely than men to own smartphones, access mobile internet and use some digital financial services. These differences are often linked to income, education, digital skills, social expectations and control over household resources (Gillwald *et al.*, 2010; GSMA, 2023) ^[11, 13].

Women operating small businesses may rely on shared or borrowed mobile phones, with implications for privacy and control over digital transactions. Shared access can restrict the management of passwords, transaction records and business communication. In some cases, women may also rely on spouses or other family members for account registration, financial transactions or the resolution of technical difficulties. Such dependence may constrain their autonomy in managing digital transactions and affect their confidence in using mobile platforms independently.

Digital literacy is also closely connected to gender. Users require basic skills to identify genuine transaction messages, protect personal identification numbers, recognise fraudulent links and report suspicious activity. Women who have fewer opportunities to gain these skills may face greater exposure to fraud or may avoid digital platforms because they fear making costly mistakes (Wyche & Olson, 2018; GSMA, 2023) ^[29, 13].

Gender norms may also shape financial decision-making and the use of digital technologies within households. Where men exercise greater control over business income, mobile devices and technology-related decisions, women may have access to a phone without corresponding authority over its use. Access should therefore be distinguished from control, as device ownership or availability alone does not adequately capture the extent of women's participation in digital financial and business activities.

Women's business activities may further influence how they use digital platforms. Some women operate small businesses alongside household and caregiving responsibilities. Mobile platforms can help them communicate with customers and complete transactions without travelling. At the same time, limited time, small business capital and restricted movement may reduce opportunities to attend digital training or seek help when problems occur.

Existing studies have largely examined gender differences in access to mobile phones and the internet, with limited attention to how gender shapes trust in transactions, service

providers, agents and online contacts. Digital trust should therefore be analysed in relation to experiences of security, privacy, financial control and problem resolution. In the present study, gender was treated not merely as a demographic variable but as a social factor influencing access to devices, control over financial resources and opportunities to acquire digital skills. This approach enables an assessment of how these conditions influence digital trust among rural microentrepreneurs and account for differences in confidence, risk and control between men and women using similar platforms.

2.4 Kinship Networks and Digital Trust

Kinship networks comprise relationships among relatives, extended family members and others connected through familial ties. In many rural settings, such networks constitute an important source of information, financial assistance, business support and resources during periods of economic difficulty. Economic decisions are therefore embedded within social relationships rather than undertaken solely at the individual level, with kinship ties influencing access to resources, patterns of exchange and obligations among network members (Granovetter, 1985; Fafchamps, 2004) ^[12, 9].

Kinship networks can facilitate the adoption of digital platforms by providing information and practical support. Relatives may introduce individuals to mobile money services, recommend reliable agents, explain platform functions and assist in resolving transaction-related difficulties. Recommendations from trusted social contacts may reduce uncertainty associated with unfamiliar technologies, allowing interpersonal trust to influence perceptions of digital platforms, agents and service providers. Kinship networks also facilitate financial exchanges across geographical distances. In Kenya, mobile money has strengthened informal mechanisms of financial support by enabling households to transfer resources efficiently, particularly during periods of financial difficulty (Jack & Suri, 2014; Suri & Jack, 2016) ^[19, 25].

Kinship networks may also contribute to distrust in digital platforms. Experiences of fraud, failed transactions or inadequate customer support can be communicated among relatives and other members of a social network, influencing perceptions of particular services. Consequently, an adverse experience affecting one individual may shape the attitudes and subsequent decisions of others who have not encountered the problem directly. Digital trust may therefore be influenced by both personal experience and information transmitted through kinship networks.

Kinship networks may also encourage continued dependence on informal financial practices. Some users may prefer to send money through a trusted relative, keep cash with a family member or seek advice from relatives instead of contacting formal service providers. These practices may offer a sense of security, but they can also limit independent use of digital platforms.

Social obligations associated with kinship may present particular challenges for microentrepreneurs. Relatives may expect financial assistance when business income is received through mobile platforms, while shared devices or accounts can complicate the separation of business finances from household needs. Kinship networks may therefore facilitate access to information and financial support while simultaneously constraining privacy, increasing social

obligations and encouraging reliance on informal arrangements. Although existing scholarship demonstrates that social networks influence economic behaviour and access to resources (Granovetter, 1985; Fafchamps, 2004) ^[12, 9], less attention has been given to their role in shaping trust in specific digital transactions among rural microentrepreneurs. The present study addresses this gap by examining how kinship relations may strengthen confidence in digital transactions while also contributing to caution, dependence and distrust.

2.5 Digital Literacy and Mobile Platform Use

Digital literacy refers to the knowledge and skills required to access, understand and use digital technologies safely and effectively. It includes the ability to operate a mobile device, complete transactions, protect personal information, identify suspicious messages and seek help when problems occur (UNESCO Institute for Statistics, 2018; ITU, 2024) ^[26, 16]. Digital literacy is therefore important for both the adoption and continued use of mobile platforms.

Users with stronger digital skills are better able to compare services, understand transaction charges, create secure passwords and protect their personal identification numbers. They may also be more confident when using mobile money, mobile banking, social media and online marketplaces. Digital literacy can build trust by giving users greater control over their digital activities and helping them understand how platforms operate (GSMA, 2023; World Bank, 2025) ^[13, 28].

Limited digital literacy can expose users to fraud, misinformation and transaction mistakes. Some users may find it difficult to distinguish between genuine and fraudulent messages. Others may share passwords, follow unsafe links or disclose personal information to people pretending to represent service providers. These experiences can cause financial loss and reduce confidence in digital platforms (GSMA, 2024; World Bank, 2025) ^[28].

Fear of making mistakes can also discourage platform use. A person may own a mobile phone and have access to a mobile money account but still depend on an agent, relative or friend to complete transactions. This form of dependence shows that physical access to technology does not always amount to meaningful or independent digital participation (ITU, 2024) ^[16]; GSMA, 2024).

Digital skills are not distributed equally. Age, education, income, gender, location and previous exposure to technology can affect a person's ability to use digital services (GSMA, 2023) ^[13]; GSMA, 2024; ITU, 2024) ^[16]; World Bank, 2025) ^[28]. Rural microentrepreneurs may also have limited access to formal training and reliable technical support. Many users learn through personal experience or assistance from relatives, friends and mobile money agents. Evidence from rural Uganda shows that digital literacy shapes how effectively people gain and use financial services through financial technologies (Bongomin *et al.*, 2025) ^[3].

Informal learning can make digital services more accessible, but the information provided may not always be accurate. Users who depend on other people may also face reduced privacy and control over their accounts. The relationship between digital literacy and trust is therefore influenced by the quality of information, the reliability of the person providing assistance and the user's ability to act independently.

Service providers often focus on expanding network coverage and increasing the number of registered users. However, registration does not show whether users understand platform risks or can use the services safely. Digital inclusion should therefore be measured through effective, safe and confident use, not simply through access, registration or ownership of a mobile device (ITU, 2024; World Bank, 2025) ^[16, 28].

The present study examined digital literacy as an important factor in building and eroding digital trust. It considered how participants learned to use mobile platforms, protected their accounts, identified fraud and responded to transaction problems. This approach helps explain why microentrepreneurs with similar access to digital services may show different levels of trust and mobile platform use.

2.6 Theoretical and Conceptual Framework

This study was guided by the Technology Acceptance Model, trust theory and the concept of social embeddedness. These perspectives were combined because no single theory fully explains how rural microentrepreneurs develop trust in digital platforms and decide whether to continue using them. The Technology Acceptance Model explains that people are more likely to adopt a technology when they consider it useful and easy to use (Davis, 1989) ^[6]. Perceived usefulness refers to the extent to which a person believes that a platform will improve the performance of a task. Among microentrepreneurs, this may include receiving payments quickly, communicating with customers, paying suppliers and reducing the need to carry cash. Perceived ease of use refers to the degree to which a person believes that a platform can be used without unnecessary difficulty. The model was later extended to include social influence and other external factors that shape technology adoption (Venkatesh & Davis, 2000) ^[27]. However, usefulness and ease of use do not fully explain why some people avoid or limit their use of platforms that are readily available. A platform may be useful and easy to operate, but users may still reject it if they fear fraud, financial loss or misuse of personal information.

Trust theory helps address this limitation. Trust in digital transactions includes confidence in the platform, service provider, agent and transaction process (McKnight *et al.*, 2002; Gefen *et al.*, 2003) ^[22, 10]. Trust develops when users experience reliable transactions, clear charges, secure systems and effective customer support. It can be weakened by fraud, transaction errors, privacy concerns, poor network services and unresolved complaints. Trust therefore helps explain how access and perceived usefulness are converted into actual and continued platform use.

The concept of social embeddedness explains that economic behaviour is shaped by social relationships rather than individual decisions alone (Granovetter, 1985) ^[12]. In rural communities, relatives, friends and other trusted people may introduce users to digital platforms, recommend reliable agents and help resolve transaction problems. These relationships may build trust, but they may also spread negative information, create financial obligations or encourage dependence on informal arrangements (Fafchamps, 2004) ^[9].

Gender and digital literacy were included as important social and personal influences. Gender may affect access to mobile devices, control over money, privacy and opportunities to develop digital skills. Digital literacy may

influence the ability to complete transactions safely, protect account information and identify fraud. These factors can directly influence platform use and can also strengthen or weaken the relationship between trust and continued use.

Based on these perspectives, the study proposed that mobile platform use is shaped by the interaction of technological, personal and social factors. Platform usefulness, ease of use, reliability, security and customer support influence digital trust. Gender, digital literacy and kinship networks shape how users experience and interpret these factors. Where trust is strengthened, users are more likely to adopt and continue using mobile platforms. Where trust is eroded, users may restrict platform use, depend on other people or return to cash-based transactions.

2.7 Literature Synthesis and Research Gap

Existing studies show that mobile platforms have expanded access to financial services, reduced transaction costs and supported communication between businesses and customers (Aker & Mbiti, 2010; Jack & Suri, 2011) ^[1, 18]. Research has also shown that perceived usefulness, ease of use, reliability and security influence the adoption of digital technologies (Davis, 1989; Gefen *et al.*, 2003) ^[6, 10]. These studies provide a strong foundation for understanding mobile platform adoption.

However, much of the literature treats trust as an individual response to the technical features of a platform. Users are often assumed to trust a platform when it is secure, reliable, useful and easy to operate. This approach gives limited attention to the social relationships and everyday experiences through which trust is built, weakened or restored.

Studies on gender and digital inclusion have shown that women may experience barriers related to device ownership, internet access, financial control and digital skills (Gillwald *et al.*, 2010 ^[11]; GSMA, 2023 ^[13]; GSMA, 2024). However, many of these studies focus mainly on differences in access between men and women. Less attention has been given to how gender affects privacy, independent decision-making, exposure to fraud and confidence in specific digital transactions.

Research on social embeddedness has demonstrated that economic behaviour is influenced by family and community relationships (Granovetter, 1985; Fafchamps, 2004) ^[12, 9]. Kinship networks can provide information, financial assistance and practical support. However, there is limited evidence on how these networks transfer trust to digital platforms, spread distrust after negative experiences or encourage dependence on informal financial arrangements.

Digital literacy has also been recognised as an important part of digital inclusion. Users require skills to complete transactions, protect personal information, identify fraud and seek assistance when problems occur (ITU, 2024; World Bank, 2025) ^[24, 28]. However, access and digital literacy are often examined separately from trust. This makes it difficult to explain why people with similar access to mobile devices and platforms may show different levels of confidence and continued use.

There is also limited evidence from rural microentrepreneurs. Many studies examine households, general consumers or urban businesses. Rural microentrepreneurs operate under different conditions, including limited capital, weaker network connections, fewer training opportunities and strong family and

community relationships. A failed or fraudulent transaction may have a greater effect on a microentrepreneur whose business depends on small amounts of daily working capital. This study addressed these gaps by examining digital trust as both a technological and social process. It focused on the experiences that built and eroded trust and examined how gender, digital literacy and kinship networks influenced mobile platform use among rural microentrepreneurs in Masaba North Sub-County. By bringing these factors together, the study provides a fuller explanation of why access to a mobile platform may lead to confident use, cautious use, dependence on other people or rejection of the platform.

3. Conceptual Approach

This paper uses a theory-synthesis approach to explain how digital trust is built and eroded among rural microentrepreneurs in East Africa. Theory synthesis brings together ideas from different theories to provide a fuller explanation of a problem that cannot be adequately understood through one theory alone (Jaakkola, 2020) ^[17].

The paper draws on three main perspectives. The Technology Acceptance Model explains how usefulness and ease of use influence technology adoption (Davis, 1989; Venkatesh & Davis, 2000) ^[6, 27]. Trust theory explains how reliability, security, provider integrity and previous experience influence confidence in digital platforms (McKnight *et al.*, 2002; Gefen *et al.*, 2003) ^[22, 10]. Social embeddedness explains how economic behaviour is shaped by family and community relationships (Granovetter, 1985) ^[12].

Relevant literature on mobile money, digital financial inclusion, gender, digital literacy, rural enterprise and social networks was used to connect these perspectives. The discussion gives particular attention to evidence from Kenya, Uganda, Tanzania and other East African settings. Reports from recognised institutions, including the International Telecommunication Union, GSMA and the World Bank, were also used to provide recent evidence on digital access, skills and gender differences.

The literature was selected for its relevance to the main concepts rather than through a formal systematic-review process. The paper therefore does not claim to identify every study on digital trust in East Africa. Instead, it uses existing knowledge to clarify relationships among technological, personal and social factors.

The concepts were compared to identify areas of agreement, difference and connection. These relationships were then organised into factors that build trust, factors that erode trust and social conditions that shape both processes. The outcome is a Socially Embedded Digital Trust Framework that explains why access to a mobile platform may lead to confident use, cautious use, dependence on other people or rejection of the platform.

This approach is appropriate because a conceptual paper should do more than summarise previous studies. It should connect ideas, clarify relationships and provide a framework that can guide future research and practice (MacInnis, 2011; Jaakkola, 2020) ^[21, 17].

3.1 Study Area

The study was conducted in Masaba North Sub-County, Nyamira County, Kenya. Masaba North had a population of 111,860 people during the 2019 Kenya Population and

Housing Census (Kenya National Bureau of Statistics [KNBS], 2019). The sub-county contains rural settlements and growing trading centres where residents engage in farming, retail trade, transport, mobile money services and other small-scale economic activities.

Small businesses in the area include retail shops, market stalls, mobile money agencies, tailoring businesses, food outlets, agricultural produce businesses and small service enterprises. Many of these businesses use mobile phones to receive payments, communicate with customers, contact suppliers and share information about products and prices.

Nyamira County has experienced continued growth in the use of information and communication technologies. However, rural areas still face challenges related to internet connectivity, access to digital infrastructure, affordability and digital skills. The county government has identified infrastructure, ICT development and support for commercial activities as important areas for local development (County Government of Nyamira, 2023).

Masaba North Sub-County was suitable for the study because digital platforms are increasingly used alongside cash transactions and strong family and community networks. This setting allowed the study to examine how technology, personal experience and social relationships influenced digital trust.

The presence of both male and female microentrepreneurs in different business activities also provided an opportunity to examine gender differences in access, control, digital skills and mobile platform use. The study area therefore offered a suitable setting for understanding the factors that built and eroded digital trust in a rural business environment.

3.2 Target Population and Sampling

The target population consisted of microentrepreneurs operating in Masaba North Sub-County. They included retail shop owners, market vendors, mobile money agents, tailors, artisans, service providers, farmers and traders in agricultural products. Participants were required to be involved in a small business and to have experience using mobile money, social media or another mobile platform for business or personal transactions.

The study used purposive sampling to select participants who could provide information on digital trust and mobile platform use. Selection also considered gender, age and type of business to capture different experiences.

Data were collected from 100 individual participants, 10 focus group discussions and five life-history interviews. The individual participants provided information on platform use, trust, benefits and risks. The focus group discussions explored shared experiences of fraud, digital skills, gender roles and kinship networks. Life-history interviews provided detailed accounts of how trust changed following positive or negative digital experiences.

Purposive sampling was suitable because the study required participants with direct experience of digital transactions. However, the findings were interpreted within the study area and were not treated as statistically representative of all microentrepreneurs in Kenya.

3.3 Data Collection Methods

Data were collected using individual survey interviews, focus group discussions and life-history interviews. The use of different methods allowed the study to compare measurable patterns with participants' detailed experiences.

A structured questionnaire was administered to 100 microentrepreneurs. It collected information on participants' backgrounds, business activities, mobile platform use, digital skills and levels of trust. Trust was assessed through questions on platform reliability, transaction security, privacy, service-provider credibility and complaint resolution. The questionnaire also examined experiences that increased or reduced participants' confidence in digital transactions.

Ten focus group discussions were conducted to explore shared experiences of mobile platform use. The discussions focused on fraud, transaction failure, digital literacy, gender roles, kinship networks and access to technical support. They helped explain the social conditions that shaped trust and distrust.

Five life-history interviews were conducted with selected participants. These interviews examined how participants began using digital platforms and how their trust changed over time. Particular attention was given to important positive and negative transaction experiences.

Separate guides were used for the focus group discussions and life-history interviews. Using the three methods allowed the study to compare individual responses, shared community experiences and detailed personal accounts. This strengthened the depth and credibility of the findings.

3.4 Data Analysis

Quantitative data from the 100 individual survey interviews were analysed using descriptive statistics. Frequencies and percentages were used to summarise participants' characteristics, patterns of mobile platform use, levels of digital trust and experiences that built or eroded trust.

Qualitative data from the focus group discussions and life-history interviews were analysed thematically. The responses were read, coded and grouped into themes based on recurring experiences and meanings (Braun & Clarke, 2006). The main themes included platform reliability, fraud, privacy, digital literacy, gender roles, kinship networks and complaint resolution.

Quantitative and qualitative findings were brought together during interpretation. The qualitative evidence was used to explain the patterns identified in the survey data, while differences between the two forms of evidence were examined carefully. This process helped the study provide a fuller account of how digital trust developed and changed among participants.

3.5 Quality Assurance

The study used the same structured questionnaire for all individual survey interviews to ensure consistency. Questions were linked to the study objectives and covered the main dimensions of digital trust, including reliability, security, privacy and confidence in service providers.

Triangulation was achieved by comparing evidence from individual surveys, focus group discussions and life-history interviews. Similar findings across the three sources increased confidence in the results, while differences were examined to understand varied participant experiences.

Participants were also selected from different business activities and gender groups. This provided a wider range of views and reduced dependence on evidence from one category of microentrepreneurs. During qualitative analysis, themes were checked against the original responses to

ensure that the interpretation remained close to participants' accounts.

3.6 Ethical Considerations

Participation in the study was voluntary. Participants were informed about the purpose of the research, the information required and their right to withdraw without penalty. Informed consent was obtained before data collection.

Informant's names and other identifying information were excluded from the analysis and reporting. Information collected during individual interviews, focus group discussions and life-history interviews was treated confidentially and used only for research purposes. Participant quotations were presented using anonymous identifiers to protect individual identities.

4. Building Digital Trust

Digital trust develops when users repeatedly experience a platform as useful, secure and reliable. It is also strengthened when service providers communicate clearly, resolve problems and protect users from financial loss. Among rural microentrepreneurs, trust is especially important because digital platforms are used to receive customer payments, pay suppliers and manage limited business funds.

4.1 Platform Reliability and Security

Reliability refers to the ability of a digital platform to complete transactions correctly and consistently. Users are more likely to trust a platform when money reaches the intended recipient, transaction records are accurate and confirmation messages are received without delay. Previous successful transactions reduce uncertainty and encourage continued platform use (McKnight *et al.*, 2002; Gefen *et al.*, 2003) [22, 10].

Security also influences trust. Users need confidence that their money, passwords and personal information are protected. Security measures such as personal identification numbers, transaction confirmation messages and clear warnings about fraud can strengthen confidence. However, these measures are only effective when users understand and apply them correctly.

Mobile money services have gained wide acceptance in East Africa partly because they provide a convenient and familiar way of completing financial transactions. In Kenya, the growth of M-Pesa has been supported by its accessibility, large agent network and ability to reduce the cost of transferring money (Jack & Suri, 2011; Jack & Suri, 2014) [18, 19].

Reliability and security work together. A secure platform that regularly fails to complete transactions may not be trusted. In the same way, a reliable platform may lose trust if users believe that their personal information or money is unsafe.

For rural microentrepreneurs, reliable and secure transactions support business continuity. Each successful transaction can strengthen trust, while repeated positive experiences can turn initial platform adoption into continued use. Platform reliability and security therefore form the technological foundation of digital trust.

4.2 Trust in Service Providers and Agents

Digital trust is not limited to confidence in the technology.

Users must also trust mobile network operators, financial institutions, mobile money agents and other people involved in providing digital services. A platform may function well, but users may still avoid it if they distrust the organisation or agent handling their transactions.

Service providers build trust by giving users clear information about transaction charges, privacy, security and complaint procedures. Users are more likely to remain confident when charges are predictable and transaction records are easy to understand. Transparent communication reduces uncertainty and helps users make informed decisions (McKnight *et al.*, 2002) ^[22].

Mobile money agents are particularly important in rural areas. They help users deposit and withdraw money, understand transaction procedures and respond to technical problems. A reliable agent can increase confidence among users who have limited digital skills. The wide agent network has been one of the factors supporting the growth of mobile money in Kenya (Jack & Suri, 2011) ^[18].

However, dependence on agents can also create risk. Users may disclose personal information or ask agents to complete transactions on their behalf. This can reduce privacy and expose them to fraud. Trust in an agent should therefore be supported by clear professional standards, user education and effective monitoring by service providers.

Complaint resolution is another important part of digital trust. Users need to know where to report failed transactions, fraud or unauthorised charges. Quick and fair resolution shows that the service provider accepts responsibility for protecting its customers. A platform may recover trust after a failure if the complaint is handled openly, quickly and fairly.

Trust in service providers and agents therefore depends on competence, honesty, transparency and accountability. Where these qualities are present, users are more likely to view digital platforms as dependable business tools rather than uncertain or risky services.

4.3 Digital Literacy and Positive Experience

Digital literacy strengthens trust by helping users understand how platforms operate and how to use them safely. Users who can protect passwords, recognise genuine messages, check transaction details and report suspicious activity are more likely to feel in control of digital transactions (ITU, 2024; World Bank, 2025) ^[16, 28].

Positive experience also builds confidence. Successful transactions, clear confirmation messages and effective problem resolution show users that a platform is dependable. Repeated positive experiences may encourage microentrepreneurs to move from basic mobile money transactions to mobile banking, digital marketing and online sales.

Many rural users gain digital skills through relatives, friends and mobile money agents rather than formal training. This support can make platforms easier to understand and reduce fear of making mistakes. However, the quality of informal guidance depends on the knowledge and reliability of the person providing it.

Digital literacy and positive experience reinforce each other. Skills enable safer use, while successful use increases confidence and encourages further learning. Digital literacy is therefore not only an access issue. It is an important part of building and maintaining digital trust.

4.4 Kinship Networks and Social Endorsement

Kinship networks can build digital trust by providing information, practical support and reassurance. Rural microentrepreneurs may seek advice from relatives and friends before adopting a platform or completing an unfamiliar transaction. Recommendations from trusted people can reduce uncertainty and encourage initial use.

Relatives may also help users register accounts, learn security procedures and resolve transaction problems. Mobile money allows family members to send financial support across long distances and can influence the financial behaviour of rural households (Munyegera & Matsumoto, 2018; Jack & Suri, 2014) ^[23, 19].

Social relationships therefore influence technology decisions. Economic behaviour is often shaped by trusted networks rather than individual judgement alone (Granovetter, 1985; Fafchamps, 2004) ^[12, 9]. When a trusted person recommends a platform, some of that interpersonal trust may be transferred to the technology, agent or service provider.

However, social endorsement remains useful only when the information shared is accurate. Advice based on rumours or limited knowledge may expose users to fraud or discourage them from using reliable services. Kinship networks can build trust, but they should support rather than replace accurate consumer information and formal assistance from service providers.

5. Eroding Digital Trust

Digital trust can decline quickly when users experience financial loss, transaction failure or poor customer support. Such experiences may discourage users from adopting digital financial services or cause existing users to reduce their platform use. These risks may have a greater effect on rural and low-income users who have limited financial and digital skills (CGAP, 2022).

5.1 Fraud and Privacy Concerns

Fraud is one of the main threats to digital trust. It may involve false messages, identity theft, stolen passwords, SIM swaps, dishonest sellers or people pretending to represent service providers. Fraud and related consumer risks can cause direct financial loss and weaken confidence in digital financial services (CGAP, 2022; GSMA, 2024).

Privacy concerns also reduce trust. Users may fear that personal details, transaction records or business information could be accessed or used without permission. These concerns may increase when users share devices, accounts or passwords with relatives and agents (World Bank, 2024). Limited digital skills can increase exposure to fraud and privacy risks. Users may struggle to identify unsafe links, false messages or fraudulent customer-support contacts. A platform may therefore lose trust even when the fraud is committed by an outside person rather than caused by the technology itself.

Trust is more difficult to restore when users believe that service providers failed to warn them or respond effectively. Fraud prevention, privacy protection, consumer education and clear reporting procedures are therefore necessary for maintaining digital trust (CGAP, 2022; GSMA, 2024).

5.2 Transaction Failure and Weak Customer Support

Transaction delays, network failure, incorrect charges and

unsuccessful transfers can reduce confidence in digital platforms. These problems may interrupt business activities and temporarily prevent microentrepreneurs from accessing working capital. Network downtime and agent-related problems are recognised risks in digital financial services, especially in underserved areas (CGAP, 2022).

Technical problems do not always cause lasting distrust. Users may remain confident when service providers explain the problem and correct it quickly. However, unclear reporting procedures, delayed refunds and poor communication can make users feel unprotected.

Rural users may face additional difficulties when customer support is available only through digital channels or distant service centres. Limited digital skills may also prevent some users from following formal complaint procedures.

A transaction failure becomes a trust problem when the service provider does not respond fairly and promptly. Clear complaint channels, timely refunds and accessible customer support are therefore important for restoring and maintaining digital trust (World Bank, 2024).

5.3 Gendered Exposure to Digital Risk

Women microentrepreneurs may face greater digital risks because of unequal access to mobile devices, digital skills and financial resources. Some women depend on shared phones or accounts controlled by spouses and relatives. This can reduce privacy and limit independent control over transactions (GSMA, 2023^[13]; GSMA, 2024).

Limited opportunities for digital training may also make it harder for women to identify fraud, protect account information and report problems. Evidence shows that low-income women can be more exposed to digital financial risks when low digital and financial literacy occur together (CGAP, 2022).

Gender norms may further affect women's ability to recover from financial loss. A woman with limited control over business income may be less able to replace money lost through fraud or a failed transaction.

Digital distrust among women should therefore not be treated as simple resistance to technology. It may reflect unequal access, reduced privacy, limited control and greater exposure to financial risk. Gender-responsive digital services should provide accessible training, secure account options and clear complaint procedures.

5.4 Kinship Networks and the Spread of Distrust

Kinship networks can spread distrust as well as confidence. Information about fraud, failed transactions or dishonest agents may move quickly through families and communities. People may avoid a platform after hearing about the negative experience of a trusted relative, even when they have not experienced the problem themselves.

Relatives may also encourage users to depend on cash or informal financial arrangements instead of digital services. Such advice may offer protection from unfamiliar risks but can limit independent use of mobile platforms.

Shared devices, accounts and passwords can create additional privacy and security concerns. Family obligations may also make it difficult for microentrepreneurs to separate business money from household demands.

Economic behaviour is shaped by social relationships and the information shared within them (Granovetter, 1985; Fafchamps, 2004)^[12, 9]. Digital distrust can therefore spread through trusted networks in the same way that confidence

does. Service providers should recognise these networks as important channels for accurate information, fraud awareness and trust recovery.

6. Socially Embedded Digital Trust Framework

The Socially Embedded Digital Trust Framework brings together the technological, service, personal and social factors that shape mobile platform use among rural microentrepreneurs. It proposes that digital trust does not develop from technology alone. Instead, it develops through interactions among platform performance, service providers, user capabilities and social relationships.

The framework conceptualises digital trust through four interrelated dimensions: technological, service, personal and social. The technological dimension encompasses platform reliability, security, usability, network quality and transaction accuracy, which determine confidence in system performance. The service dimension concerns agent conduct, transparency of charges, customer support, complaint resolution and consumer protection. The personal dimension includes digital literacy, prior experience, financial capacity, gender and risk perception, which influence the ability to navigate digital transactions. The social dimension incorporates kinship networks, peer recommendations, shared devices, family obligations and community experiences. These relationships may facilitate adoption through information and assistance or generate caution when fraud and transaction failures are reported within social networks.

Evidence from Tanzania shows that mobile money supports financial transfers and risk sharing, but its benefits may not reach people who do not use the service, even when they live within the same community (Riley, 2018)^[24]. This shows that access and social connection do not automatically produce equal benefits.

The four groups of factors shape whether users develop confidence or distrust. Positive experiences, reliable services, digital skills and trusted social support build digital trust. Fraud, transaction failure, privacy concerns and poor customer support erode it.

Digital trust may produce different patterns of engagement with digital platforms, including confident, cautious, dependent use and platform rejection. Confident use occurs when individuals transact regularly and independently, whereas cautious use involves continued engagement accompanied by restrictions on the frequency, value or type of transactions because of perceived risk. Dependent use arises when individuals rely on agents, relatives or friends to undertake or complete transactions. Platform rejection occurs when users avoid a service altogether or discontinue its use. This classification extends the analysis beyond a binary distinction between users and non-users by recognising that regular use does not necessarily indicate confidence or independence. Individuals may continue using a platform while remaining cautious, dependent on others or uncertain about its trustworthiness.

The framework incorporates a feedback mechanism through which transaction experiences influence digital trust. Successful transactions may strengthen confidence and encourage continued use, while fraud or transaction failure may weaken it. Effective complaint resolution may restore confidence after an adverse experience. Digital trust is therefore conceptualised as a dynamic, socially embedded process. This perspective helps explain variations in mobile

platform use among rural microentrepreneurs with similar technological access but different experiences and social circumstances.

6.1 Conceptual Propositions

The framework generates five propositions that may be examined empirically in future research. It proposes that reliable and secure platforms are more likely to sustain digital trust and continued use; transparent service provision and effective complaint resolution may lessen the adverse effects of transaction failure; and digital literacy may enable users to engage with mobile platforms more confidently and independently. It further suggests that inequalities in device access, financial control and digital skills may contribute to cautious or dependent use among women microentrepreneurs. Kinship networks may likewise influence trust in different ways: support and recommendations from trusted relations can encourage adoption, while shared accounts of fraud or transaction failure may generate caution towards particular services. Taken together, these propositions indicate that patterns of mobile platform use emerge from the interaction between technological performance, service provision, individual capabilities and social relations.

7. Policy and Practical Implications

The framework shows that expanding mobile networks and registering new users are not enough to achieve meaningful digital inclusion. Policies should also address security, service quality, digital skills and the social conditions under which rural microentrepreneurs use mobile platforms.

Service providers should strengthen fraud prevention, transaction confirmation and account protection. Charges should be clearly explained, while complaint and refund procedures should be simple and accessible. Customer support should include options suitable for users with limited internet access or digital skills. Mobile money agents should also receive regular training on customer protection, privacy and fraud reporting.

Governments, development organisations and service providers should expand practical digital-literacy programmes. Training should cover password protection, identification of fraudulent messages, safe online selling and complaint procedures. Training should be linked to the platforms and risks that microentrepreneurs face in their daily businesses.

Gender-responsive interventions are also needed. Women should have greater access to personal mobile devices, digital training and secure financial accounts. Services should protect the privacy of users who depend on shared devices and provide complaint channels that women can access safely.

Kinship and community networks should be used as channels for building trust. Community leaders, business groups and trusted local agents can help share accurate information about fraud and safe platform use. However, community-based information should support rather than replace formal consumer protection and accountable service provision.

Regional and national policies in East Africa should treat digital trust as an important part of financial inclusion. Progress should be measured through safe, confident and continued use, not only through mobile ownership, account registration or transaction volume.

8. Directions for Future Research

Future studies should test the Socially Embedded Digital Trust Framework in different East African settings. Research should examine whether platform reliability, digital literacy, gender and kinship networks have similar effects across countries, business types and rural communities.

Longitudinal studies are needed to show how trust changes over time. Such studies could examine how users respond to fraud, transaction failure, platform changes and complaint resolution. This would help explain how trust is built, lost and restored rather than treating it as a fixed attitude.

Researchers should also distinguish between platform adoption and patterns of continued use. Regular use does not always indicate full confidence. Some users may remain cautious, depend on agents or limit the amount of money handled digitally.

More attention should be given to women microentrepreneurs, shared-device use and control over digital accounts. Research should also examine how social networks spread confidence, fraud warnings and distrust.

Future empirical studies should develop and test measures of confident use, cautious use, dependent use and platform rejection. These outcomes could provide a more accurate understanding of digital participation than the simple division between users and non-users.

9. Conclusion

Digital platforms have expanded economic opportunities for rural microentrepreneurs in East Africa, but access does not necessarily result in secure, independent or sustained use. Participation depends on confidence in the technology, service providers, agents and other actors involved in transactions. Trust develops through system reliability, security, transparent communication, digital competence and satisfactory experiences, while fraud, privacy risks, network failures, unclear charges and ineffective complaint resolution may undermine it. Gender relations and kinship networks further influence access, financial control, information and support. The Socially Embedded Digital Trust Framework integrates these technological, service, personal and social dimensions to explain differences in platform engagement, ranging from confident and cautious use to dependence and rejection. Digital inclusion should therefore extend beyond device ownership, account registration and transaction volume to consider users' capacity to engage with digital services safely, independently and confidently.

10. References

1. Aker JC, Mbiti IM. Mobile phones and economic development in Africa. *Journal of Economic Perspectives*. 2010; 24(3):207-232. Doi: <https://doi.org/10.1257/jep.24.3.207>
2. Asongu SA, Nwachukwu JC. The role of governance in mobile phones for inclusive human development in Sub-Saharan Africa. *Technovation*. 2016; 55-56:1-13. Doi: <https://doi.org/10.1016/j.technovation.2016.04.002>
3. Bongomin GOC, Malinga CA, Amani AM, Balinda R. Recalibrating the scope of financial inclusion through financial technologies in the digital age: The role of digital literacy as a moderator in rural Uganda. *Information Technology & People*. 2025; 38(3):1178-1207. Doi: <https://doi.org/10.1108/ITP-09-2022-0732>

4. Chalwe-Mulenga M, Duflos E, Coetzee G. The evolution of the nature and scale of digital financial services consumer risks: A review of evidence. CGAP, 2022. <https://www.cgap.org/research/reading-deck/evolution-of-nature-and-scale-of-dfs-consumer-risks-review-of-evidence>
5. Dahlberg T, Guo J, Ondrus J. A critical review of mobile payment research. *Electronic Commerce Research and Applications*. 2015; 14(5):265-284. Doi: <https://doi.org/10.1016/j.elerap.2015.07.006>
6. Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*. 1989; 13(3):319-340. Doi: <https://doi.org/10.2307/249008>
7. Donner J, Tellez CA. Mobile banking and economic development: Linking adoption, impact, and use. *Asian Journal of Communication*. 2008; 18(4):318-332. Doi: <https://doi.org/10.1080/01292980802344168>
8. Duncombe R, Boateng R. Mobile phones and financial services in developing countries: A review of concepts, methods, issues, evidence and future research directions. *Third World Quarterly*. 2009; 30(7):1237-1258. Doi: <https://doi.org/10.1080/01436590903134882>
9. Fafchamps M. *Market institutions in Sub-Saharan Africa: Theory and evidence*. MIT Press, 2004.
10. Gefen D, Karahanna E, Straub DW. Trust and TAM in online shopping: An integrated model. *MIS Quarterly*. 2003; 27(1):51-90. Doi: <https://doi.org/10.2307/30036519>
11. Gillwald A, Milek A, Stork C. Gender assessment of ICT access and usage in Africa. *Research ICT Africa*, 2010.
12. Granovetter M. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*. 1985; 91(3):481-510. Doi: <https://doi.org/10.1086/228311>
13. GSMA. *Empowering women micro-entrepreneurs through mobile: A landscape report on how women micro-entrepreneurs use mobile for business in low- and middle-income countries*. GSMA, 2023.
14. GSMA. *The mobile gender gap report 2024*. GSMA, 2024a.
15. GSMA. *Mobile money fraud typologies and mitigation strategies*. GSMA, 2024b. https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/gsma_resources/mobile-money-fraud-typologies-and-mitigation-strategies/
16. International Telecommunication Union. *Measuring digital development: Facts and figures 2024*. ITU, 2024.
17. Jaakkola E. Designing conceptual articles: Four approaches. *AMS Review*. 2020; 10:18-26. Doi: <https://doi.org/10.1007/s13162-020-00161-0>
18. Jack W, Suri T. *Mobile money: The economics of M-Pesa* (NBER Working Paper No. 16721). National Bureau of Economic Research, 2011. Doi: <https://doi.org/10.3386/w16721>
19. Jack W, Suri T. Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*. 2014; 104(1):183-223. Doi: <https://doi.org/10.1257/aer.104.1.183>
20. Koomson I, Martey E, Etwire PM. Mobile money and entrepreneurship in East Africa: The mediating roles of digital savings and access to digital credit. *Information Technology & People*. 2023; 36(3):996-1019. Doi: <https://doi.org/10.1108/ITP-11-2021-0906>
21. MacInnis DJ. A framework for conceptual contributions in marketing. *Journal of Marketing*. 2011; 75(4):136-154. Doi: <https://doi.org/10.1509/jmkg.75.4.136>
22. McKnight DH, Choudhury V, Kacmar C. Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*. 2002; 13(3):334-359. Doi: <https://doi.org/10.1287/isre.13.3.334.81>
23. Munyegera GK, Matsumoto T. ICT for financial access: Mobile money and the financial behaviour of rural households in Uganda. *Review of Development Economics*. 2018; 22(1):45-66. Doi: <https://doi.org/10.1111/rode.12327>
24. Riley E. Mobile money and risk sharing against village shocks. *Journal of Development Economics*. 2018; 135:43-58. Doi: <https://doi.org/10.1016/j.jdeveco.2018.06.015>
25. Suri T, Jack W. The long-run poverty and gender impacts of mobile money. *Science*. 2016; 354(6317):1288-1292. Doi: <https://doi.org/10.1126/science.aah5309>
26. UNESCO Institute for Statistics. *A global framework of reference on digital literacy skills for Indicator 4.4.2* (Information Paper No. 51). UNESCO Institute for Statistics, 2018.
27. Venkatesh V, Davis FD. A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*. 2000; 46(2):186-204. Doi: <https://doi.org/10.1287/mnsc.46.2.186.11926>
28. World Bank. *What works to advance women's digital literacy? A review of good practices and programmes*. World Bank, 2025.
29. Wyche S, Olson J. Gender, mobile, and mobile internet: Kenyan women's rural realities, mobile internet access, and "Africa Rising." *Information Technologies & International Development*. 2018; 14:33-47.