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Thematic Review of Mobile Money Research in Africa Focusing on Financial Inclusion and Platform Ecosystems (2020 to 2025)

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Abstract

This paper reviewed the development of the mobile money literature in the context of a shift in the focus from financial inclusion towards a more comprehensive perspective of platform ecosystems. The paper reviewed mobile money research in Africa published in the years 2020 to 2025. It reviewed the framing of mobile money in the context of the themes of access, welfare, resilience, livelihoods, interoperability, regulation, payments to merchants, and cross-border integration. A thematic literature review design was adopted, using peer-reviewed literature and select influential reports of African settings, and employed structured searching, screening, coding, and comparative synthesis to find dominant patterns and gaps in research. The review discovered that mobile money research was increasingly becoming more than a mere cash transfer service to include savings, credit, insurance, public payments, and ecosystem coordination among users, agents, merchants, banks, fintech firms, and regulators. It further revealed that mobile money helped to secure household welfare through consumption smoothing, market structure, and governance, and ecosystem studies showed the increased significance of interoperability, market structure, and governance. Nevertheless, the literature was still uneven between different regions, populations, and methods, with few evidence of underrepresented countries and vulnerable groups. The paper finds that mobile money in Africa can best be viewed not only as a tool of financial inclusion but also as a digital platform infrastructure, with significant implications on research, regulation, and inclusive development.

1. Introduction

The idea of mobile money emerged as a solution to the structural disconnect between the uptake of mobile-phone or (Global System for Mobile Communication) GSM services and access to formal banking (particularly in the low-income segments of the population. M-Pesa which was introduced in 2007 in Kenya, is a great example of this, it began as a simple phone service to deposit, transfer and withdraw cash for the unbanked (Ahmad et. al., 2020; Myengera & Matsumoto, 2017).

What started as a basic Unstructured Supplementary Service Data (USSD) based person-to-person money transfer service evolved into a financial ecosystem (Apiors & Suzuki, 2018). Senyo et. al. (2021) state that mobile money now facilitates payments of bills, payments to merchants, savings, access to credit, insurance, money transfers, payments at Point of Sale (POS) and other digital financial services in most countries of sub-Saharan Africa. Also, the data on transaction history is now also a valuable source of information that is used to provide more services such as credit (Tembo & Okoro, 2021).

1.2 Problem Statement

The body of African research on mobile money has grown rapidly, but it has tended to be fragmented across financial inclusion, regulation, consumer uptake, ecosystem practices and macroeconomic impacts, which makes it hard to see as a coherent story (Ahmad et al., 2020; Chitimira & Torerai, 2021; Katusiime, 2021; Senyo et al., 2021).

This is an issue because mobile money is no longer just a remittance service. The research literature demonstrates a clear evolution in mobile money research from financial inclusion to the development of platform ecosystems that include merchant payments, savings, credit, insurance, digital wallets, interoperability and mobile app-based financial services, but many researchers continue to focus primarily on financial inclusion (Chitimira & Torerai, 2021; Munyegera & Matsumoto, 2017; Senyo et al., 2021; Tembo & Okoro, 2021).

The problem is that there is a scarcity in thematic reviews that synthesises the transition from mobile money as inclusion-focused payments to ecosystems between 2020 and 2025 in Africa. This means evidence remains largely focused on access and adoption but lacks evidence on ecosystem design, interoperability and governance, merchant adoption, and platform power (Senyo et al., 2021; Tembo & Okoro, 2021; Sangwa et al., 2025).

1.3 Purpose of this Review

This study aims to conduct a review of mobile money research in Africa in the period of 2020 to 2025 and to discuss how the literature has changed in terms of emphasis from a focus on financial inclusion to the broader viewpoint and ecosystem of mobile money. It is hoped that the review will reveal prevailing themes, theoretical frameworks, pattern methodologies, and gaps that remain, and clarify how mobile money is increasingly becoming infrastructural to interconnected digital economies rather than being a stand-alone transfer tool (Ahmad et al., 2020; Senyo et al., 2021).

1.4 Research Questions

RQ1: How have the academic interests of the study of mobile money in Africa changed between 2020 and 2025 and what are the prevailing thematic areas in mobile money research in Africa in 2020 and 2025?

RQ2: What are the conceptual and operational definitions of financial inclusion as used in recent studies in comparison with platform ecosystem dynamics within the context of mobile money?

RQ3: Which theoretical frameworks and methodological strategies are most frequently used in mobile money research in the period 2020 to 2025 and how are these interconnected with the emerging view of the platform ecosystem?

RQ4: What are the major gaps in the current literature on African mobile money between 2020 and 2025 on the topic of going beyond standalone mobile money financial inclusion tools to integrated platform ecosystems and what do the gaps imply about future research?

1.5 Importance of the Review

The review compiles work that is scattered across the fields of finance, development studies, regulation, and information systems and demonstrates the mobile money is now embedded in larger digital ecosystems that are shaped by interoperability, digital literacy, regulatory design, cybersecurity, and platform coordination (Chitimira and Torerai, 2021; Senyo et al., 2021). That is why thematic synthesis can prove helpful in linking the literature to a single analytical image (Ahmad et al., 2020; Katusiime, 2021).

The review is also useful to regulators, development agencies, providers, banks, and fintech firms since it demonstrates that the next phase of mobile money is about ecosystem building, rather than just transfer volume. The literature identifies the need to regulate flexibly, protect consumers, ensure products are interoperable, and the need to foster healthy competition, and it also demonstrates that dominant platforms can create new forms of exclusion when market power is not checked (Simatele, 2021; Tembo and Okoro, 2021; Senyo et al., 2021).

2 Conceptual and Theoretical Background

Mobile money is the service by which financial transactions are accessed through a mobile phone, typically by using an electronic wallet in which a user can store value, deposit and withdraw cash, and send or receive money without having a traditional bank branch (Ahmad et al., 2020; Munyegera and Matsumoto, 2017). In the context of African research, it is commonly contrasted with mobile banking since mobile money is more commonly telecom-led or hybrid, whereas mobile banking is more bank-led.

Digital financial services are more comprehensive than mobile money and comprise financial products provided by digital means including phones, the internet, ATMs, and POS terminals. They also cross beyond payments to savings, credit, insurance, merchant payments, and government-to-person or business-to-business transfers, making mobile money better understood as a single component of a broader digital finance ecosystem, rather than a standalone service (Apiors & Suzuki, 2018; Simatele, 2021; Tembo & Okoro, 2021).

Financial inclusion is in general terms, the access to right, reasonable and opportune financial services that enhance quality of life. It is increasingly being framed in the literature within four related dimensions: access, usage, quality, and welfare or resilience, with access defined as entry into the system, usage as sustained engagement, quality as affordability and convenience, and welfare as whether services improve living standards and coping capacity (Ahmad et al., 2020; Abiona and Koppensteiner, 2018; Simatele, 2021).

This wider perspective is significant since mobile money does not just increase the nominal access. Research in African contexts demonstrates it facilitates the previously marginalized users to transact, save, receive remittances, and access credit or insurance through channels that are cheaper and easier to use than conventional banking, especially to rural households, informal workers, and low-income groups (Munyegera & Matsumoto, 2017; Abiona and Koppensteiner, 2018; Apiors and Suzuki, 2018; Adams and Gopakumar, 2023). What started as an on-ramp to formal finance has thus become a practical means of managing livelihoods, shocks, and everyday economic involvement.

The literature has now demonstrated that the perspectives of financial inclusion and platform ecosystem co-exist, yet not always neatly fit. The inclusion lens focuses on the lower costs, broader access, and improved welfare, and the ecosystem lens is concerned with coordination between users, agents, merchants, banks, fintechs, and regulators, interoperability, merchant acceptance, and market structure (Senyo et al., 2021; Tembo and Okoro, 2021; Chitimira and Torerai, 2021). Simultaneously, the development of ecosystems can enhance inclusion alongside concentration of power and undermining of transparency in case of poor competition, regulation, or the quality of services (Simatele, 2021; Katusiime, 2021; Senyo et al., 2021).

3 Methodology

3.1 Review Design

The current study involved a thematic narrative review as opposed to a purely bibliometric review or a meta-analysis due to the conceptual breadth, methodological heterogeneity, and unevenness of the outcome measures of the literature on mobile money in Africa. Thematic synthesis is particularly suitable to trace the shift of the field towards questions of welfare, resilience, and ecosystems due to prior review work in this area has been based on

taxonomic, descriptive, and analytical approaches (Ahmad et al., 2020).

The scope of the review is limited to the African countries; however, the main emphasis is placed on the studies published between 2020 and 2025. The core evidence base consists of peer-reviewed articles, and a small number of influential reports, and previous seminal studies are also included where they are necessary to explain how concepts, theories and empirical patterns have evolved. The design is appropriate since the literature cuts across household welfare, platform governance, merchant payments, interoperability, regulation, and cross-border integration which cannot be easily reduced to a single outcome measure or pooled effect size.

3.2 Search Strategy

The search approach consisted of primary scholarly databases and sources such as Scopus, Web of Science, Google Scholar, EconLit, and ICT4D/information systems venues. Search terms that included "mobile money" and included terms like financial inclusion, livelihood, welfare, resilience, shocks, ecosystem, interoperability, merchant payments, digital finance, and government transfers were used to capture both inclusion and emerging and related studies for the ecosystem approach.

Studies were accepted if they examined mobile money, or digital payment systems as they are often called, and related contexts in Africa or sub-Saharan Africa; were published between 2020 and 2025; and looked at mobile money or other digital payment systems from an empirical, conceptual, or theory building approach. Earlier studies were only included where necessary for historical context. Studies that were not relevant to the development of the field and were purely technical telecommunications papers, non-financial mobile service studies and pre-2020 papers were not included.

3.3 Screening and Selection Process

The screening process was in three steps: initial retrieval, screening title and abstract, and screening the full-text. Due to the heterogeneity of the literature, screening was not directed by a strict hierarchy of methods but by relevance. This enabled the review to include not just causal papers like Abiona and Koppensteiner (2018), but also qualitative and theory-generating studies such as Simatele (2021) and Senyo et al. (2021), which are necessary to understand mechanisms and structure of the ecosystem.

3.4 Coding and Extraction of Data

For an optimal result, coding was done through a hybrid process. The start utilized a deductive frame, which was based on the major themes, which were already apparent in the literature, whereas inductive coding was used to capture emerging ideas, such as platform power, interoperability, public payment rails, and digital dependence. Research like Senyo et al. (2021) and Sangwa et al. (2025) demonstrates why a fixed coding frame is inadequate in isolation because the ecosystem literature presents new concepts that are missing in the older inclusion literature.

3.5 Shortcomings of the Review Technique

A thematic review of this type is susceptible to publication bias, as positive findings on inclusion and welfare have a greater chance of publication compared to null or negative results. It is also constrained by database coverage, language constraints and it is possible that some relevant studies may be missed even with a broad search strategy.

The topical relevance of the focus on 2020-2025 is strengthened, but it is also associated with the risk of underrepresenting older foundational studies that established the main empirical claims of the field. To address that issue, only a few of the pre-2020 studies have been retained only where they are essential to understanding the trajectory between inclusion and ecosystem thinking, such as Munyegera and Matsumoto (2017), Apiors and Suzuki (2018), and Abiona and Koppensteiner (2018).

4 Thematic Review and Analysis

4.1 Mobile Money in The Context of Financial Inclusion and Basic Use Cases

The review of the mobile money literature, the focus was initially on the view of mobile money as an easier access to financial inclusion. Typically it is described as a low-cost entry point offering person-to-person transactions, remittances, bill payments, airtime purchases, and cash-in or cash-out, particularly in the absence banks, or where the banking cost is a barrier (Ahmad et al., 2020; David-West et al., 2021; Nyimbiri, 2021; Tembo and Okoro, 2021). In this regard, it is viewed more like a simple platform, than an ecosystem. The focus is more on a payment solution that allows for more convenient transactions, money transfers and easier value storage than using cash or branch-based banking (Abbey, 2021; Katusiime, 2021; Stark, 2021).

A second strand shows mobile money linking users to semi-formal and hybrid finance. It is used alongside informal finance in Zimbabwe and Nigeria, and mainstreamed in Ghana (Bawuah, 2024; David-West et al., 2021; Simatele, 2021). The transitions towards inclusion, then, are seen as gradual, with users beginning with simple transfers, and then accessing savings and loans without giving up on informal mechanisms (Ahmad et al., 2020; Bawuah, 2024). This is particularly notable for women, low-paid workers and rural populations, and these groups are subject to bank distance, cost, and documentation issues (Abbey, 2021; Ikue et al., 2021; Oluk, n.d.; Stark, 2021; Asongu et al., 2024).

Lastly, definitions of "inclusion" have evolved from a yes/no on account ownership to more sophisticated measures that also reflect account use, frequency of use and the use of the account for remittances and bill payments, among others (Ahmad et al., 2020; Bawuah, 2024; Akter et al., 2021; Coulibaly, 2021).

4.2 Mobile Money Relationship to Welfare, Resilience and Livelihood

In the literature looked at, mobile money is presented as a shock-absorbing solution in situations where there is unstable or low income, to cushion consumption, to shield basic spending, and to facilitate recovery of livelihoods after adverse events (Abiona and Koppensteiner, 2018; Munyegera and Matsumoto, 2017; Simatele, 2021). In Tanzania, Abiona and Koppensteiner (2018) find that mobile money reduces the impact of rainfall shocks on per capita expenditure, reduces the risk of temporary poverty, and maintains remittance inflows and welfare payments during income disruptions from

agriculture. Mobile money in Uganda and Ghana has a similar effect on saving and borrowing, as well as remittance receipt, because it reduces transaction costs and distance barriers, and makes saving and borrowing more likely and profitable, and increases remittance receipts, as reported by Munyegera and Matsumoto (2017), which in turn leads to increased investment in education, microenterprises, land, and buildings as reported by Apiars and Suzuki (2018). At the heart of it is human-capital protection, as mobile money protects preventive health spending and education for children, particularly girls have strong effects (Abiona and Koppensteiner, 2018). Mobile money also reduces poverty impact at the distributional level by smoothing inequality impacts, and enhances women's participation in business and politics (Asongu and le Roux, 2023; Asongu et al., 2024). Under the COVID-19 pandemic, it allowed for safe transfers and wage payments in Zimbabwe and Uganda in the face of mobility restrictions (Chitimira and Torerai, 2021; Katusiime, 2021). From the empirical perspective, resilience is defined as avoiding transient poverty, maintaining consumption, health and schooling expenditures, and remittances after shocks (Abiona and Koppensteiner, 2018; Munyegera and Matsumoto, 2017; Simatele, 2021). Gains are dependent however: high costs, system failures, low acceptance, market concentration, and delayed regulation can diminish the welfare impacts (Simatele, 2021; Chitimira and Torerai, 2021).

4.3 Mobile Money as a Platform and Ecosystem

In the literature, there was an increasing discussion of mobile money as a multi-sided platform integrated into a greater FinTech ecosystem. By conceptualising the Ghanaian ecosystem as a network of users, merchants, fintech firms, telcos, banks, mobile money agents, central bank and supporting institutions, Senyo et al. (2021) argue that the incorporation of the network is shaped through innovative and collaborative, protectionist and equitable, and legitimising and sustaining practices.

Among the most important implication of such framing is that mobile money has taken the centre stage of day-to-day business not just peer-to-peer remittances. In Ghana, the characterisation of mobile money users consists of transacting on feature phones and USSD menus to pay merchants, settle bills, airtime, savings, credit, microinsurance and even government cash transfers (Adams and Gopakumar, 2023; Eton et al., 2025).

The platform logic as well is used to be incorporated with formal financial institutions. The adoption of mobile money in rural Uganda, Munyegera and Matsumoto, posit that, in rural Uganda, mobile money is increasingly acting in concert with, and not outside of, the formal financial sector. Eton et al. (2025) go a step further by claiming that mobile money in Ghana, Tanzania and Rwanda has enhanced access to savings, credit and insurance products and interoperability has enabled users to transact across different mobile networks and financial institutions.

Interoperability is thus an earmark of the ecosystem turn. Tembo and Okoro (2021) show that the adoption of mobile money in sub-Saharan Africa improves the connection between the emergent and existing actors and argue that the value of mobile money ecosystems does not lie in the mobile wallet, but the relationship between the new and existing actors. In this respect, platform success is the ability to translocate value among users, agents, merchants, financial institutions, and regulatory systems with a low level of friction.

Also growing is the ecosystem, when there is a crisis and mobile money is one of the channels through which the government and the humanitarian community can make payments. In Zimbabwe, mobile money transactions were positively linked to paying frontline workers safely during COVID-19 and to delivering relief and social transfers to poor and unbanked households, and Katusiime (2021) finds the pandemic to be positively linked to higher mobile money usage in Uganda and that policy responses were actively encouraging contactless payments. This platform role is also a platform view since mobile money is not just a private payment rail, but a public infrastructure of state transfers and emergency liquidity.

Taken together, the theme suggests that a change is occurring between single-function mobile transfers, versus a single digital finance architecture bundle. The literature can be most effectively thought of as trend toward a super-applike logic, where a wallet of payments, savings, credit, insurance, merchant transactions, utilities, public transfers, and networked financial relationships are more and more supported by a single wallet. The extent to which that bundle can scale is determined by ecosystem governance and interoperability.

4.4 Theoretical and Methodological Patterns

Theoretical Approaches

The literature seems to present distinct layers of theoretical architecture, namely, access and inclusion, and systems, platforms, and governance. The best lens to read the initial studies on the topic is financial inclusion, livelihoods, and capability lenses, as they focus on whether mobile money helps households to smooth consumption, keep health and education spending and save, borrow and avoid transient poverty. This type of framing is also present in the case of Uganda, Tanzania, and Ghana where mobile money is treated as a tool to reduce poverty and vulnerability rather than being viewed as an end in itself (Munyegera and Matsumoto, 2017; Abiona and Koppensteiner, 2018; Apiors and Suzuki, 2018; Simatele, 2021; Adams and Gopakumar, 2023).

The implicit capability and livelihoods approach can be observed the results of some studies. Very frequently the literature quantifies welfare by the maintenance of such functional aspects such as as food consumption, health spending, school attendance, savings, microenterprise investment, and resilience to shocks, which are closely related to a livelihoods perspective even when the studies do not explicitly call it so (Abiona and Koppensteiner, 2018; Apiors and Suzuki, 2018; Munyegera and Matsumoto, 2017; Eton et al., 2025). In practice, mobile money is thought to be an extension of what households can do when stressed and not whether households have an account.

The second theoretical cluster is built based on the concepts of innovation diffusion, and technology adoption. The literature is clearer in this instance, in terms of user acceptance, perceived usefulness, ease of use, relative advantage and proximity of the service. Adams and Gopakumar (2023) use the Technology Acceptance Model, whereas the other adoption studies relies on the diffusion-of-innovation style of explanations and associated digital adoption logics to explain the reason why some users adopt mobile money and other users do not (Akossey et al., n.d.; Valea, 2024). These works are more narrow as compared to the livelihoods literature, but are important in that they can explain the point of entry into the ecosystem.

The other, and closely related, but differing stream of work applies the concepts of activity theory and adjacent platform adoption to the explanation of how fintech companies can be integrated in the financial system. Senyo and Karanasios (2021) define fintech start-ups as a type of innovators and aggregators operating through APIs, in collaboration with banks, and balancing between competition and collaboration. It is not just a user level adoption story but a coordination story, how companies integrate services across institutional boundaries.

The most significant theoretical shift in the new literature is to platform, ecosystem, and network forms of thinking. The three practices of Senyo et al.

(2021) operationalize the ecosystem dynamics, and they are innovative and collaborative, protectionist and equitable, as well as legitimising and sustaining practices. In such framing mobile money has ceased to be a medium of transferring value, but rather a platform around which various actors coordinate, compete and co-produce inclusion.

Network theory is also more exposed by the more recent ecosystem-oriented work. Eton et al. (2025) stress that the beneficiaries are mediated by networked access, digital literacy, and proximity to agents. David-West et al. (2019) also position mobile money as a low-cost innovation that seals institutional gaps by enlisting agent networks and low-cost access points, which renders the platform digital, but also highly infrastructural and relational.

Of special interest is the institutional and political economy approach when the literature has started to ask questions about why the scale of ecosystems is an uneven distribution. Chitimira and Torerai (2021) focus on regulatory failure, banking regulation and how the prudential frameworks have failed to keep pace with innovation of mobile money in Zimbabwe, whilst Simatele (2021) shows that market concentration, lack of transparency and system failures can turn digital payments into welfare-reducing infrastructure. Katusiime (2021) presents the policy dimension by showing that taxes, macroeconomic volatility, and the COVID-19 crisis have an impact on actual usage, as opposed to just access.

In this it is made evident where the theoretical course is taken. The older literature on early inclusion inquires whether mobile money assists households to survive shocks and access basic services, but the more recent work asks how value is governed across networks, how interoperability is realised, how ownership, regulation and competition contribute to determining who gets the gains. In that respect, the literature has switched to the ecosystem architecture, as well as access, to the politics of coordination and control.

Methodological Approaches

The best methodological aspects of the welfare and resilience studies are the exploitation of exogenous shocks or panel variation. Abiona and Koppensteiner (2018) implement an interactive quantile regression design, which is based on rainfall shocks, Tembo and Okoro (2021) and Asongu et al. (2024) employ interactive quantile regression to test the distributional effects of poverty and gender inclusion. These are well suited to causal or near-causal questions about welfare, but are more generally well-suited to identify the average or heterogeneous effects behind it than to dissect the social mechanisms behind it.

The adoption and user-behavior literature typically considers the fundamentals of cross-sectional surveys, regression, and decomposition. Adams and Gopakumar (2023) refers to the Fairlie decomposition to address the gender gaps in ECOWAS; Valea (2024) uses the survey data and a regression analysis; and Akossey et al. employs a cross-sectional design based on the diffusion and acceptance theory. The design is handy in identifying the correlates of adoption, but not that helpful in causality because of self-selection, reverse causality and omitted variable bias.

The most common cases of the qualitative approach were when the question of whether mobile money works or not could not be answered, but rather how it works and in what circumstances it works. Simatele (2021) uses the focus groups to show that the gains in welfare are subject to quality of service, competition, and reliability. The fact that the questions of ecology require the interpretation of the relationships between participants, and not user-level results, justifies the methodological adequacy of the theory-generating case study employed by Senyo et al. (2021) to create their own ecosystem model.

Mixed methods, network analysis, and large-scale administrative or big data methods are becoming increasingly popular as ecosystem and platform studies. Eton et al. (2025) are combined household surveys, econometric analysis, and interviews; Sangwa et al. (2025) are combined, a Bayesian panel, venture-capital network graph, geospatial mapping and natural-language processing of policy discourse; and David-West et al. (2019) overlay country comparisons with case-based and quantitative evidence to demonstrate how mobile money fills institutional voids. Such designs are highly adapted to ecosystem questions because the multi-actor relations are represented, but by the sparsity of data, the assumptions made in the models, and the difficulty in observing informal or unrecorded transactions.

The current trend of trade off in methodology across the literature is apparent. The quasi experimental and panel studies are more successful in their causal inference but they are also likely to lose depth, context and external validity. Qualitative studies can provide mechanism and context and cannot readily extrapolate beyond the cases of interest under study. Broad and efficient but most vulnerable to endogeneity and selection effects, cross-sectional surveys are. The structural information can be given by ecosystem and network research but tends to approximate the effects on households indirectly which makes them strong in mapping platforms and weak in estimating the impacts on households.

4.5 Discussion

Inclusion to Evolution of Ecosystems

The thematic review of the literature has identified a clear shift of a narrow focus that analyzed access to Mobile Money to a broader concern with the re-shaping of economic and institutional systems by mobile money. It is an inclusion-based agenda, as opposed to an ecosystem one, which is already framed with the help of a foundational review (Ahmad et al., 2020).

First empirical studies in Uganda, Tanzania and Ghana were still largely based on the basis of financial inclusion and livelihoods but went beyond account ownership by demonstrating that mobile money changes saving, borrowing, remittances, consumption smoothing and productive investing. Munyegera and Matsumoto (2017) show that more households are adopting mobile money and thereby increasing the probability and amount of saving, borrowing, and receiving remittances whereas Abiona and Koppensteiner (2018) show that mobile money can be used by households to smooth their consumption and prevent temporary poverty when rain falls. Apiars and Suzuki (2018) have extended this argument and have associated adoption with increased amounts of remittance, expenditure on education, investment in micro-enterprises, and consumption.

Now, as we may observe, the unit of analysis became more abstract, the literature had become more mature, and so was the unit of analysis which now was the system as opposed to the household. By conceptualising mobile money as a part of a FinTech ecosystem that includes users, merchants, telcos, banks, agents, regulators and support institutions, Senyo et al. (2021) argue that inclusion is created through innovative and collaborative, protectionist and equitable, and legitimising and sustaining practices. This is a noteworthy conceptual shift as inclusion is no longer perceived as a unilateral influence of access, but as a result of the interactions between a number of actors who act on a platform.

The above turn in the ecosystem is reinforced by the research of merchant payments, government transfers, interoperability and cross-border remittances. Tembo and Okoro (2021) demonstrate that mobile money is increasing cross-border remittance links, financial integration across regions, and other

studies have shown that mobile money is increasingly utilized to pay utility bills, school fees, salaries, merchant payments, and government-to-person transfers. That is, mobile money is infrastructural and not transactional.

The interdependencies of themes is also crucial. Inclusion presupposes participation in the ecosystem since users need to be able to save, receive, and send value before they can participate in the activities of the merchant payment, credit, insurance, or online commerce. In the meantime, an ecosystem is also feeding back on to inclusion and exclusion, with the underlying cause of bad service quality, market concentration, weak regulation, or high prices undermining the very welfare gains that inclusion is supposed to deliver (Simatele, 2021; Chitimira and Torerai, 2021; Katusiime, 2021).

Measurement and Conceptual Problems

A significant conceptual change in the literature is that financial inclusion is no longer being conceptualized as merely owning an account. The use, including remittances, savings, borrowing, bill payments, merchant transactions, and ability to take action in response to shocks without reducing consumption or investment in human capital (Munyegera and Matsumoto, 2017; Abiona and Koppensteiner, 2018; Apiors and Suzuki, 2018; Simione and Muehlschlegel, n.d.). The importance of this broader definition is that a user can be formally incorporated and functionally excluded in case the wallet is not used regularly or the service is too costly or unreliable.

The given issue is reflected in the quantification of the ecosystem. Nevertheless, they seldom operationalize the maturity of the ecosystem on the basis of standardized indicators. A more attempt to theorize the ecosystem would be found in Senyo et al. (2021), but even there the evidence would mainly be actor-based and practice-based rather than basing the evidence on a universally comparable ecosystem index.

This brings about discrepancies between studies. Some papers (e.g., ecosystem development as a larger bundle of adjacent services) view some papers as a broader bundle of adjacent services, some papers as interoperability and cross-border linkages, and others as an expanded version of the adjacent services concept (e.g. ecosystem development as a larger bundle of adjacent services). Two studies can both claim to study the same phenomena, but will actually be measuring quite different phenomena, due to the differences in the definitions of the operational terms.

Regional and Population Biases

There is a high concentration of the evidence base in few countries, in particular, in Ghana, Uganda, Tanzania, Kenya and Zimbabwe, cross-country work prefers to consider the sub-Saharan Africa as a single country. The latter level of concentration is serviceable to the extent of depth, but leaves Francophone West Africa, Lusophone Africa, weak settings and much conflict-ridden or highly rural environments relatively underrepresented. The literature of the WAEMU does assist in filling a portion of this gap, but the balance of evidence continues to be heavily biased towards East and Anglophone Africa (Tembo & Okoro, 2021; Valea, 2024).

The same happening is recorded in population coverage. Women also find their way to other studies, but they are often depicted as a subgroup to the overall inclusion, poverty or inequality analyses, rather than the main focus of the analysis (Asongu et al., 2024; Valea, 2024). Other groups of people such as refugees, disabled people and many informal workers are also rather underinvestigated. 272842

Partly, this is due to a number of exceptions. Eton et al. (2025) introduce a border-city situation that is created by mobility, displacement, and informal trade, unlike the Arua study, which also concentrates on the dynamics of cross-border and informal trade. However, they are still exceptions and not the rule so that there is still a lack of strong evidence on the population that is often most financially vulnerable.

Implications for Theory

The current theories are useful but none of them is sufficient in itself. The approaches of financial inclusion and livelihoods help to explain why mobile money is important to households, where the end result is consumption smoothing, savings, remittances, and shock absorption. The tradition of technology acceptance, including the work on TAM-style, helps to explain the user take-up as a result of the perceived usefulness, ease of use, and proximity of the service (Adams and Gopakumar, 2023; Akossey et al., n.d.).

Platform, ecosystem and network theories are therefore increasingly becoming more of a necessity. They describe why value is determined by coordination of users, agents, merchants, banks, fintechs, and the state, and why interoperability, merchant acceptance, and public payments are as important as account ownership. The frugal innovation and institutional void perspective, introduced by Senyo et al. (2021) and David-West et al. (2019) adds the framing of the ecosystem as frugal and pushes the field towards the questions of diffusion under dependency and digital dependence.

The gap which still remains in the theory is the combination of platform power and development finance. The literature often talks about positive impacts of ecosystems, but it does not also often theorize that who captures rent, how data are governed, how algorithmic rules impact access, and how concentration can turn a welfare tool into a gate keeping infrastructure. The said disconnection is evident in Zimbabwe, where Simatele (2021) shows that failures of services and concentration have detrimental impacts on welfare, and in the context of regulatory discussion, where Simatele (2021) demonstrates that there is a need to have competition, updated rules, and interoperability. 15163318

Implications For Policy and Practice

To the regulators it delivers the message that it cannot be sought in isolation of competition, consumer protection and quality of the services. As exhibited by Chitimira and Torerai (2021), regulation in Zimbabwe followed innovation, whereas Simatele (2021) demonstrates that market concentration, lack of transparency and frequent system breakdown can destroy the benefits of welfare. Katusiime (2021) also shows that policy settings, including taxes on the use of mobile money and the response to the crisis, have a direct impact on the use of mobile money.

The takeaway here is that inclusive ecosystems are not presumed but created by providers, and fintechs. According to the best studies, the significance of merchant acceptance, interoperable rails, nearby agents, low fees, integrated transfer publicity, and trusted service environments are important (Senyo et al., 2021; Tembo and Okoro, 2021; Munyegera and Matsumoto, 2017; Adams and Gopakumar, 2023).

Balance is the policy and practice implication. Mobile money must be left to grow as a development infrastructure but the ecosystem must always be contestable, interoperable and consumer-centered in order to be inclusive rather than extractive. 92015

Gaps in Research and Future Research Directions

A careful reading of the literature on welfare and resilience makes it apparent that much of this literature is based on quasi-experimental designs which seek to identify causal effects due to actual shocks in the field. This study follows the interactive quantile regression method developed by Abiona and Koppensteiner (2018), which is used to analyze the effects of mobile money on the extreme poverty and gender inclusion. Tembo and Okoro (2021)

and Asongu et al (2024) use similar methods to examine the impact of mobile money on the extremes of poverty and inclusion of women respectively. These strategies can be helpful in making estimates of average and heterogeneous effects but are not as informative on the social processes experienced below the numbers.

A study on adoption and user behaviour usually resorts to the use of cross-sectional survey, regression models and decomposition techniques. Adams and Gopakumar (2023) adopt the Fairlie decomposition approach whilst Valea (2024) take a survey regression analysis approach and Akossey et al. employ the diffusion and technology-acceptance theory. These methods offer a useful set of instruments to map correlates of adoption, but suffer from reverse causality, omitted variable, and self-selection problems.

Numbers are not quantified as numbers and work steps are qualitative and used to add information. The quality of services, competition and reliability of the mobile-money services will impact on the impact of welfare (Simatele, 2021) and theory building case studies will enable Senyo et al. (2021) to build a theory on mobile-money ecosystems.

A more recent study of the ecosystem, following a more comprehensive approach, which is based on mixed methods, network analysis and big data. The methods adopted in this study by Eton et al (2025) is a survey approach, econometric and interview approach adopted by Sangwa et al (2025) while the study adopted comparative and case-based evidence approach by David West et al (2019). The designs can give a better sense of the complexity of the platform, but have their limitations of data sparsity and modelling requirements.

The evidence base is still dominated by the quasi-experimental, cross-sectional, and case-study designs. It gives the field important causal hints and rich context, but significant gaps in external validity, long-run dynamics and micro-to-macro tracing. The strengths of identification are strong in Abiona and Koppensteiner (2018) and Asongu and le Roux (2023), whereas the strengths of interpretation are strong in Simatele (2021) and in Senyo et al. (2021).

The future generation of research will have to use longitudinal panels, transaction level administrative data and mixed methods tracking households, agents, merchants, and regulators over time. The reviewed papers in this thematic review suggest that there could be value in combining survey evidence with network maps, geospatial data, and qualitative fieldwork, as in the relatively newer ecosystem and dependency-oriented studies (Eton et. al. 2021; Sangwa et. al. 2025; Akossey et. al. 2025).

Recent systematic review carried out by Oluk (2025) suggests evidence exists in Uganda that points to the same practical barrier set namely, digital literacy, fees, connectivity, smartphone access, and mistrust, to different segments of the population.

5 Conclusion and Implications

5.1 Conclusion

The research on mobile money has shifted from a limited concern with financial inclusion to a much wider concern with the impact of mobile money on the organisation of welfare, living and economic life. Prior research focuses on inclusion effects through savings, credit, remittances and shock absorption and later on the conceptualization of the mobile money platform as part of a platform ecosystem that includes users, merchants, agents, banks, fintechs and the state (Ahmad et al., 2020; Munyegera and Matsumoto, 2017; Abiona and Koppensteiner, 2018; Senyo et al., 2021). Evidence indicates that consumption smoothing, health and education spending, microenterprise activity, labour force participation, and economic, health, and climate resilience benefits (Apiors & Suzuki, 2018; Abiona and Koppensteiner, 2018; Simatele, 2021; Katusiime, 2021; Eton et al., 2025). But concentration, weak regulation and exclusion can coexist with ecosystem expansion (Simatele, 2021; Asongu et al., 2024). The field has therefore moved towards platform governance and interoperability, and merchant integration (Senyo et al., 2021; Tembo and Okoro, 2021; David-West et al., 2019). As a whole, mobile money has increasingly become a digital infrastructure that affects savings, trade, and governance, whose impact is determined by competition, regulation, and ecosystem design (Chitimira and Torerai, 2021; Sangwa et al., 2025).

5.2 Suggestion For Future Research

Future studies can attempt to clarify the way merchant ecosystems change when interoperability is intensified, the impact of platform concentration on consumer welfare, and how digital payment systems facilitate public transfers in crisis times. It should also compare national pathways in East, West and Southern Africa, and include groups which are currently sparsely sampled, especially refugees, the disabled, informal workers and low-literacy users.

A strong design of the subsequent phase may include a set of panel data, transaction records and qualitative fieldwork in the same setting in order to fill some of the research gaps that were identified in this review. That would allow the researchers to see which way adoption to usage, usage to ecosystem participation and ecosystem power can feed back into either inclusion or exclusion over time.

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