

International Journal Research Publication Analysis

Page: 01-21

CONTRIBUTION OF MOBILE MONEY TRANSACTION SPEED ON PUBLIC FINANCIAL SERVICE DELIVERY IN IRINGA MUNICIPAL COUNCIL, TANZANIA

***Stella Fredy Kyando; Zebedayo S. Mvena; Sosthenes Ruheza**

Department of Community Development, University of Iringa.

Article Received: 07 September 2026

*Corresponding Author: Stella Fredy Kyando

Article Revised: 27 September 2026

Department of Community Development, University of Iringa.

Published on: 17 October 2026

DOI: <https://doi-doi.org/101555/ijrpa.8801>

ABSTRACT

The study assessed the contribution of mobile money transaction speed to public financial service delivery in Iringa Municipal Council, Tanzania. Specifically, the study examined Council workers assessment on how the speed of mobile money transactions contributes to public financial service delivery. A mixed-method research approach with a cross-sectional research design was employed. Primary data were collected using questionnaires and interview guides. Quantitative data were analysed using descriptive statistics with the Statistical Product for Social Solutions (SPSS) Version 26, while qualitative data were analysed using thematic analysis. The findings revealed that mobile money transaction speed contributed to public financial service delivery through instant payment processing, real-time transaction execution, automated payment confirmation and continuous availability of transaction services. These features facilitated timely processing of public payments and supported efficient delivery of financial services. The study concludes that mobile money transaction speed contributes positively to financial service delivery in Iringa Municipal Council by reducing delays in payment processing and improving the timeliness of financial transactions. The study recommends that the Council strengthen collaboration with mobile network operators to improve network reliability, transaction processing systems and automated confirmation mechanisms. Further studies should examine mobile money transaction speed in other local government authorities using larger samples and inferential statistical analysis to allow broader comparison and generalisation of findings.

KEYWORDS: Mobile money; transaction speed; financial service delivery; digital payments; Iringa Municipal Council.

INTRODUCTION

1.1 Background of the Study

Financial service delivery is important for effective local government operations because it enables customers to make payments for services such as business licenses, permits and municipal charges. Efficient financial transactions can reduce delays, improve accountability and support timely access to public services (World Bank, 2025; OECD, 2024). The introduction of mobile money has provided an alternative means of making public payments and has the potential to improve the speed of financial transactions. Mobile money transaction speed is particularly important because delayed payment processing or confirmation can affect the timely completion of public financial services.

Digital payment systems have increasingly been integrated into public financial services to reduce transaction time and improve the efficiency of government payments. Mobile and electronic payment platforms enable users to make payments remotely and receive transaction confirmations without relying entirely on physical payment points (OECD, 2021; International Monetary Fund (IMF), 2024). However, the effectiveness of these systems depends on the ability to process transactions and provide confirmation promptly. Delays caused by system interruptions, network problems or processing limitations can reduce the expected benefits of digital payments. Therefore, transaction speed remains an important aspect of assessing how mobile money contributes to public financial service delivery.

Mobile money is increasingly used for government revenue collection and payment of municipal services, including licenses, permits and service charges. The Government of Tanzania has strengthened electronic payments through the Electronic Transactions (Mandatory Electronic Payments for Specified Transactions) Order, 2026, which requires specified transactions to use approved electronic payment channels. In Iringa Municipal Council, mobile money provides customers with an alternative mechanism for making public payments, but delays in payment confirmation and network-related problems may affect the timely delivery of financial services (Iringa Municipal Council Report, 2024). Therefore, this study examines the experiences of Iringa Municipal Council employees on the contribution of mobile money transaction speed to public financial service delivery in Iringa Municipal Council, focusing specifically on the extent to which faster transaction processing and payment confirmation support timely and efficient public financial services.

LITERATURE REVIEW

2.1 Theoretical Literature Review

The Technology Acceptance Model (TAM) developed by Davis (1989) explains how perceived usefulness and perceived ease of use influence users' acceptance and use of technology. The model is relevant to this study because mobile money transaction speed can influence users' perception of the usefulness and efficiency of digital payment services. Faster transaction processing and prompt payment confirmation can reduce waiting time and support timely completion of public financial transactions, thereby improving experience of public financial service delivery. TAM therefore provides an appropriate basis for examining how mobile money transaction speed contributes to improved public financial service delivery in Iringa Municipal Council.

2. 2 Empirical Literature Review

2.2.1 Contribution of mobile money transaction speed on public financial service delivery

Mobile money transaction speed is regarded as an important factor in improving public financial service delivery because it enables timely payment processing, reduces delays and supports efficient access to government services.

2.2.1 Contribution of mobile money transaction speed on public financial service delivery

Mobile money transaction speed referred to the time required to initiate, process and confirm mobile money payments during access to public financial services. Faster processing supported timely completion of payments, reduced delays and improved the movement of customers through service points. Recent studies showed that digital payment systems improved the speed and convenience of financial transactions, although network reliability and system interruptions continued to affect transaction completion (Coulibaly, 2021; Kanobe, 2021). The present study examined this contribution through instant payment processing, real-time transaction execution, automated confirmation systems and continuous system availability.

2.2.1.1 Contribution of mobile money instant payment processing on waiting time

Instant payment processing contributed to shorter waiting time by allowing customers to complete payments without prolonged manual procedures. Koomson et al. (2021) found that mobile money improved access to financial transactions by allowing users to send and receive funds through digital channels, reducing some barriers associated with conventional financial services. Similarly, Tembo and Okoro (2021) found that mobile money supported

faster financial transactions and improved the movement of funds across users in Sub-Saharan Africa. These findings indicated that faster payment processing reduced the time required to complete financial transactions. In public financial service delivery, instant processing was relevant because shorter payment time enabled customers to proceed more quickly to subsequent service procedures.

2.2.1.2 Contribution of mobile money transaction speed on real-time transaction execution

Real-time transaction execution enabled payments to move immediately between the customer and the service provider after a transaction was initiated. Mswahili (2022) found that mobile money interoperability supported successful financial transactions across different mobile money and banking platforms in Tanzania, with system functionality influencing effective use. In another study, Grzybowski et al. (2023) found that developments in mobile money interoperability in Tanzania expanded users' ability to access mobile money services through different networks and agents. These findings indicated that improved connectivity between payment platforms supported faster movement of financial transactions. For public financial service delivery, real-time execution enabled council staff to proceed with payment-related procedures without relying on lengthy manual transfer processes.

2.2.1.3 Contribution of mobile money transaction speed on automated confirmation systems

Automated confirmation systems provided customers and service providers with evidence that a payment had been completed. Adewusi et al. (2026) found that mobile money systems used electronic messages to confirm transactions, although delays in receiving confirmation messages sometimes affected transaction verification. Similarly, Kanobe (2021) reported that operational difficulties within mobile money systems affected the smooth completion of transactions and highlighted the importance of reducing system-related interruptions. These findings showed that automated confirmation improved transaction processing when confirmation was received accurately and promptly. In public financial service delivery, automated confirmation supported faster verification of payments and allowed customers to proceed to the next stage of service provision.

2.2.1.4 Contribution of mobile money transaction speed on continuous system availability

Continuous system availability ensured that customers could initiate and complete mobile money transactions when public financial services were being accessed. Furahisha and Gomera (2024) found that mobile money systems improved the speed and convenience of

digital transactions among informal traders in Dar es Salaam, although effective use depended on the functioning of the supporting payment environment. In addition, Grzybowski et al. (2023) found that access to mobile money services in Tanzania was influenced by the availability and proximity of supporting mobile money networks and agents. These findings indicated that transaction speed depended not only on the payment platform but also on the availability of the supporting network and service infrastructure. In public financial service delivery, continuous system availability reduced interruptions and supported uninterrupted payment and service processing.

3. METHODOLOGY

3.1 Research Design

This study employed a mixed research approach, combining quantitative and qualitative methods. The approach enabled the researcher to collect numerical data on the contribution of mobile money transaction speed to public financial service delivery and obtain detailed views and experiences from key informants. A cross-sectional research design was used, whereby quantitative and qualitative data were collected during the same period. Creswell and Plano Clark (2018) explain that mixed methods research enables researchers to integrate quantitative and qualitative evidence to obtain a more comprehensive understanding of a research problem. The design was appropriate because it enabled the study to examine how transaction speed contributes to timely and efficient public financial service delivery in Iringa Municipal Council.

3.2 Area of the Study

This study was conducted in Iringa Municipal Council, located in Iringa Region, Tanzania. According to the 2022 National Population and Housing Census, the municipality had a population of approximately 151,345 people (URT, 2022). The area was selected because the Council provides public financial services that involve regular payments such as business licenses, permits, service fees and other municipal charges. Iringa Municipal Council has adopted electronic payment channels, including mobile money, for revenue collection and payment of municipal charges (Iringa Municipal Council Report, 2024). The Municipal Council employees therefore provided a suitable setting for examining the contribution of mobile money transaction speed to the delivery of financial services based on their experiences.

3.3 Population and Sampling

3.3.1 Population

A population refers to the entire group of people or units possessing characteristics relevant to a particular study. Kothari (2004) explains that the study population comprises the units from which relevant information is obtained. The population for this study consisted of 75 Iringa Municipal Council staff members directly involved in the use, management and supervision of mobile money-supported public financial services. The population included 70 employees from the Revenue Collection Unit, Finance and Accounts Department and Customer Service/Service Desk Unit, together with five key informants with specific responsibilities related to mobile money operations. These participants were included because they had direct knowledge and experience of mobile money transactions and public financial service delivery.

3.3.2 Sampling

This study used a census approach for the quantitative component, whereby all 70 employees involved in relevant municipal financial services were included because the population was small and accessible. Five key informants were selected purposively based on their positions, responsibilities and experience in mobile money operations. Purposive sampling was appropriate because it enabled the researcher to obtain detailed information from individuals with specific knowledge of transaction processing and public financial service delivery. The study therefore involved 70 respondents and five key informants.

3.4 Data Collection Instruments

A structured questionnaire was used to collect quantitative information from the 70 selected municipal employees. The questionnaire focused specifically on mobile money transaction speed and its contribution to public financial service delivery, including the speed of payment processing, transaction execution and payment confirmation. Semi-structured interviews were also conducted with five key informants to obtain detailed information about their experiences with mobile money transaction processes and their contribution to timely public financial service delivery. Creswell and Plano Clark (2018) note that combining structured quantitative instruments with qualitative interviews can provide both measurable evidence and detailed explanations of a research problem.

3.5 Data Analysis

Quantitative data were coded, entered and analysed using the Statistical Product for Social Solutions (SPSS) Version 26. Descriptive statistics, including frequencies and percentages, were used to summarise respondents' views regarding the contribution of mobile money

transaction speed to public financial service delivery. Qualitative data collected through semi-structured interviews were analysed using thematic analysis. Braun and Clarke (2006) explain that thematic analysis involves identifying, analysing and reporting patterns or themes within qualitative data. Interview responses were therefore reviewed, coded and organised into themes related to transaction processing speed, payment execution, payment confirmation and timely public financial service delivery. The qualitative findings were then used to support and explain the quantitative findings.

4. DATA PRESENTATIONS AND DISCUSSIONS

This section presents the findings of the study on mobile money transaction speed and public financial service delivery. The findings are presented and discussed based on the study objective, focusing on how the speed of mobile money transactions contributes to the delivery of public financial services.

4.1 Contribution of Mobile Money Transaction Speed on Public Financial Service Delivery

This section presents and discusses the findings on the contribution of mobile money transaction speed to public financial service delivery in Iringa Municipal Council as assessed by the Council employees. The findings are based on four indicators of mobile money transaction speed, namely instant payment processing, real-time transaction execution, automated confirmation systems and continuous system availability.

4.1.1 Contribution of mobile money transaction speed on instant payment processing and public financial service delivery

This subsection presents and discusses the findings on the contribution of mobile money transaction speed through instant payment processing to public financial service delivery in Iringa Municipal Council. Instant payment processing is assessed in relation to waiting time, fewer bottlenecks and better flow of public financial services. The findings are presented using frequencies and percentages and are supported by evidence from key informant interviews and reviewed empirical studies

4.1.1.1 Contribution of mobile money transaction speed through instant payment processing to waiting time

Instant payment processing showed a limited contribution to reducing the total waiting time for public financial services in Iringa Municipal Council. As presented in Table 4.1, 77.1% of respondents reported that service users waited for more than five minutes after making instant payments. This indicated that payment confirmation was not the main source of delay, since

most service users continued waiting after the payment had already been processed. In contrast, 15.7% reported waiting for less than one minute, indicating that instant payment processing supported very quick service completion for a smaller group of users. A further 4.3% reported waiting for 4–5 minutes, while 2.9% reported 1–3 minutes, showing that only a small proportion experienced moderate waiting periods. The high proportion of respondents reporting more than five minutes suggests that delays occurred mainly after payment confirmation, particularly during document verification, approval and updating of council records. During the interview, the Head of Revenue Collection Unit explained:

Transaction confirmations are received immediately after customer's complete payments, but document verification and approval can still delay service provision. In some cases, staff also need to update council records before the requested service is completed for the customer. This means that fast payment confirmation does not always result in immediate completion of the service.” (Key Informant 01, Head of Revenue Collection Unit, 18 July 2026).

Instant payment processing reduced delays in payment verification, but later administrative procedures continued to affect service completion. This means that faster payment confirmation alone did not guarantee immediate service delivery. The finding agrees with Furahisha and Gomera (2024), who found that mobile money improved transaction speed and operational efficiency, although system-related factors affected its effective use. The present study adds that the contribution of instant payment processing to shorter waiting time depended on the efficiency of procedures followed after payment confirmation.

4.1.1.2 Contribution of mobile money transaction speed through instant payment processing to fewer bottlenecks

Instant payment processing made a limited contribution to reducing bottlenecks in public financial service delivery. Table 4.1 shows that 65.7% of respondents reported a reduction of less than 25% of the respondents who indicating that most respondents experienced only a small improvement in the removal of transaction-related interruptions. In contrast, 22.9% reported an improvement of more than 75%, showing that instant processing provided substantial relief in some service situations. A smaller proportion reported improvements of 25–50% and 51–75%, at 5.7% each, indicating that moderate reductions in bottlenecks were less common. The results suggest that instant payment processing addressed some payment verification interruptions, while other service procedures continued to create bottlenecks. This finding was consistent with Njoroge (2022), who found that faster mobile money transactions reduced congestion at service points and improved the flow of financial services.

Table 4.1: Contribution of Mobile Money Transaction Speed on Instant Payment Processing and Public Financial Service Delivery. (n=70)

Response category	Frequency	Percent (%)
Instant payment processing and waiting time		
Less than 1 minute	11	15.7
1–3 minutes	2	2.9
4–5 minutes	3	4.3
More than 5 minutes	54	77.1
Total	70	100.0
Instant payment processing and fewer bottlenecks		
Less than 25%	46	65.7
25–50%	4	5.7
51–75%	4	5.7
More than 75%	16	22.9
Total	70	100.0
Instant payment processing and better flow		
Less than 10 services	6	8.6
10–20 services	45	64.3
21–30 services	13	18.6
More than 30 services	6	8.6
Total	70	100.0

Source: Field Data (2026)

4.1.1.3 Contribution of mobile money transaction speed through instant payment processing to better flow

Instant payment processing contributed to the flow of public financial services by reducing interruptions related to payment verification. Table 4.1 shows that 64.3% of respondents reported completion of 10–20 service activities, indicating that instant confirmation supported a steady movement of service activities. Another 18.6% reported 21–30 completed services, showing stronger service flow in some cases. Meanwhile, 8.6% reported fewer than 10 services and another 8.6% reported more than 30 services, indicating differences in service output across situations. The results suggest that faster payment confirmation supported service continuity, although the level of service flow was also influenced by activities beyond payment processing. During the interview, the Customer Service Supervisor said:

Immediate payment confirmation has reduced complaints related to delayed payment verification. It has enabled customer service staff to assist clients more efficiently and reduced unnecessary movement between service offices. Delays still occur when supporting documents are incomplete or when approval from another department is required before a service can be provided.” (Key Informant 04, Customer Service Supervisor, 11 July 2026).

Faster confirmation enabled staff to proceed with customer assistance without waiting for manual payment verification. However, incomplete documentation and interdepartmental approval continued to interrupt the movement of service activities. The finding indicates that instant payment processing supported better flow mainly by removing payment-related interruptions, while administrative coordination remained important for maintaining continuous service delivery. This finding was consistent with Dhingra (2021), who found that faster digital payment processing improved transaction efficiency and supported smoother delivery of digital financial services.

4.2.2 Contribution of mobile money transaction speed on Real-time transaction execution and public financial service delivery

This subsection presents and discusses the findings on the contribution of real-time transaction execution to public financial service delivery in Iringa Municipal Council. Real-time transaction execution is assessed in relation to waiting time, fewer bottlenecks, user trust, better flow and service confidence.

4.2 .2.1 Contribution of mobile money real-time transaction execution and waiting time

Real-time transaction execution reduced delays associated with payment processing, but it had a limited effect on the total waiting time for public financial services. Table 4.2 shows that 64.3% of respondents reported customers waiting for more than five minutes, indicating that service users continued to experience delays after payments had been executed. In contrast, 28.6% reported customers waiting for less than one minute, showing that real-time execution enabled quick service completion in some cases. A further 5.7% reported waiting for 1–2 minutes and 1.4% reported 3–5 minutes, indicating that shorter waiting periods were less common. The results suggest that real-time execution improved the payment stage, while validation, document review and approval continued to influence the time required to complete public financial services. During the interview, the Head of Revenue Collection Unit said:

Real-time transaction execution allows payments to appear in the council system immediately. Staff can continue processing applications without waiting for manual payment verification. However, service completion still depends on validation and approval procedures, particularly when many requests are received at the same time (Key Informant 01, Head of Revenue Collection Unit, 24 July 2026).

Real-time execution allowed payment information to move directly into the Council system and reduced dependence on manual confirmation. However, the continuation of validation and approval activities meant that payment completion and service completion did not occur

at the same point. This indicates that faster transaction execution improved one part of the service process, while administrative coordination remained necessary for reducing total waiting time. Simione and Muehlschlegel (2023) found that digital financial transactions improved access to financial services by reducing dependence on conventional transaction processes. The present study extends this evidence by showing that real-time execution within public financial services required supporting administrative processes to achieve shorter waiting periods.

Table 4.2: Real-Time Transaction Execution and Public Financial Service Delivery.
(n=70)

Response category	Frequency	Percent (%)
Real-time transaction execution and waiting time		
Less than 1 minute	20	28.6
1–2 minutes	4	5.7
3–5 minutes	1	1.4
More than 5 minutes	45	64.3
Total	70	100.0
Real-time transaction execution and fewer bottlenecks		
Less than 5 cases/day	24	34.3
5–10 cases/day	40	57.1
11–15 cases/day	3	4.3
More than 15 cases/day	3	4.3
Total	70	100.0
Real-time transaction execution and better flow		
Less than 10 services/day	57	81.4
10–20 services/day	10	14.3
21–30 services/day	3	4.3
More than 30 services/day	0	0.0
Total	70	100.0

Source: Field Data (2026)

4.2.2.2 Contribution of mobile money real-time transaction execution and fewer bottlenecks

Real-time transaction execution contributed to reducing some payment-related bottlenecks, although interruptions remained in the wider service process. Table 4.2 shows that 57.1% of respondents reported 5–10 bottlenecks per day, indicating that moderate interruptions remained common during service delivery. In contrast, 34.3% reported fewer than five bottlenecks, showing that real-time execution reduced interruptions more effectively in some service situations. Only 4.3% reported 11–15 bottlenecks and another 4.3% reported more than 15 bottlenecks per day, indicating that severe interruptions were less common. The

results suggest that immediate transaction execution reduced delays associated with manual payment verification, while system coordination and other service procedures continued to generate bottlenecks. In explaining this finding an accountant responsible for digital payments stated that:

Real-time transaction execution has reduced dependence on manual payment verification because transaction details become available immediately. However, continuous monitoring is still needed to ensure proper synchronization between the payment platform and the Council's financial system (Key Informant 03, Accountant Responsible for Digital Payments, 30 July 2026).

Immediate access to transaction details reduced the need for manual checking and removed some payment-related interruptions. However, the need for continuous system monitoring indicates that effective transaction execution also depended on proper coordination between the payment platform and the council's financial system. This finding was consistent with Adewusi et al. (2026), who found that mobile money systems supported faster transaction processing through improved digital payment operations. The present study showed that real-time execution supported fewer bottlenecks, but its contribution was affected by the reliability of system integration and related operational processes.

4.2 .2.3 Contribution of mobile money real-time transaction execution and better flow of public financial service transactions

Real-time transaction execution supported the flow of municipal financial services, although the effect was limited by other service procedures. The findings in Table 4.2 show that 81.4% of respondents reported completion of fewer than 10 service activities per day, while 14.3% reported 10–20 and 4.3% reported 21–30 services. No respondent reported more than 30 services. This indicates that real-time execution improved the movement of payment information, but the number of completed services remained influenced by activities beyond payment processing. During the interview, the Customer Service Supervisor said:

Real-time payment confirmation helps customers proceed to the next service point faster. However, incomplete supporting documents and approvals from other offices still delay service completion (Key Informant 04, Customer Service Supervisor, 15 July 2026).

Real-time transaction execution improved payment processing, but its contribution to the wider service flow remained limited by activities performed after payment. Document verification and approval procedures continued to affect the completion of services. Nose (2023) found that digital payment systems improved efficiency, but the gains depended on

organisational coordination and system integration. The present finding supports this position by showing that faster transaction execution contributed to better service flow, while subsequent administrative procedures continued to affect service completion.

4.1.3 Automated confirmation systems and public financial service delivery

This section presents and discusses findings on the contribution of automated confirmation systems to public financial service delivery in Iringa Municipal Council. The discussion focuses on waiting time, fewer bottlenecks and better service flow.

4.1.3.1 Contribution of mobile money transaction speed through automated confirmation systems to waiting time

The findings in Table 4.3 indicate that 74.3% of respondents reported waiting for more than two minutes after automated payment confirmation, while 15.7% reported less than 30 seconds, 7.1% reported 30 seconds to one minute and 2.9% reported one to two minutes. The results indicate that automated confirmation reduced payment verification time, but longer waiting remained at the service completion stage. This suggests that payment confirmation was only one part of the service process, with document checking and approval continuing to influence the time taken to provide municipal services. To provide further explanation of the findings, the Head of Revenue Collection Unit explained:

Payment confirmations are generated immediately, reducing the time employees spend checking whether payments have been received. However, document verification and approval are still required before services can be completed (Key Informant 01, Head of Revenue Collection Unit, 20 July 2026).

The researcher noted that immediate confirmation removed part of the delay associated with manual payment checking. The continued waiting after confirmation showed that faster payment verification did not automatically produce faster completion of the whole service. The result points to the need for coordination between payment confirmation and subsequent administrative procedures.

This indicates that the contribution of automated confirmation depended on both system reliability and the speed of activities following payment. The finding was consistent with Adewusi et al. (2026), who reported that automated mobile money confirmations supported faster transaction verification but that delayed messages could affect payment processing. The present study adds that even where confirmation was immediate, administrative procedures remained relevant to the total waiting time.

Table 4.3: Automated Confirmation Systems and Public Financial Service Delivery.
(n=70)

Response category	Frequency	Percent (%)
Automated confirmation systems and Waiting time		
Less than 30 seconds	11	15.7
30 seconds–1 minute	5	7.1
1–2 minutes	2	2.9
More than 2 minutes	52	74.3
Total	70	100.0
Automated confirmation systems and Fewer bottlenecks		
Less than 5 bottlenecks/month	16	22.9
5–10 bottlenecks/month	2	2.9
11–15 bottlenecks/month	1	1.4
More than 15 bottlenecks/month	51	72.9
Total	70	100.0
Automated confirmation systems and Better flow		
Less than 10 transactions/hour	33	47.1
10–20 transactions/hour	28	40.0
21–30 transactions/hour	4	5.7
More than 30 transactions/hour	5	7.1
Total	70	100.0

Source: Field Data (2026)

4.1.3.2 Contribution of mobile money transaction speed through automated confirmation systems to fewer bottlenecks

The findings in Table 4.3 indicate that 72.9% of respondents reported more than 15 bottlenecks per month, while 22.9% reported fewer than five, 2.9% reported 5–10 and 1.4% reported 11–15 bottlenecks. The results indicate that automated confirmation did not remove bottlenecks from the wider service process. Immediate recording and confirmation reduced interruptions related to payment verification, while document processing, approvals and inter-departmental coordination continued to affect service completion.

The researcher observed that automated recording addressed errors and delays linked to manual confirmation, improving the financial processing stage. However, bottlenecks arising from other administrative activities remained. This indicates that the contribution of automated confirmation was concentrated on payment-related procedures rather than the entire service delivery process.

Adding to this view, the Head of Revenue Collection Unit stated that employees no longer spent much time confirming received payments before providing services, allowing officers to attend to other customers more efficiently. The finding indicates that automated confirmation reduced a specific source of interruption, while document verification and

approval continued to influence service processing. This finding was consistent with Mishra et al. (2021), who reported that digital payment systems reduced manual processing and improved the efficiency of financial transactions. The present study further showed that the reduction of payment-related bottlenecks did not necessarily remove bottlenecks arising from subsequent administrative procedures.

4.1.3.3 Contribution of mobile money transaction speed through automated confirmation systems to better flow

The findings in Table 4.3 reveal that 47.1% of respondents reported processing fewer than 10 transactions per hour, while 40.0% reported 10–20 transactions, 5.7% reported 21–30 transactions and 7.1% reported more than 30 transactions. The results indicate that automated confirmation supported continuity in payment processing, but the number of transactions completed remained influenced by activities beyond payment confirmation. Document verification, approval procedures, staffing and the nature of customer requests continued to affect service flow. The researcher noted that immediate confirmation reduced interruptions caused by manual payment verification and allowed employees to proceed with other service activities. Network interruptions, however, continued to affect the flow of payment information. This indicates that the contribution of automated confirmation depended on the reliability of the supporting communication system.

Further clarification was provided by the ICT Officer, who stated that regular monitoring and maintenance of the automated confirmation system improved the reliability of payment notifications and reduced disruptions during financial transactions. The finding indicates that reliable automated confirmation supported smoother movement of payment-related activities, while other administrative procedures continued to influence the number of transactions completed. The finding was consistent with Kou et al. (2022), who found that digital payment systems improved transaction efficiency by reducing manual processing and facilitating faster financial operations. The present study further showed that automated confirmation supported better service flow when reliable connectivity and efficient administrative procedures were in place.

4.1.4 Contribution of mobile money transaction speed through continuous system availability to public financial service delivery

This subsection presents and discusses the findings on the contribution of continuous system availability to public financial service delivery in Iringa Municipal Council. Continuous system availability is examined in relation to waiting time, fewer bottlenecks and better flow

4.1.4.1 Contribution of mobile money transaction speed through continuous system availability to waiting time

The findings in Table 4.4 indicate that 52.9% of respondents reported system availability for 6–8 hours per day, while 21.4% reported less than 6 hours, 20.0% reported 9–11 hours and 5.7% reported more than 11 hours. The results indicate that the payment system was available for most official working hours for many respondents, supporting continuous processing of mobile money payments. However, the 21.4% reporting less than six hours indicates that interruptions remained relevant to service access and could extend waiting time.

The system availability supported uninterrupted payment verification and reduced delays linked to system downtime. However, limited availability for some periods showed that network connectivity and maintenance remained operational factors affecting waiting time. This means that maintaining system availability throughout service hours is important for reducing payment-related delays. The finding was consistent with Wambua (2023), who reported that reliable digital payment platforms improved access to public services by reducing transaction interruptions. The present study further showed that the contribution of continuous system availability to shorter waiting time depended on stable connectivity and uninterrupted operation during municipal service hours.

Table 4.4: Contribution of Mobile Money Transaction Speed through Continuous System Availability to Public Financial Service Delivery. (n=70)

Response category	Frequency	Percent (%)
Continuous system availability and Waiting time		
Less than 6 hours/day	15	21.4
6–8 hours/day	37	52.9
9–11 hours/day	14	20.0
More than 11 hours/day	4	5.7
Total	70	100.0
Continuous system availability and Fewer bottlenecks		
Less than 2 interruptions/week	5	7.1
2–4 interruptions/week	15	21.4
5–6 interruptions/week	28	40.0
More than 6 interruptions/week	22	31.4
Total	70	100.0
Continuous system availability and Better flow		
Less than 10 completed services/day	46	65.7
10–20 completed services/day	4	5.7
21–30 completed services/day	4	5.7
More than 30 completed services/day	16	22.9
Total	70	100.0

Source: Field Data (2026)

4.1.4.1 Contribution of mobile money transaction speed through continuous system availability to fewer bottlenecks

As presented in Table 4.4 results show that 40.0% of the respondents reported 5–6 system interruptions per week, while 31.4% reported more than 6 interruptions. This means that 71.4% experienced at least five interruptions per week, indicating that system downtime remained a frequent source of bottlenecks in public financial service delivery. In contrast, 21.4% reported 2–4 interruptions and only 7.1% reported fewer than 2 interruptions, showing that relatively few respondents experienced highly stable system operation. Frequent interruptions could suspend payment processing, increase queues and delay completion of financial services.

The Senior Finance Officer reported that continuous system availability had improved preparation of financial reports because payment information was received throughout the working day. However, system downtime made financial reconciliation more difficult and slowed service delivery. The researcher noted that interruptions affected both payment processing and subsequent financial activities. This indicates that system availability contributed to reducing bottlenecks when the platform remained operational, while repeated downtime created interruptions across different stages of financial service delivery. The finding was consistent with Onyango (2022), who found that reliable mobile money platforms improved the efficiency of public revenue collection through continuous system accessibility.

4.1.4.3 Contribution of mobile money transaction speed through continuous system availability to better flow

Continuous system availability contributed to the flow of public financial services by allowing payment transactions to continue with fewer interruptions. Table 4.4 shows that most respondents (65.7%) reported completion of less than 10 services per day, indicating that system availability supported continued payment processing but did not result in high service output in most cases. Another 22.9% reported more than 30 completed services, showing that higher service flow was achieved in some situations. Meanwhile, 5.7% reported 10–20 services and another 5.7% reported 21–30 services per day, indicating that moderate service volumes were less common. The results suggest that continuous system availability supported uninterrupted payment processing, while document processing, approvals, staffing and the nature of service requests also influenced service flow. The Accountant Responsible for Digital Payments explained:

Uninterrupted access to the payment platform has improved coordination between the mobile money system and the council's financial management system. Employees can process customer requests continuously because transaction records become available immediately after payment completion. Regular technical monitoring has also helped to reduce interruptions during service processing (Key Informant 03, Accountant Responsible for Digital Payments, 27 July 2026).

The continuous system availability kept payment information moving between the mobile money platform and the council's financial system. The low service volumes reported by most respondents showed that payment continuity did not remove delays arising from activities after payment. This finding also reflected the wider Tanzanian payment environment, where the Bank of Tanzania reported that payment systems were being developed to support continuous transaction processing and improve efficiency in digital payments. The finding was consistent with Mishra et al. (2021), who reported that digital payment systems improved financial transaction efficiency by reducing manual procedures. The present study added that system availability supported continuity of payment processing, while the final level of service flow remained influenced by administrative activities beyond the payment system.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that mobile money transaction speed contributes to public financial service delivery in Iringa Municipal Council, particularly through instant payment processing, real-time transaction execution, automated confirmation systems and continuous system availability. Faster processing reduced delays associated with manual payment verification and enabled payment information to reach the Council's financial systems more quickly. However, the findings also show that transaction speed alone does not guarantee immediate completion of public financial services because document verification, approvals, system coordination and network interruptions can continue to delay service completion. Therefore, the contribution of transaction speed is strongest when faster payment processing is supported by efficient administrative procedures and reliable digital infrastructure. Pasted markdown.

Recommendations

This study focused more on the Iringa Municipal Council self-assessment through staff interviews on how they assess the performance of the Mobile Money Transaction. It is recommended that the Council should strengthen the integration of mobile money payment systems with internal financial and service-processing procedures so that faster payment confirmation is followed by equally efficient verification, approval and service completion. The Council should also work closely with mobile network operators to maintain reliable connectivity, conduct regular monitoring and maintenance of payment systems and strengthen automated confirmation mechanisms. These measures would reduce interruptions and ensure that the benefits of faster mobile money transactions extend beyond payment processing to the timely completion of public financial services. Pasted markdown.

REFERENCES

1. Adewusi, A., Okafor, C., & Mensah, P. (2026). Mobile money systems and digital payment confirmation in developing economies. *International Journal of Digital Finance*, 8(1), 45–59.
2. Bank of Tanzania. (2024). *Annual financial sector development report 2024*. Bank of Tanzania.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
4. Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
5. Coulibaly, B. (2021). Mobile money and digital financial transaction efficiency in developing countries. *Journal of African Financial Studies*, 9(2), 112–126.
6. Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). SAGE Publications.
7. Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
8. Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
9. Dhingra, R. (2021). Digital payment processing and transaction efficiency in financial services. *International Journal of Digital Banking*, 6(2), 88–103.
10. Furahisha, J., & Gomera, A. (2024). Mobile money services and transaction efficiency among informal traders in Dar es Salaam, Tanzania. *Tanzania Journal of Business and Economic Studies*, 12(1), 55–70.

11. Grzybowski, L., Lindlahr, M., & Moth, R. (2023). Mobile money interoperability and financial inclusion in Tanzania. *Information Economics and Policy*, 62, 100994.
12. International Monetary Fund. (2024). *Digital payments and financial inclusion: Recent developments and policy considerations*. International Monetary Fund.
13. Iringa Municipal Council. (2024). *Iringa Municipal Council report on electronic revenue collection and payment systems*. Iringa Municipal Council.
14. Kanobe, F. (2021). Operational challenges and efficiency of mobile money services in developing economies. *Electronic Journal of Information Systems in Developing Countries*, 87(4), e12176.
15. Koomson, I., Villano, R. A., & Hadley, D. (2021). Effect of mobile money on financial inclusion in Ghana. *Journal of African Economies*, 30(4), 353–374.
16. Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
17. Kou, G., Olgu Akdeniz, Ö., Dinçer, H., & Yüksel, S. (2022). Digital payment systems, financial technology and transaction efficiency. *Technological Forecasting and Social Change*, 178, 121557.
18. Mishra, V., Walsh, I., & Srivastava, A. (2021). Merchants' adoption of mobile payment in emerging economies: The role of perceived value and trust. *Information Systems Frontiers*, 23, 1205–1221.
19. Mswahili, M. (2022). Mobile money interoperability and financial transaction efficiency in Tanzania. *Journal of African Business and Digital Finance*, 7(2), 91–107.
20. Njoroge, P. (2022). Mobile money transaction speed and efficiency of financial service delivery. *African Journal of Digital Finance*, 5(1), 44–58.
21. Nose, M. (2023). Digital payments and public service efficiency: The role of organisational coordination and system integration. *Journal of Digital Economy and Public Administration*, 5(2), 73–88.
22. Onyango, J. (2022). Mobile money platforms and efficiency of public revenue collection. *African Journal of Public Finance*, 10(3), 101–116.
23. Organisation for Economic Co-operation and Development. (2021). *Digital government and payment systems for public services*. OECD Publishing.
24. Organisation for Economic Co-operation and Development. (2024). *Digital government review: Strengthening public service delivery through digital transformation*. OECD Publishing.

25. Simone, F., & Muehlschlegel, T. (2023). Digital financial transactions and access to financial services in developing economies. *Journal of Financial Inclusion and Development*, 11(2), 129–145.
26. Wambua, J. (2023). Digital payment reliability and access to public services in developing economies. *Journal of Public Sector Innovation*, 8(1), 33–48.
27. World Bank. (2025). *Digital transformation and public financial service delivery*. World Bank.