2026 Volume: 02 Issue: 11 www.ijrpa.com ISSN 2456-9995 Research Article

International Journal Research Publication Analysis

Page: 01-21

CONTRIBUTION OF MOBILE MONEY TRANSACTION SECURITY ON PUBLIC FINANCIAL SERVICE DELIVERY IN IRINGA MUNICIPAL COUNCIL

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Article Received: 28 September 2026
Article Revised: 18 October 2026
Published on: 07 November 2026

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DOI: https://doi-doi.org/101555/ijrpa.1872

ABSTRACT

The study assessed the contribution of mobile money transaction security to public financial service delivery in Iringa Municipal Council, Tanzania. The study focused on the contribution of mobile money transaction security to public financial service delivery. A mixed-methods approach and a cross-sectional research design were employed. Data were collected from Council employees using structured questionnaires and semi-structured interviews with key informants. Quantitative data were analysed using descriptive statistics with the aid of the Statistical Package for the Social Sciences (SPSS) Version 26, while qualitative data were analysed using thematic analysis. The findings established that mobile money transaction security contributed to public financial service delivery through protection of transaction information, fraud prevention controls, secure transaction verification, and improved confidence in mobile money transactions. The study concludes that effective mobile money transaction security contributes to improved public financial service delivery in Iringa Municipal Council by protecting financial transaction information and supporting secure and reliable payment processes. The study recommends that the Council strengthen transaction security controls, improve transaction verification procedures, regularly monitor mobile money transactions, and strengthen coordination between finance and information and communication technology units to enhance secure public financial service delivery. Further studies should examine other factors that contribute to public financial service delivery in local government authorities in Tanzania.

KEYWORDS: Mobile Money Transaction Security; Public Financial Service Delivery; Mobile Money; Local Government; Iringa Municipal Council.

INTRODUCTION

1.1 Background of the Study

Public financial service delivery is important for effective local government administration because it involves the collection and management of payments for services, permits, licences and other municipal charges. The growth of digital payment systems has changed how citizens make payments to public institutions, with mobile money becoming an important channel in many countries. However, secure financial transactions are necessary to protect payment information, prevent fraud and maintain public confidence in digital financial services (World Bank, 2025; OECD, 2024). Weak transaction security can expose users and public institutions to fraud, unauthorized transactions and loss of financial information, which can reduce trust in public financial services. Strengthening transaction security is thus important for improving the reliability of mobile money-based public financial services.

At the global level, governments have increasingly adopted digital payment systems to support the delivery of public financial services. Mobile and electronic payment platforms provide digital records that support transaction verification, monitoring and accountability (OECD, 2021; IMF, 2024). Transaction security is an important part of these systems because users need assurance that payments are made to the correct recipient and that financial information is protected. Digital payment systems also face risks related to fraud, unauthorized access and cyber-related financial losses, particularly where security controls are weak. The quality of security measures can influence users' confidence in using digital payment channels for government services (World Bank, 2024; UNDP, 2024).

In Africa, mobile money has become an important means of making and receiving payments, including payments for public services. Governments and public institutions have increasingly used digital payment channels to support revenue collection and other financial transactions. However, concerns about fraud, unauthorized transactions, protection of personal and financial information and secure verification continue to affect digital financial services (GSMA, 2023; African Development Bank, 2024). These concerns show that the availability of mobile money does not alone ensure reliable public financial service delivery. Strong transaction security controls are needed to protect financial transactions and maintain confidence among users of public financial services.

In Tanzania, mobile money is increasingly used in public financial transactions, including the payment of municipal charges, licences, permits and other government services. The Government has continued to strengthen electronic payments through the Electronic Transactions (Mandatory Electronic Payments for Specified Transactions) Order, 2026,

which requires specified transactions to use approved electronic payment channels, including mobile money. This development increases the importance of secure digital transactions in public financial service delivery. At Iringa Municipal Council, mobile money provides a channel for making payments for municipal services, but concerns related to transaction verification, protection of payment information and fraud prevention remain important for reliable service delivery. This situation provides a basis for assessing the contribution of mobile money transaction security to public financial service delivery in Iringa Municipal Council.

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 the acceptance and use of technology. The theory is relevant to this study because mobile money is a digital technology used in public financial transactions at Iringa Municipal Council. Mobile money transaction security relates to users' confidence in using the system because secure authentication, protection of transaction information, fraud prevention controls and secure transaction verification support safe financial transactions. When employees perceive mobile money systems as useful and easy to use while providing adequate security, they are more likely to use them in handling public financial transactions. Therefore, TAM provides a suitable theoretical basis for examining the contribution of mobile money transaction security to public financial service delivery in Iringa Municipal Council.

2.2 Empirical Literature Review

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

This subsection examines the contribution of mobile money transaction security to public financial service delivery. The review focuses on user authentication, protection of transaction information, fraud prevention controls and secure transaction verification. The empirical findings are linked to the four security indicators in the conceptual framework and the gap addressed by the study.

2.2.1.1 Contribution of user authentication on public financial service delivery

Strong user authentication was found to improve protection against unauthorized access to mobile money services (Rashidi et al., 2024). The study proposed combining a personal identification number with iris biometric authentication to strengthen access security in

mobile money applications. Supporting this finding, Mohsini et al. (2025) found that the combination of iris biometric authentication and two-factor authentication improved security perceptions among mobile money customers and agents in Tanzania. These findings show that stronger authentication controls help protect financial transactions from unauthorized access. However, the studies focused on mobile money access and user acceptance rather than financial service delivery within public institutions. Therefore, the study assessed the contribution of user authentication to improved public financial service delivery among employees of Iringa Municipal Council.

2.2.1.2 Contribution of protection of transaction information on public financial service delivery

Protection of transaction information is important in maintaining the security of mobile money transactions. Mvogo et al. (2026) found that cybersecurity threats to mobile money included data breaches and account hacking, which affected trust and continued use of mobile money services in Cameroon. The finding connects protection of financial information with confidence in the security of mobile money services. Similarly, Bawuah (2026) identified security and data protection as important mechanisms supporting the effectiveness of mobile money systems in Sub-Saharan Africa, particularly through protection of users' personal information and reduction of cyber risks. However, these studies focused on mobile money users and broader mobile money ecosystems rather than financial transactions handled by public institutions. Therefore, the study assessed the contribution of protection of transaction information to improved public financial service delivery among employees of Iringa Municipal Council.

2.2.1.3 Contribution of fraud prevention controls on public financial service delivery

Fraud prevention controls were found to be important in reducing risks associated with mobile money payment systems. Sayibu et al. (2025) found that mobile money systems faced phishing, spoofing, fraudulent SMS verification codes and other text-based fraud schemes. The review further showed that suspicious transactions require additional verification and that fraud detection and prevention mechanisms are necessary to identify and block fraudulent transactions. These findings demonstrate the importance of fraud prevention controls in protecting mobile money transactions and maintaining the integrity of financial services. However, the study reviewed fraud prevention within mobile money payment systems generally and did not specifically assess its contribution to public financial service delivery. Therefore, the study assessed the contribution of fraud prevention controls to improved public financial service delivery among employees of Iringa Municipal Council.

2.2.1.4 Contribution of secure transaction verification on public financial service delivery

Secure transaction verification was found to be important in confirming the legitimacy of mobile money payments and protecting transactions from fraudulent confirmation (Adewusi et al., 2026). The study found that reliance on customer SMS confirmation created security and privacy risks because confirmation messages could be delayed, unavailable to employees, or replaced by screenshots and spoofed messages. These findings show that reliable and secure verification of transactions supports the safe confirmation of financial payments In a related study, Matovu et al. (2025) found that reliance on a single authentication factor was a major contributor to insecurity in mobile money transactions and recommended multifactor authentication to improve the security of mobile money withdrawals. These findings indicate that secure verification controls strengthen the process of confirming legitimate transactions. However, the studies did not specifically assess how secure transaction verification contributes to financial service delivery within municipal councils. Therefore, the study assessed the contribution of secure transaction verification to improved public financial service delivery among employees of Iringa Municipal Council.

METHODOLOGY

The study adopted a mixed-method research approach to examine the contribution of mobile money transaction security to public financial service delivery in Iringa Municipal Council. Quantitative data were collected from 70 Council employees using structured questionnaires, while qualitative data were obtained through semi-structured interviews with five purposively selected key informants. The respondents were involved in payment processing, payment verification, transaction confirmation, financial record management and other financial service processes.

A cross-sectional research design was used, with data collected at a single point in time. The study focused on mobile money transaction security in relation to public financial service delivery, particularly within financial processes involving transaction verification, confirmation and security. Quantitative data were analysed using frequencies and percentages through SPSS Version 26, while qualitative data were analysed thematically to provide detailed views on mobile money-supported financial services.

DATA PRESENTATIONS AND DISCUSSIONS

4.1 Contribution of mobile money transaction security on public financial service delivery

This section presents the contribution of mobile money transaction security on public financial service delivery at Iringa Municipal Council. The assessment focused on the security of transaction information, fraud prevention controls and secure transaction verification. The assessment compared financial service delivery before and after the use of mobile money services. The comparison considered transaction processing errors, reliability of payment confirmation and delays in recording and reconciliation of transactions.

4.1.1 Contribution of security of transaction information on public financial service delivery

This subsection presents the contribution of security of transaction information on public financial service delivery at Iringa Municipal Council. The assessment compared the situation before and after the use of mobile money services. The comparison focused on reduced transaction processing errors, increased reliability of payment confirmation and reduced delays in recording and reconciliation of transactions.

4.1.1.1 Reduced transaction processing errors through security of transaction information

Before the use of mobile money services, employees spent more time checking transaction information before recording payments because payment details had to be obtained and compared with available records. Inadequate protection of transaction information increased the need for repeated checking before a payment was recorded. After the use of mobile money services, transaction information was received electronically and employees could check the payment reference and amount during processing. Better protection of transaction information reduced unnecessary handling of payment details and supported the identification of incorrect information before recording. This change was reflected in the lower number of transaction processing errors after the use of mobile money services.

The results in Table 4.1 show that 85.7% employees stated that protection of transaction information contributed to reduced transaction processing errors, while 14.3% employees stated that it did not. The responses indicate that most employees observed fewer transaction processing errors when transaction information was properly protected. Protection of transaction information supported proper checking and handling of payment details during mobile money transactions. The responses from employees indicate that security of

transaction information contributed to reducing transaction processing errors at Iringa Municipal Council.

The Senior Finance Officer explained the change:

…. employees handled payment information through records that required more checking before transactions were entered. Payment details were sometimes handled at different stages before the transaction was completed. After mobile money services, transaction information was received electronically and checked against the payment details available to employees. This reduced unnecessary handling of payment information during transaction processing. Errors identified during checking were corrected before the transaction was recorded. (Interview with Senior Finance Officer, 18 July 2026).

Transaction information protection was closely connected with the accuracy of payment details available during financial processing. When information passed through several manual handling stages, employees spent more time checking whether the details matched the payment being processed. Electronic transaction information provided a clearer reference for checking payment amounts and transaction references. This reduced repeated handling and supported earlier identification of incorrect details.

The ICT Officer also described the security aspect of the process:

Early before, payment information was handled through several manual procedures before employees completed the related transaction. This increased the need for employees to check information at different stages of processing. After mobile money services, transaction details were transmitted electronically and accessed through the designated payment systems. Employees used the available transaction information to confirm payment details before recording. This reduced errors linked to handling incomplete or inconsistent payment information. (Interview with ICT Officer, 18 July 2026).

Secure access to transaction information strengthened the checking process used by employees. The availability of electronic payment details reduced reliance on repeated manual handling and provided a reference for confirming transactions before recording. This was particularly relevant where employees needed to match payment references and amounts with Council financial records. The lower level of transaction processing errors was consistent with the improved control of payment information.

The technical process involved mobile money payment channels, GePG and local government digital service processes supported through TAUSI. Transaction information transmitted through the electronic payment environment provided payment references and amounts that employees used during verification and recording. This supported the

movement of protected payment information from confirmation to Council financial records and subsequent reconciliation.

The finding was consistent with Rashidi et al. (2024), who reported that security measures in digital financial services strengthened the protection and handling of electronic transaction information. The study supports the importance of protecting payment information during financial processing. In the Council setting, secure transaction information provided employees with reliable details for checking payments before recording, which was associated with fewer transaction processing errors.

4.1.1.2 Increased reliability of payment confirmation through Security of transaction information

Reliable payment confirmation depended on the availability and protection of transaction information used by employees during financial service processing. When payment details were not readily available or required repeated checking, employees spent more time establishing whether a transaction had been completed. The use of mobile money services provided electronic payment information that employees accessed during confirmation. Protected transaction information gave employees a clearer basis for matching payment references and amounts with the relevant financial records. This supported more reliable confirmation of payments handled by the Council.

Table 4.1 shows that 87.1% employees stated that protection of transaction information contributed to increased reliability of payment confirmation, while 12.9% employees stated that it did not. The responses indicate that most employees observed more reliable payment confirmation when transaction information was properly protected. Proper protection of transaction information supported checking and confirmation of payment details before transactions were recorded. The employees' responses indicate that security of transaction information contributed to reliable payment confirmation at Iringa Municipal Council.

The Customer Service Supervisor described the change in the handling of payment information:

Payment confirmation previously required employees to spend more time checking whether the information received matched the payment being followed up. Some service requests remained pending while employees sought confirmation of the payment details. With mobile money services, the transaction reference and amount were available electronically for checking. Employees used these details to confirm whether the payment corresponded with the service requested. This made payment confirmation more reliable during the processing of financial services. (Interview with Customer Service Supervisor, 18 July 2026).

Reliable confirmation was closely connected with the quality of transaction information available to employees. When payment details were readily accessible, employees had a clear reference for checking the transaction before completing the related service. Electronic records also reduced repeated follow-up for payment information. This strengthened the confirmation process and supported the higher number of reliable confirmations recorded after the use of mobile money services.

The Senior Finance Officer further explained the change from the financial records perspective:

In the earlier payment process, employees sometimes had to verify payment information through more than one record before confirming a transaction. This created additional checking before the payment was accepted for recording. Electronic transaction information provided a reference that employees used to compare the payment amount and transaction number. Once the details matched the financial record, the payment was confirmed and moved to the next stage. The process gave employees more confidence in the payment information used for financial recording.(Interview with Senior Finance Officer, 18 July 2026).

The availability of protected transaction information strengthened the link between payment confirmation and financial recording. Employees relied on identifiable transaction details when checking whether payments matched the relevant service or financial record. This reduced uncertainty during confirmation and supported a more consistent process for handling completed payments.

Mobile money transaction information moved through the electronic government payment environment, including GePG, before being used within local government financial service processes. The payment reference and amount provided employees with information for verification, recording and reconciliation. TAUSI supported the local government service environment in which payment-related services were handled, while government payment use cases integrated within TIPS strengthened interoperability across electronic payment systems.

The finding was in line with Msacky et al. (2024), who found that security controls in digital financial services strengthened the reliability of electronic transactions by improving the protection and handling of transaction information. The evidence supports the importance of secure transaction information in confirming payments before financial records are updated. At Iringa Municipal Council, protected payment information supported employees in

establishing the validity of transactions before proceeding with subsequent financial procedures.

Table 4.1: Contribution of security of transaction information on public financial service delivery. (n = 70)

Public Financial Service Delivery Indicator	Improved n (%)	Not Improved n (%)
Reduced transaction processing errors	60 (85.7)	10 (14.3)
Increased reliability of payment confirmation	61 (87.1)	9 (12.9)
Reduced delays in recording and reconciliation of transactions	62 (88.6)	8 (11.4)

Source: Field Data (2026).

4.1.1.3 Security of transaction information has contributed to reduced delays in recording and reconciliation of transactions

Secure transaction information was important in reducing delays during recording and reconciliation because employees needed clear payment details before updating financial records. When payment information required repeated checking or clarification, recording and reconciliation took more time. With mobile money services, employees received electronic transaction references, payment amounts and confirmation details that supported checking against Council records. This reduced repeated handling of payment information during financial processing. The change was reflected in the shorter time required to record and reconcile transactions after the use of mobile money services.

Table 4.1 shows that 88.6% employees stated that protection of transaction information contributed to reduced delays in recording and reconciliation of transactions, while 11.4% employees stated that it did not. The responses indicate that most employees observed shorter delays in recording and reconciling transactions when transaction information was properly protected. Proper protection supported timely checking, recording and reconciliation of payment information. The employees' responses indicate that security of transaction information contributed to reducing delays in recording and reconciliation at Iringa Municipal Council.

The Senior Finance Officer described the change in the recording process:

Payment information previously required more checking before it was entered into the financial records. Employees had to compare the available details before confirming that the transaction belonged to the correct payment. With mobile money services, transaction references and payment amounts were available electronically during the recording process.

Employees checked these details against the Council records and proceeded with the transaction once the information matched. This reduced the time spent preparing transactions for reconciliation (Interview with Senior Finance Officer, 18 July 2026).

The recording process became less time-consuming when employees had protected transaction information that was clear and available for checking. Instead of spending additional time searching for payment details or comparing several sources, employees used the electronic transaction reference and amount to establish the correct payment. This reduced repeated checking before entries were made in the financial records. The shorter recording process contributed to the reduction in the time required for recording and reconciliation.

The Accountant responsible for digital payments explained the change from the reconciliation perspective:

Reconciliation previously involved more checking because payment information was not always available at the same point in the financial process. Employees spent additional time matching payment details with the records before closing the transaction. With electronic payment information, the transaction reference and amount were available for comparison during reconciliation. This made it easier to identify the payment and match it with the corresponding financial entry. Reconciliation was completed within a shorter period when the transaction information was clear (Interview with Accountant responsible for digital payments, 18 July 2026).

Reconciliation required employees to match payment information with the corresponding financial records. Protected electronic transaction details provided a clear reference for identifying the payment and confirming the amount recorded. This reduced the need for repeated clarification when employees were reconciling transactions. The process was completed faster because the required payment information was available for direct comparison.

The Customer Service Supervisor linked secure transaction information with the completion of service-related financial records:

Some service requests took longer to complete when employees needed to establish the status of a payment before the financial record was updated. Payment information had to be checked before the request could move to the next stage. Mobile money services provided electronic confirmation details that employees used when following up the payment. The information reduced repeated requests for payment clarification during service processing.

This helped employees complete the recording stage without unnecessary delays (Interview with Customer Service Supervisor, 18 July 2026).

Payment confirmation was also important to the movement of service requests through the Council's financial process. When employees had access to secure confirmation details, they spent less time following up on payment status before updating the related record. This reduced waiting between payment confirmation and recording. The shorter waiting period supported faster completion of service-related financial procedures.

Mobile money transaction information moved through the electronic government payment environment, including GePG, before being used in local government financial service processes. Payment references and amounts provided employees with information for verification, recording and reconciliation. TAUSI supported the local government digital service environment, while government payment use cases integrated within TIPS strengthened the movement and interoperability of electronic payment information.

The finding was consistent with Pfeil et al. (2026), who reported that stronger security in digital financial systems supported reliable handling of electronic transaction information and financial processes. This supports the importance of protected transaction information in reducing unnecessary checking during financial recording and reconciliation. At Iringa Municipal Council, secure and accessible transaction details supported faster movement of payments through these financial procedures.

4.1.2 Contribution of fraud prevention controls on public financial service delivery

This subsection presents the contribution of fraud prevention controls on public financial service delivery at Iringa Municipal Council. The assessment compared the situation before and after the use of mobile money services. The comparison focused on reduced transaction processing errors, increased reliability of payment confirmation and reduced delays in recording and reconciliation of transactions. The assessment considered the controls used to identify, prevent and respond to fraudulent or suspicious mobile money transactions during financial service processes.

4.1.2.1 Fraud prevention controls have contributed to reduced transaction processing errors

Fraud prevention controls were important in reducing errors during mobile money transaction processing because employees needed to establish whether payment information was genuine before recording it. When suspicious or inconsistent transaction details required additional checking, the processing stage took longer and created greater room for recording mistakes. After the use of mobile money services, electronic transaction records provided employees

with information that supported checking payment references, amounts and transaction status. Fraud prevention controls also helped employees identify unusual payment information before it entered the Council's financial records. This strengthened the checking process and contributed to fewer transaction processing errors.

Table 4.2 shows that 87.1% employees stated that fraud prevention controls contributed to reduced transaction processing errors, while 12.9% employees stated that they did not. The responses indicate that most employees observed fewer transaction processing errors when fraud prevention controls were in place. Fraud prevention controls supported proper checking of mobile money transactions and identification of suspicious transactions during payment processing. The employees' responses indicate that fraud prevention controls contributed to reducing transaction processing errors at Iringa Municipal Council.

The ICT Officer explained how fraud controls were applied during transaction processing:

Payment information previously required careful checking because employees had to establish whether the details presented for processing were genuine. Suspicious differences in payment information required additional verification before the transaction was recorded. With mobile money services, electronic transaction details provided information that employees used to check the payment reference and amount. Transactions with unusual information were identified during the checking process before being entered into the financial records. This reduced errors associated with processing incorrect payment information. (Interview with ICT Officer, 18 July 2026).

Fraud prevention controls strengthened the checking stage by requiring employees to examine transaction information before accepting it for recording. Electronic payment details provided a reference for identifying differences in payment amounts or transaction references. This reduced the possibility of incorrect information passing through the processing stage unnoticed. The lower number of processing errors was linked to stronger checking before financial records were updated.

The Senior Finance Officer described the financial control aspect:

Financial records required payment information to be checked before transactions were accepted for recording. Transactions that did not match the available payment details required further clarification before they were processed. With mobile money services, employees had electronic transaction information that supported these checks. The controls made it easier to identify questionable payment details before they affected the financial records. This helped reduce errors during the recording of transactions (Interview with Senior Finance Officer, 18 July 2026).

The financial control process relied on checking transaction details before recording. When a payment did not correspond with the available information, employees had an opportunity to resolve the difference before updating the records. Fraud prevention controls thus worked alongside transaction verification to protect the quality of financial information. This reduced errors that could arise from recording unverified or questionable payments.

The Customer Service Supervisor also related fraud prevention controls to payment confirmation:

Service requests required payment confirmation before employees completed the related financial procedure. Payment information that appeared unusual was checked before the service request proceeded. With mobile money services, employees used electronic transaction details to establish whether the payment corresponded with the service requested. This reduced the possibility of accepting incorrect payment information during service processing. Employees were able to address questionable transactions before completing the service (Interview with Customer Service Supervisor, 18 July 2026).

Payment verification provided an additional control point before a financial service was completed. Employees were able to compare transaction information with the service request and address differences before proceeding. This helped prevent incorrect payment details from moving into later stages of the financial process. The control was particularly relevant to reducing errors where service completion depended on confirmation of a valid payment.

The finding was consistent with Sayibu et al. (2025), who reported that digital financial controls strengthened the monitoring and protection of electronic financial transactions. Their findings support the importance of transaction controls in identifying questionable information before it enters financial records. At Iringa Municipal Council, fraud prevention controls strengthened the checking of mobile money transactions and contributed to fewer processing errors.

4.1.2.2 Fraud prevention controls have contributed to increased reliability of payment confirmation

Fraud prevention controls were important in establishing whether payment information was genuine before employees confirmed a transaction. When payment details required additional verification, employees spent more time checking whether the transaction matched the service and financial records. After the use of mobile money services, electronic transaction information provided a clearer basis for checking payment references, amounts and transaction status. Fraud prevention controls helped employees identify questionable payment

information before confirmation was completed. This strengthened the reliability of payment confirmation during financial service processing.

Table 4.2 shows that 85.7% employees stated that fraud prevention controls contributed to increased reliability of payment confirmation, while 14.3% employees stated that they did not. The responses indicate that most employees observed more reliable payment confirmation when fraud prevention controls were in place. Fraud prevention controls supported proper checking of payment information and confirmation of legitimate mobile money transactions. The employees' responses indicate that fraud prevention controls contributed to reliable payment confirmation at Iringa Municipal Council.

The Customer Service Supervisor explained how fraud controls supported payment confirmation:

Payment confirmation required employees to check whether the payment details matched the service request. Transactions with unusual or unclear information were not confirmed immediately and required further checking. With mobile money services, employees received electronic transaction details that helped them identify the payment reference and amount. The information made it easier to distinguish a valid payment from one that required further verification. This improved the reliability of payment confirmation during service processing (Interview with Customer Service Supervisor, 18 July 2026).

Payment confirmation became more reliable when employees had transaction details that allowed them to check the payment before accepting it. Fraud prevention controls provided an additional checking point where unusual information could be identified before confirmation. This reduced the possibility of confirming a payment without sufficient verification. Reliable confirmation also gave employees a clearer basis for proceeding with the related financial service.

The Senior Finance Officer described the process from the financial control side:

Employees had to establish that payment information corresponded with the financial record before confirming a transaction. Differences in payment amounts or transaction references required additional checking before the transaction was accepted. Electronic payment information made these checks easier because the details were available for comparison. Fraud prevention controls helped employees identify questionable transactions before confirmation was completed. This strengthened the reliability of payment information used in financial processing (Interview with Senior Finance Officer, 18 July 2026).

The financial control process depended on matching payment information before confirmation. Electronic transaction details gave employees a reference for checking amounts

and transaction numbers against the relevant financial records. Where differences were identified, the transaction received further attention before confirmation. This strengthened the reliability of confirmed payments and reduced uncertainty during subsequent financial procedures.

The ICT Officer further explained the security controls involved:

Electronic payment transactions passed through systems that recorded transaction information for checking. Employees used the available information to identify transactions that required additional verification before confirmation. Suspicious differences were addressed before the payment was accepted as completed. The controls helped protect the transaction process from incorrect or questionable payment information. This gave employees a more reliable basis for confirming completed payments (Interview with ICT Officer, 18 July 2026).

The electronic control process provided employees with transaction information that supported verification before confirmation. Fraud prevention controls were relevant because not every payment could be treated as valid without checking the available details. The additional verification strengthened the reliability of the confirmation process and provided better information for subsequent recording and reconciliation.

The finding was consistent with Mvogo et al. (2026), who found that stronger controls within digital financial services improved the security and reliability of electronic transactions. The evidence supports the importance of fraud prevention controls in checking payment information before confirmation. At Iringa Municipal Council, these controls strengthened employees' ability to confirm valid payments and contributed to more reliable payment confirmation.

Table 4.2: Contribution of fraud prevention controls on public financial service delivery. (n = 70)

Public Financial Service Delivery Indicator	Improved n (%)	Not Improved n (%)
Reduced transaction processing errors	61 (87.1)	9 (12.9)
Increased reliability of payment confirmation	60 (85.7)	10 (14.3)
Reduced delays in recording and reconciliation of transactions	63 (90.0)	7 (10.0)

Source: Field Data (2026).

4.1.2.3 Fraud prevention controls have contributed to reduced delays in recording and reconciliation of transactions

Fraud prevention controls also influenced the time employees spent recording and reconciling mobile money transactions. When payment information required additional verification, employees spent more time checking whether the transaction was genuine before entering it into the financial records. After the use of mobile money services, electronic transaction details provided a reference for checking payment amounts, transaction numbers and payment status. Fraud prevention controls helped employees identify questionable transactions at an earlier stage before they proceeded to recording and reconciliation. This reduced repeated checking and shortened the time required to complete these financial procedures.

As presented in Table 4.2, 90.0% employees reported that fraud prevention controls contributed to reduced delays in recording and reconciliation of transactions, while 10.0% reported no improvement. The responses indicate that most employees observed shorter delays when fraud prevention controls were applied during mobile money transactions. Fraud prevention controls supported proper checking of transaction information before recording and reconciliation. Employee responses indicate that fraud prevention controls contributed to reducing delays in recording and reconciliation at Iringa Municipal Council.

The Accountant responsible for digital payments explained the change in the reconciliation process:

Reconciliation required more checking when employees had to establish whether payment information was genuine before matching it with the financial records. Transactions that raised questions required additional verification before they could be closed. With mobile money services, employees accessed electronic transaction details and used the payment reference and amount during reconciliation. Suspicious or inconsistent information was identified before the transaction was completed. This reduced the time spent following up individual transactions during reconciliation (Interview with Accountant responsible for digital payments, 18 July 2026).

Reconciliation became less time-consuming when questionable transactions were identified before they reached the final stage of the process. Employees were able to separate transactions requiring further attention from those with matching payment information. This reduced repeated checking of transactions that had already been verified. The shorter reconciliation period contributed to the reduction in delays recorded after the use of mobile money services.

The Senior Finance Officer described the effect on financial recording:

Financial recording took longer when employees needed to check payment information from different records before accepting a transaction. Any difference in the payment details required clarification before the entry was completed. Electronic transaction information provided a clearer reference for checking the payment before recording. Fraud prevention controls helped employees identify unusual details before they entered the financial records. This reduced the time spent correcting or following up transactions during the recording process (Interview with Senior Finance Officer, 18 July 2026).

The recording stage benefited from identifying questionable payment information before entries were completed. Employees had an opportunity to resolve differences at the checking stage instead of correcting them after recording. This reduced additional work associated with correcting transaction entries and following up unclear payments. The result was a shorter period between receiving payment information and completing the financial record.

The ICT Officer further explained how the electronic controls supported the process:

Electronic systems provided transaction information that employees used when checking payments for recording and reconciliation. Transactions with unusual information were identified during the verification process before they moved to the next stage. This reduced the need to trace the same payment through several records after recording. Employees were able to focus on transactions that required further attention while completing those with matching information. The process reduced delays in handling payment records (Interview with ICT Officer, 18 July 2026).

Early identification of unusual transactions reduced the amount of follow-up required after recording. Employees were able to work with transactions that had clear payment information while directing questionable cases for further checking. This helped separate routine transactions from those requiring additional control procedures. The reduction in unnecessary follow-up contributed to faster recording and reconciliation.

The finding was consistent with Adewusi et al. (2026), who reported that digital financial control mechanisms strengthened the monitoring of electronic transactions and supported more efficient financial processes. This supports the importance of identifying questionable transactions before they reach later stages of financial processing. At Iringa Municipal Council, fraud prevention controls supported earlier identification of transaction problems and reduced delays in recording and reconciliation.

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study concludes that mobile money transaction security contributed positively to public financial service delivery at Iringa Municipal Council. Security of transaction information supported the reduction of transaction processing errors, increased the reliability of payment confirmation and reduced delays in recording and reconciliation. Fraud prevention controls also supported the identification and checking of questionable payment information before recording, confirmation and reconciliation. Secure transaction verification strengthened the checking of payment references, amounts and transaction details before payments were accepted and recorded. The findings show that secure handling, checking and verification of mobile money transactions supported more reliable financial service processes at Iringa Municipal Council.

5.2 Recommendations

The Iringa Municipal Council should strengthen the protection of mobile money transaction information by maintaining proper controls for accessing, checking and handling electronic payment details. The Council should also strengthen fraud prevention controls by ensuring that questionable or inconsistent transactions receive further verification before recording and confirmation. In addition, the Council should strengthen secure transaction verification by ensuring that payment references, amounts and transaction details are checked against relevant financial records before payments are confirmed. These measures would support continued reduction of transaction processing errors, improve the reliability of payment confirmation and reduce delays in recording and reconciliation.

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