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Bridging the Digital Gap: Mobile Money Services (MMSs) as a Catalyst for Financial Inclusion in Rural Tanzania

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Abstract

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This study assessed the use of Mobile Money Services (MMSs) for financial transactions among rural residents in Ziba Ward, Igunga District, Tanzania. A sample of 360 household heads was surveyed using structured questionnaires, supported by qualitative interviews. Data were analysed using descriptive statistics. The findings revealed that sending and receiving money was the most common transaction, followed by bill payments, deposits/withdrawals and purchasing goods and services. The study concludes that MMSs have transformed rural financial life by offering safe, convenient, and affordable alternatives to banking, especially benefiting women in household and small business management. The study recommends expansion of agent networks, targeted awareness campaigns, integration of savings and agricultural payments, and stronger consumer protections to maximize the developmental impact of mobile money in rural Tanzania.

Keywords: Digital Gap, Mobile Money Services (MMSs), Financial Inclusion, Rural, Tanzania

Introduction

Mobile money services have emerged as a promising solution for financial transactions in rural communities, particularly in developing countries. The rapid growth of mobile phone usage has enabled the development of mobile money platforms that allow users to store, send, and receive money using their mobile devices (Demirgüç-Kunt *et al.*, 2022b; Thulani *et al.*, 2018). In developed countries like USA, mobile payment technologies like Venmo and Cash App have been proved to offer a viable, simple and secure way to enhance money transactions. Likewise, similar technologies have become prominent in the African countries such as the so-called Mobile wallet (Dorfleitner and Nguyen, 2024). The prominence of mobile money has remained high in Sub-Saharan Africa, with the region consistently accounting for around 50% of global mobile money providers since 2011 (McCaffrey, 2022). This suggests that mobile money is particularly well-suited to addressing the financial Transaction challenges faced by rural communities in developing regions.

In the East African region, mobile money solutions like Kenya's M-Pesa, launched by Safaricom in 2007, have seen widespread adoption. M-Pesa has significantly impacted Kenya's economy by enhancing financial Transaction and offering innovative services, with over 30 million active users as of 2022 (Alampay *et al.*, 2017; Jack and Suri, 2019). The service allows users to deposit, transfer, and redeem money via SMS, becoming one of the most successful mobile financial services globally (Jack and Suri, 2019). By late 2009, more than two-thirds of Kenyan households had at least one M-Pesa user (Jack and Suri, 2019).

Similarly, Uganda has seen rapid growth in mobile money services, with over 20 million registered users as of 2021, mobile money services have the potential to address the challenges faced by rural communities in accessing financial services. By reducing the costs and barriers associated with traditional banking, mobile money can enable rural residents to

save, borrow, and make payments more easily, Additionally, mobile money can facilitate the transfer of remittances, which are an important source of income for many rural households (Mugambi *et al.*, 2020). In Tanzania, the mobile money sector has experienced rapid growth since the introduction of M-Pesa by Vodacom in 2008. Today, Tanzania has several mobile money providers, including Tigo Pesa, Airtel Money and Halopesa, which have made significant strides in expanding their services (Taylor, 2024), yet the benefits remain unevenly distributed between urban and rural areas (Mganyizi, 2023).

The National Financial Inclusion Framework (2024) reports that 83 percent of urban residents actively use mobile financial services compared with only 68 percent in rural areas. This persistent gap highlights that while access to mobile networks has improved, rural communities still experience barriers to the effective and consistent use of Mobile Money Services (MMSs). Hence, this necessitated the present study to analyse the types of financial transactions conducted through Mobile Money Services among rural residents. The study generates empirical evidence on the patterns of financial transactions conducted through MMSs by rural residents. By documenting the actual transactions performed such as sending and receiving money, bill payments, and purchases the study enhances understanding of how digital financial services are embedded in rural economic practices. This evidence helps policymakers and regulators, such as the Bank of Tanzania and the Tanzania Communications Regulatory Authority (TCRA), to develop regulations that strengthen financial inclusion initiatives.

Transaction Cost Theory (TCT), initially proposed by Coase (1937) and later expanded by Williamson (2007), provides a foundational framework for analysing the costs associated with economic exchanges. The theory emphasizes both explicit costs such as fees and transportation and implicit costs, including time, effort, risk exposure, and information asymmetry. Williamson's contributions further delineated key dimensions influencing transaction costs, namely bounded rationality, opportunism, asset specificity, uncertainty, and transaction frequency (Williamson, 2007). In the context of this study, TCT is instrumental in

elucidating the role of Mobile Money Services (MMSs) in reducing transaction-related frictions within rural financial systems. The application of mobile money platforms such as M-Pesa, Tigo Pesa, and Airtel Money has significantly reduced the costs traditionally incurred in financial transactions, particularly for individuals residing in areas with limited access to formal banking services. These services minimize travel time, mitigate the risks associated with physical cash handling, and improve the overall efficiency of financial transactions (Yao *et al.*, 2022).

In alignment with this study TCT supports the proposition that lower transaction costs contribute to increased transaction frequency, broader transaction types, and enhanced accessibility. Empirical indicators such as transaction frequency patterns, types of transactions, travel time and cost, and account ownership serve as proxies for the efficiency and inclusiveness of MMSs in rural financial systems (Economides and Jeziorski, 2017; Isaac and Musiimenta, 2025). Additionally, this study is grounded in TCT because the decision to adopt MMSs is influenced by rational cost-benefit evaluations, wherein users consider the ease of use, usefulness, and accessibility of services. Trust in mobile money agents, digital literacy, and awareness of service availability play a pivotal role in reducing perceived risks and uncertainties thereby lowering implicit transaction costs and facilitating adoption (Abdinoor and Mbamba, 2017).

Randomized field experiment by Batista and Vicente (2025) in rural Mozambique demonstrated that mobile money access significantly increased remittance inflows and household welfare, particularly following shocks such as floods (IDEAS). However, these results pertain to Mozambique and may not fully apply to the Tanzanian rural context, especially regarding gender dynamics and localized barriers. According to Awel and Yitbarek (2022), using a dichotomous-choice willingness-to-pay (WTP) household survey experiment in Ethiopia with about 400 respondents, participants revealed a strong willingness to pay for mobile money-based utility bill payments, often exceeding current provider fees, with education and trust emerging as important predictors (UPSpace Repository; OUCI). Nevertheless, the study's urban focus limits its relevance to remote rural areas where access and awareness may differ.

According to evaluation by Heath and Riley (2024) involving approximately 750 female microfinance clients in Tanzania found that those who repaid loans via mobile money subsequently increased their use of the platform for a range of financial activities, including payments for goods and services, thereby enhancing financial agency and empowerment (Poverty Action). The context of microfinance clients may not represent broader rural populations, especially non-clients. According to Grzybowski *et al.* (2023), applying discrete-choice models to 1,200 Tanzanian survey respondents from 2017, the researchers found that distance to mobile money agents was a key determinant of user subscription preferences and adoption rates (De Gruyter Brill; PMC). However, because the data predate key market and policy shifts, current rural realities regarding agent access may not be fully captured.

Yawe *et al.* (2022) examine the critical role of mobile money and digital payments in fostering financial Transaction across Africa. They highlight that financial Transaction, as advocated in global frameworks like the Universal Financial Access 2020, serves as a vital tool for reducing socioeconomic disparities. This Transaction allows economically disadvantaged households to access education, healthcare, and essential services, thereby enhancing overall human capital development. During the COVID-19 pandemic, mobile money and digital payments proved indispensable, providing safe and contactless methods for transactions essential for food, electricity, and other necessities, thus ensuring continued financial connectivity during crises. Despite their benefits, the authors caution that financial Transaction alone cannot solve poverty; it must be complemented by efforts to improve financial literacy, problem-solving skills, emotional intelligence, and financial capability among vulnerable populations. They recommend that financial Transaction programs integrate strategies to enhance these intellectual competencies alongside access to financial services, thereby fostering sustainable socioeconomic development across the continent.

Ngaruiya *et al.* (2014) investigate the influence of mobile money transactions on SMEs' financial performance in Nakuru Central Business District (CBD). Employing a descriptive research design and sampling 120 out of 640 businesses using purposive sampling, the study focuses

on assessing the impact of mobile financial services on SMEs' sales revenue. It finds compelling evidence that mobile money transactions significantly enhance sales revenue for SMEs, demonstrating that businesses utilizing mobile financial services experience higher revenue compared to those reliant solely on traditional banking methods. The study underscores the cost efficiency of mobile money transactions, highlighting their role in reducing transaction costs and improving financial accessibility for SMEs operating in urban environments such as Nakuru CBD. This research contributes valuable insights into the direct benefits of mobile financial services, emphasizing their potential to bolster SME financial performance and operational efficiency in dynamic urban business districts.

Mrindoko (2022) examines the influence of mobile money microcredit on the profitability of small businesses in Iringa Municipality, Tanzania. Employing a cross-sectional design, the study collected quantitative data from 240 small business owners/managers through structured questionnaires, complemented by qualitative insights from interviews with mobile money service providers. The findings indicate that the accessibility, affordability, convenience, and flexibility of mobile money microcredit significantly enhance the financial performance of small businesses. These factors emerged as pivotal predictors of profitability, underscoring the positive impact of mobile financial services on business outcomes in the Tanzanian context. Methodologically, the study ensures reliability through a Cronbach's Alpha coefficient of 0.851, validating the data collection instrument's robustness. The research suggests practical implications for stakeholders, advocating for strategic frameworks to promote the adoption and effective utilization of mobile money microcredit services among small firms. This study fills a gap in prior research by providing comprehensive insights into how mobile money microcredit can contribute to enhanced productivity, efficiency, and profitability for small businesses in urban settings like Iringa Municipality.

Chale and Mbamba (2019) explore the impact of mobile money services on SME growth in Kinondoni District, Dar es Salaam Region, Tanzania. Utilizing self-administered questionnaires distributed to 100 respondents

with a high return rate of 90%, the study employs multiple regression analysis to assess various aspects of mobile money usage by SMEs. Findings reveal that mobile money services significantly enhance SMEs' operational efficiency and growth. Specifically, these services facilitate increased sales volume, efficiency in stock procurement, faster payment processing, and improved savings habits, all of which contribute to enhanced market share, revenue, and profitability. Aligning with technology adoption theories, the study underscores the pivotal role of mobile money in transforming business operations, reducing costs associated with travel and payment processing, and attracting more customers. The research recommends that SMEs continue to integrate mobile money into their business strategies to capitalize on these benefits, suggesting further exploration of additional uses beyond those tested. This strategic approach is essential for SMEs in Kinondoni District and similar regions in Tanzania to sustain growth, optimize efficiency, and remain competitive in evolving market dynamics.

Shirano *et al.* (2022) examines global trends and regulatory frameworks affecting the Transaction of mobile money in the calculation of broad money. It highlights that while many jurisdictions have integrated mobile money into banking systems, challenges arise in cases where mobile network operators (MNOs) operate as financial intermediaries outside traditional banking regulations. This situation may result in mobile money liabilities remaining outside both banking systems and monetary statistics unless specifically accounted for. The study emphasizes the necessity of direct data collection from MNOs to accurately capture mobile money liabilities and ensure comprehensive measurement within the IMF's Monetary and Financial Statistics (MFS) framework. This approach is crucial for understanding the true impact of mobile money on financial transaction, fintech development and economic growth, providing insights into policy implications and regulatory adjustments needed to effectively incorporate mobile money into broader monetary systems.

Research Methodology

The study was conducted in Ziba Ward, located in Igunga District within the Tabora Region of Tanzania. Igunga District is predominantly rural, with agriculture serving as the main economic activity (Baruti *et al.*, 2022). According to the National Bureau of Statistics (NBS, 2022), the district had an estimated population of approximately 200,000 people, many of whom lived in poverty and lacked access to basic services, including financial services. Ziba Ward was purposively selected because it exemplified the financial inclusion challenges commonly faced in rural Tanzanian communities. The Ward had limited access to conventional banking infrastructure, making it an appropriate setting for assessing the factors affecting the use of Mobile Money Services (MMSs) for financial transactions (Grzybowski *et al.*, 2023b). Characterized by scattered settlements and inadequate transportation networks, Ziba Ward represented a rural socio-economic environment where digital financial solutions could offer significant utility. Studying Ziba Ward offered valuable insights into how MMSs contributed to financial inclusion and supported rural economic development in underserved areas of Tanzania. A cross-sectional research design was used involving collecting data at a single point in time from a sample that represents the population of interest.

In this study, the sampling frame consists of all 3,533 household heads in Ziba Ward (URT-NBS, 2022). This population represents the target group from which data were collected to generalize findings about mobile money transactions. The sampling unit was an individual head of household in Ziba Ward who possessed an active mobile phone registered under any licensed mobile network operator. The inclusion of phone possession as a criterion ensured that all respondents had the potential to access and use Mobile Money Services. Household heads were selected because they are typically responsible for financial decisions within their families, making them appropriate respondents for assessing the adoption and use of mobile money transactions in the community. This study employed Yamane's (1967) formula which is a mathematical approach commonly used to determine sample size in

research studies, especially when the population size is known and a specific margin of error is desired. The formula and calculation are explained below:

$$n = \frac{N}{1+N(e)^2}$$

N = Total number of units in the population (3,533 household heads in Ziba Ward) (URT-NBS, 2022).

e = Desired level of precision (margin of error, set at 5% or 0.05)

$$n = \frac{3533}{1+3533(0.05)^2}$$

n = 360 respondents

Simple random sampling technique was employed to select household heads from Ziba Ward (URT-NBS, 2022). The method ensured that each household head had an equal chance of being included in the sample, thereby enhancing the representativeness of the data collected. In addition to simple random sampling, purposive sampling was utilized to select key informants and Mobile Money Agents (MMAs) within Ziba Ward. Key informants included were community leaders, local officials, and financial service experts who possess specialized knowledge relevant to mobile money services. Mobile Money Agents, operating service points within the ward, provided insights into operational challenges, customer interactions, and service accessibility.

Key Informant Interviews (KIIs) were conducted with individuals possessing in-depth knowledge of mobile money operations and community financial dynamics in Ziba Ward. These informants included Village Executive Officers (VEOs), Mobile Money Agents (MMAs), local government officials, and community development officers. The selection of key informants was purposive, based on their professional roles and relevance to the study objectives. Focus Group Discussions (FGDs) involved participants selected from community members, Mobile Money Agents (MMAs), and key informants. These structured conversations provided a platform for participants to discuss their perceptions, attitudes, and experiences regarding mobile money services in a group setting. The primary goal of FGDs is to facilitate interactive

exchanges that reveal diverse viewpoints on critical aspects such as service accessibility, trust, and challenges associated with mobile money services in Ziba Ward. By engaging in group discussions, participants can share collective insights, establish consensus, and explore divergent perspectives. Moderators were employed prepared discussion guides containing open-ended questions to guide the discussions effectively. Each FGD session were facilitated using audio recording and note-taking to ensure comprehensive documentation of discussions. These tools were supported subsequent analysis aimed at extracting valuable qualitative data that enriches the understanding of mobile money dynamics in the community. Documentary review supported the study by offering a theoretical foundation and contextual understanding of mobile money landscape. Digital databases, online repositories, and official publications were accessed to gather and synthesize relevant data. Data processing in this study involved organizing and preparing the collected data for analysis using IBM SPSS Statistics version 27. Data from surveys, interviews, and focus group discussions were compiled into a single dataset. Double-entry verification was used to minimize entry errors. The data were then cleaned to correct inconsistencies, handle missing values, and remove outliers. Editing ensured uniformity across variables, and the dataset was checked for completeness and representativeness before analysis. Descriptive statistical and thematic analysis were used.

Results and Discussion

Understanding socio-economic characteristics is essential in contextualizing the findings of the study, particularly how different demographic and socio-economic factors such as age, gender, education level, occupation, and income levels may influence the use, accessibility, and efficiency of mobile money services (MMSs). These variables help to establish the background and diversity of the study population, offering insight into their financial behaviours, capabilities, and needs. Furthermore, they form a basis for analysing variations in adoption and impact of MMSs across different groups within the rural community.

Table 1: Socio Economic Characteristics of Respondents (n=360)

Category	Response Option	Frequency	Percentage
Gender	Male	198	55.00
	Female	162	45.00
Age Group	18–25 years	70	19.44
	26–35 years	130	36.11
	36–45 years	95	26.39
	46–60 years	50	13.89
	61 years and above	15	4.17
Marital Status	Single	55	15.28
	Married	280	77.78
	Divorced	15	4.17
	Widowed	10	2.78
Education Level	No formal education	90	25.00
	Primary school	145	40.28
	Secondary school	80	22.22
	Diploma/Certificate	30	8.33
	Bachelor's degree or higher	15	4.17
Source of Income	Farming	181	50.28
	Business/Trading	70	19.44
	Employed (formal sector)	93	25.83
	Unemployed	16	4.37
Type of Phone	Basic phone	280	77.80
	Smartphone	80	22.20
Most Used MMS	M-Pesa	175	48.61
	Mix by Yas (Tigo Pesa)	70	19.44
	Airtel Money	70	19.44
	Halo-pesa	45	12.50
Access to Banking Services	Access	140	38.89
	No access	220	61.11

Sources: Fieldwork Survey (2025).

Sending and Receiving Money

Table 2 presents the types of financial transactions that rural residents in Ziba Ward conducted after adopting mobile money services. Among the listed categories, sending and receiving money stands out as the most common transaction. The results reveal that 347 respondents (96.4%) reported using mobile money for sending and receiving money. This is the highest proportion compared to bill payments (83.1%), depositing or withdrawing cash (76.7%), and purchasing goods and services (69.7%). This means that almost all households rely on mobile money mainly for transferring funds, which makes it the primary use of MMSs in the area. The widespread use of mobile money for remittances shows that it has become an essential tool for financial inclusion in rural Tanzania. Jack and Suri (2019) explain that money transfers are the backbone of mobile money adoption, especially in rural settings where physical banks are scarce. Grzybowski *et al.* (2023) further note that proximity to mobile money agents reduces risks and costs, making transfers more attractive to low-income households. Respondents also expressed this reliance in their own words. One male participant stated:

“.....I receive money from my children working in town through my phone, and it helps me buy food and pay school fees. In the past, they had to send the money through bus drivers or wait until they visited, which was often unreliable and delayed. Now the money comes instantly, and I can immediately use it to meet family needs without worrying about losses or delays. This has made it easier to provide for the household and ensure that my children’s education is not interrupted.....”

One Mobile money agent participant stated.....

“He highlighted that residents prefer mobile platforms because they are safe, fast, and traceable, thereby reducing the risks associated with cash handling. He further noted that mobile money has deepened economic connectivity between rural and urban households by facilitating continuous remittance flows”.....

These experiences illustrate how mobile money has become a lifeline for families. The findings imply that mobile money is not only a financial tool but also a social safety net for rural residents. For

women, who often manage household budgets and depend on remittances from relatives, mobile transfers enhance economic security and reduce the risks linked to carrying cash. Policymakers and service providers should therefore continue expanding agent networks and promote digital literacy among women to ensure equitable access and sustained use of money transfer services.

Bill Payments

Table 2 presents the types of transactions that rural residents in Ziba Ward conducted after adopting mobile money services. One of the key uses identified is bill payments, which show the extent to which digital platforms are applied to meet household and community service needs. The results reveal that 299 respondents (83.1%) reported using mobile money for paying bills. This makes it the second most common use of MMSs after sending and receiving money (96.4%). This means that more than four out of every five respondents have embraced mobile money as a convenient way to pay for services such as electricity, water supply, and school fees, reflecting its growing importance in rural financial practices.

The high adoption of bill payment services indicates that mobile money has simplified access to essential services. Finscope (2023) highlights that mobile money promotes efficiency in routine payments by reducing transaction costs and saving time. Similarly, Heath and Riley (2024) emphasize that digital financial systems enhance access to utilities and education services by removing the need for long-distance travel. Respondents also shared personal experiences that support these findings. One female respondent noted:

“.....Before mobile money, I would spend a whole day travelling to town just to pay the water bill. The journey was costly, time-consuming, and sometimes meant I had to leave other responsibilities unattended at home. Now I can do it here in the village within minutes, without having to spend on transport or waste valuable time. This has made life easier,

saved me money, and allowed me to focus more on my family and farming activities.....”

These accounts highlight both the efficiency and the security that mobile money brings to households in Ziba Ward. The findings suggest that mobile money is significantly contributing to financial inclusion by enabling rural residents to access and pay for basic services. For women, who are usually responsible for household expenditures and children’s education costs, this service reduces the burden of mobility and ensures timely payments. Policymakers should strengthen partnerships between mobile operators and service providers, ensuring that more institutions accept mobile payments. This would not only enhance service delivery but also empower women in their role as managers of household resources (Aron, 2018; Heath and Riley, 2024).

Table 2: Types of Transactions Engaged in After Using Mobile Money Services

Transaction Type	Responses	Percentage
Sending and receiving money	347	96.40
Bill payments	299	83.10
Purchasing goods and services	251	69.70
Depositing or withdrawing cash	276	76.70
None	22	6.10

Sources: Fieldwork Survey (2025).

Purchasing Goods and Services

Table 2 shows the types of transactions carried out by rural residents in Ziba Ward after adopting mobile money services. One of the reported uses is purchasing goods and services, which reflects how MMSs have been integrated into daily economic activities. The results reveal that 251 respondents (69.7%) used mobile money services for purchasing goods and services. This places it as the third most common type of transaction after sending/receiving money (96.4%)

and bill payments (83.1%). This means that more than two-thirds of households in Ziba Ward are now using mobile money to buy products such as food, farming inputs, clothing, and to pay for services like transport and healthcare. The use of mobile money for purchasing goods and services shows a shift from cash-based transactions to digital payments, reducing risks and improving efficiency. Economides and Jeziorski (2017) observed that mobile money in Tanzania has diversified financial activities, enabling households to make everyday payments conveniently. Likewise, Chale and Mbamba (2019) highlighted that mobile payments enhance business operations and promote trade, particularly among small-scale traders. Respondents in Ziba Ward also confirmed this benefit. One female trader shared how mobile money has transformed her business practices, noting:

“Now most of my customers pay me with mobile money, which helps me avoid losses from keeping too much cash at the stall. Before, I worried about theft and sometimes even had to close early if I didn’t feel safe carrying the money home. With mobile payments, I feel more secure, and I can also keep better records of my sales.”

Another male respondent explained the convenience in accessing agricultural inputs, stating:

“I can pay for farm inputs without carrying money to town, which saves me time and transport costs. In the past, I had to travel long distances with cash in hand, which was risky and tiring. Now I just send the payment through my phone, and the suppliers confirm instantly. This allows me to spend more time working on the farm instead of traveling back and forth.”

These voices illustrate how MMSs are strengthening local trade and household financial management. The findings imply that mobile money is increasingly supporting rural commerce by enabling safe, fast, and accessible payment channels. For women, who dominate petty trading and household purchasing, the adoption of mobile money reduces financial risks and supports their economic empowerment. Policymakers and service providers should expand merchant integration with MMS platforms in rural markets and

provide targeted training for women traders. This would ensure that they can fully benefit from digital payments and enhance their contribution to local economic development (Economides and Jeziorski, 2017; Chale and Mbamba, 2019).

Depositing or Withdrawing Cash

Table 2 presents the types of transactions carried out by rural residents in Ziba Ward through mobile money services. Among the listed activities, depositing and withdrawing cash is another key transaction type that reflects how households manage their money. The results reveal that 276 respondents (76.7%) reported using mobile money for depositing or withdrawing cash. This makes it the third most common transaction after sending/receiving money (96.4%) and bill payments (83.1%). This means that more than three-quarters of households in Ziba Ward use mobile agents to either store their income safely or to access cash when needed. The high use of mobile money for deposits and withdrawals shows that rural residents view MMSs as an alternative to formal banking services, which are often located far from villages. Mrindoko (2022) observed that access to deposit and a withdrawal service through mobile agents improves financial performance, especially for small businesses in Tanzania. Similarly, Furahisha and Gomera (2024) noted that mobile money reduces the cost and time associated with travelling to banks. Respondents confirmed this benefit in practice. One male farmer stated:

“.....I sell my maize in town and deposit the money into my mobile account so that I do not carry cash back to the village. This way I avoid the risks of theft on the road, and I can also manage my money better because it stays safe in the account until I need it.....”

Likewise, a female respondent explained the convenience of local access, saying:

“.....Whenever I need money for household use, I just withdraw from the agent nearby instead of travelling far to the bank. Before mobile money, I had to spend time and transport costs to reach town, but now I

can access cash quickly, which makes it easier to take care of family needs without delay.....”

These statements show that MMSs provide flexibility and security in money management. The findings imply that mobile money plays a vital role in promoting financial security among rural households. By offering reliable cash deposit and withdrawal services, it reduces vulnerability to theft and supports better management of savings. For women, who often handle daily household needs, mobile money provides a safe means of keeping and accessing money. Policymakers and service providers should ensure that mobile agents are well-distributed and have enough liquidity to serve both male and female clients, thereby strengthening financial inclusion and supporting household resilience (Mrindoko, 2022; Furahisha and Gomera, 2024).

In connection to the Table 2 and Table 3 together provide a broader understanding of how rural residents in Ziba Ward interact with mobile money services. Table 4 focused on the actual types of transactions conducted, showing that sending and receiving money (96.4%) and paying bills (83.1%) are the most common uses of MMSs, followed by depositing/withdrawing cash (76.7%) and purchasing goods and services (69.7%). This reflects the widespread reliance on MMSs for essential financial activities in daily life.

Table 3: Transaction Type that Became More Convenient After Using Mobile Money Services (n=360)

Transaction Type	Responses	Percentage
Sending and receiving money	210	58.3
Bill payments	130	36.1
Purchasing goods and services	98	27.2
Depositing or withdrawing cash	135	37.5

Sources: Fieldwork Survey (2025).

On the other hand, Table 3 examined which transactions became more convenient after adopting mobile money. The results reveal that

while sending and receiving money remains the most convenient (58.3%), bill payments (36.1%) and depositing/withdrawing cash (37.5%) were also viewed as significantly easier. Interestingly, purchasing goods and services, though used by 69.7% of respondents in Table 2, was considered convenient by only 27.2% in Table 3. This shows that even though many residents use MMSs for shopping and service payments, they may still face challenges such as limited merchant acceptance or transaction costs.

Taken together, the two tables demonstrate that high usage does not always translate into high perceived convenience. For example, bill payments are widely used (83.1%) but only 36.1% considered them more convenient after adopting MMSs. In contrast, money transfers show both the highest usage and highest convenience, underlining their central role in rural households. This combined evidence strengthens the study's objective of understanding how MMSs support different types of financial transactions in Ziba Ward (Jack and Suri, 2019; Bruhn *et al.*, 2023).

Focus Group Discussions (FGDs) insight 1:

..... “I receive money from my children working in town through my phone, and it helps me buy food and pay school fees. In the past, they sent money through bus drivers, which was unreliable. Now the money comes instantly, and I can meet family needs without delay,” shared one participant.

Conclusion

The study examined the types of financial transactions conducted through Mobile Money Services (MMSs) among rural residents. The findings revealed that mobile money has become an essential tool for facilitating everyday financial activities such as transferring funds, paying bills, purchasing goods or services, and managing deposits or withdrawals. It has provided a safe and convenient means of conducting transactions, reducing reliance on cash and bridging the gap left by limited access to formal banking institutions.

Recommendations

Based on study findings it is recommended on improving access and coverage of mobile money services. Mobile network operators such as Vodacom, Airtel, and Tigo, in collaboration with the Tanzania Communications Regulatory Authority (TCRA), should expand agent networks and strengthen network infrastructure in underserved villages. This will minimize travel time, ensure liquidity among agents, and enhance physical accessibility, thereby promoting more efficient rural financial transactions.

Conflict of interest

The authors declare that they have no conflict of interest.

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