

**INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION
PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA**

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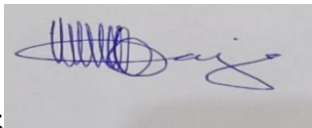
**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE AWARD OF MASTERS DEGREE OF BUSINESS
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JULY, 2025

DECLARATION AND APPROVAL

DECLARATION BY THE STUDENT

This thesis is my original work and has not been presented for a degree in any other University or for any other award.



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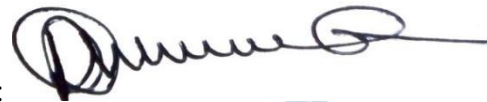
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DEDICATION

This research is dedicated to my family and friends, whose unwavering support and encouragement have been instrumental in the completion of this study.



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I would like to express my sincere gratitude to all those who have contributed to the success of this research. My deepest appreciation goes to my supervisor Dr. Robert Ombati, for his continuous support, expert advice, and insightful feedback throughout this study. I am grateful to the Meru County Government officials and employees who participated in this research, providing critical data and insights that made this study possible. A heartfelt thank you to my colleagues and friends for their encouragement and constructive criticism, which have been essential in refining this research. Finally, I extend my appreciation to my family for their endless support, patience, and encouragement, which have been my source of strength throughout this academic endeavor.



Mount Kenya

ABSTRACT

The efficient collection of government revenue is critical to the financial sustainability and service delivery of county governments in Kenya. However, traditional revenue collection methods continue to face challenges such as inefficiencies, leakages, and corruption, limiting optimal revenue generation. In response, Meru County implemented electronic payment systems to enhance transparency, accountability, and efficiency in revenue collection. Despite these initiatives, the impact of electronic payment systems on revenue collection performance remained unclear, necessitating this study. This study has assessed the influence of electronic payment systems on revenue collection performance in Meru County Government. Specifically, it has examined the effect of automation, digital transactions, system integration, and security measures on revenue collection efficiency. The research was anchored on the Technology Acceptance Model and the Diffusion of Innovation theory, which has explained the adoption and impact of technology on organizational performance. The study adopted a descriptive research design, targeting employees involved in revenue collection within Meru County. A stratified random sampling technique which was used to select respondents, ensuring representation across relevant departments. Data was collected using structured questionnaires, ensuring reliability and validity. The data collection process followed ethical guidelines, including informed consent and confidentiality measures. Data analysis employed descriptive and inferential statistics. Descriptive analysis summarized key trends, while correlation analysis was used to assess relationships between variables. Regression analysis has been used to determine the extent to which electronic payment systems influence revenue collection performance. This study has investigated the influence of electronic payment systems on revenue collection performance in Meru County, Kenya. Utilizing a rigorously tested questionnaire (Cronbach's Alpha α range: 0.841–0.879) and achieving an 88% response rate from an experienced and educated sample, the research robustly confirmed a significant positive impact. Regression analysis revealed that approximately 65.9% of the variation in revenue collection performance is explained by the electronic payment systems' attributes: security ($\beta=0.315$), accessibility ($\beta=0.291$), ease of use ($\beta=0.228$), and integration ($\beta=0.196$). Security emerged as the strongest predictor, highlighting its crucial role in fostering trust and deterring fraud. Descriptive findings reinforced these quantitative results, showing high positive perceptions regarding the systems' security (Mean = 3.98), accessibility (Mean = 4.05), ease of use (Mean = 4.12), and integration (Mean = 4.08). These attributes collectively led to perceived improvements in revenue collection, including increased revenue (Mean = 4.15), reduced processing time (Mean = 4.09), and decreased costs (Mean = 3.92). The study concludes that well-implemented electronic payment systems, underpinned by robust security, broad accessibility, user-friendliness, and seamless integration, are vital for enhancing public financial management. Recommendations include prioritizing cybersecurity, expanding multi-channel access, improving user experience and training, and promoting cross-departmental system integration to optimize revenue collection and build public trust in devolved governance contexts.

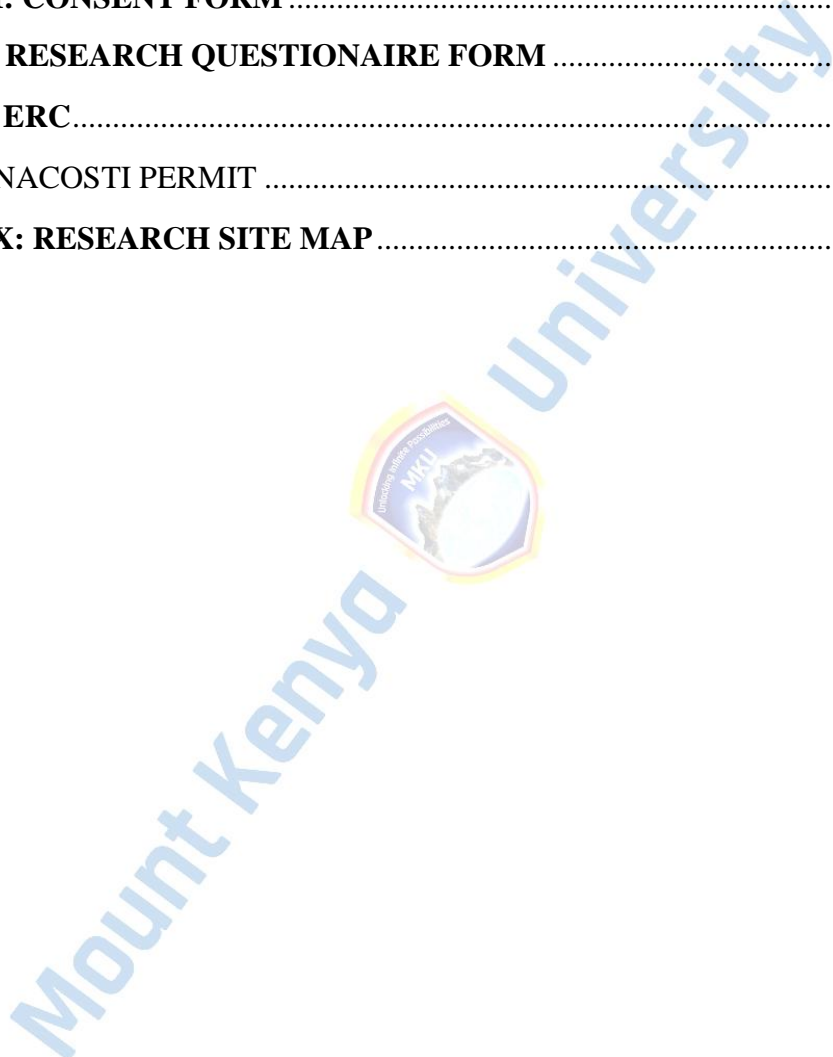
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LIST OF ABBREVIATIONS AND ACRONYMS

EPS –Electronic Payment System

CPS – Cashless Payment System

ICT – Information and Communication Technology

KRA – Kenya Revenue Authority

LAN – Local Area Network

NPS – National Payment System

POS – Point of Sale

RCM – Revenue Collection Management

SMS – Short Message Service

TPOS – Tax Payment Online System

G2C – Government-to-Citizen

G2B – Government-to-Business

G2G – Government-to-Government

USSD – Unstructured Supplementary Service Data

ERP – Enterprise Resource Planning

SSL – Secure Socket Layer



CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter contains information on the background of the study. This chapter also highlights on; statement of the problem, objectives of the study and research questions. The significance of the study, scope and the assumptions of the study are also included.

1.1 Background of the study

In recent years, the adoption of electronic payment systems has significantly transformed revenue collection processes in local governments, including Meru County in Kenya. These systems streamline the collection of fees and taxes, reducing reliance on manual cash transactions and enhancing transparency and accountability. By digitizing payments, local governments can reduce revenue leakage, improve tracking, and increase efficiency in service delivery, ultimately boosting overall revenue collection performance. Moreover, electronic payment systems provide citizens with more convenient and secure payment options, fostering higher compliance rates and contributing to enhanced fiscal management (Muthoni & Muriithi, 2022).

Electronic payment systems (EPS) have transformed how governments collect revenue by improving efficiency and transparency. For instance, in the United States of America, the Internal Revenue Service (IRS) has integrated EPS in their revenue collection, which has led to a 10% increase in tax collection efficiency over the past decade (Smith, 2020). The development of electronic payment platforms such as PayPal, credit card payments, and mobile wallets has revolutionized public sector revenue collection, making it easier for taxpayers to meet their tax, fee and licenses obligations. Despite these advancements, many countries still face challenges such as cybersecurity threats and digital illiteracy, making it difficult to fully reap the benefits of EPS (Jones, 2018).

The problem of adopting EPS lies in the complexity of managing a secure and robust system that can handle massive volumes of transactions. In Brazil, for example, the government implemented PIX, a real-time payment system, but faced challenges such as fraud and resistance from older citizens unfamiliar with digital platforms (Carvalho, 2021). This demonstrates the need for further

studies to examine how technological and infrastructural barriers impact the efficiency of EPS. The necessity for studies on EPS in global contexts is evident, especially considering empirical data showing that countries without robust digital payment systems suffer from reduced revenue collection. For instance, India reported a 15% decrease in tax compliance before implementing the Goods and Services Tax Network (GSTN), an integrated digital payment platform (Prasad & Thomas, 2019).

Studies are crucial to identifying global best practices and their applicability in different contexts, especially in developing economies. In conclusion, understanding the global impact of electronic payment systems on revenue collection can offer critical insights into how Meru County can enhance its revenue collection method for improved performance. Comparative studies are vital in analyzing the challenges and successes of EPS in countries like the United States of America, Brazil, and India, laying the foundation for Kenya's context. In the African context, many countries have embraced electronic payment systems as a way to enhance government revenue collection. Rwanda, for instance, has implemented the Rwanda Revenue Authority (RRA) electronic payment platform, which has resulted in a 12% increase in tax revenues between 2015 and 2020 (Mwangi, 2020). Similarly, South Africa has integrated various EPS solutions into its revenue collection systems, with electronic funds transfer (EFT) accounting for 70% of tax collections in 2021 (Makoni, 2021).

However, many African countries face unique challenges when adopting EPS. In Nigeria, for example, the government's push to introduce the e-payment system for tax collection was hampered by issues such as digital infrastructure gaps and resistance from both citizens and tax officials (Ademola & Oladipo, 2019). These challenges indicate that while electronic payment systems have potential, they require effective implementation strategies tailor made for local conditions. Studies on EPS within the African region are necessary because of the high levels of tax evasion and inefficiency in traditional manual systems. Research has shown that countries like Ghana, which introduced e-payments for revenue collection in 2018, reported an 8% increase in tax compliance (Owusu, 2020). This data underscores the importance of studying how EPS can address the inefficiencies and leakages in government revenue collection in developing countries.

The regional experience offers a valuable comparative framework for Kenya and Meru County in particular. By examining case studies in Rwanda, South Africa, Nigeria, and Ghana, policymakers can learn from the successes and challenges of EPS implementation to optimize their own systems.

In Kenya, electronic payment systems have been implemented as part of the country's wider e-Government strategy. The Kenya Revenue Authority (KRA) introduced the iTax platform in 2013, which significantly improved revenue collection, increasing tax compliance by 15% over the next five years (KRA Annual Report, 2018). The platform allows citizens to file and pay taxes online, improving transparency and reducing opportunities for corruption. However, despite this progress, county governments, including Meru, continue to face challenges in implementing efficient electronic payment systems. Studies have shown that technical glitches, lack of citizen awareness, and limited access to internet services have hindered the full potential of EPS in local revenue collection (Mwangi & Ochieng, 2020). Additionally, many county governments still rely on manual systems, leading to inefficiencies and loss of revenue. The necessity of studying the impact of EPS on revenue collection performance at the county level is evident. Empirical data from counties like Nairobi, which adopted electronic payment systems for parking and market fees, shows a 25% increase in revenue collection in 2021 (Nairobi County Annual Report, 2022).

These findings underscore the importance of investigating how Meru County can leverage EPS to boost its revenue collection performance. In conclusion, the local context of Kenya offers a compelling case for studying the influence of electronic payment systems on revenue collection. The experiences of KRA and other counties provide critical lessons for Meru County, where improved revenue collection can significantly enhance service delivery and development.

1.1.1 Accessibility of Electronic Payment Systems

Accessibility refers to the ease with which citizens can use electronic payment systems. Studies show that limited access to EPS, particularly in rural areas, affects revenue collection performance. For example, in many parts of Kenya, citizens face challenges such as poor internet connectivity, lack of smartphones, and digital illiteracy, which impede their ability to use EPS platforms (Ochieng, 2021). As a result, some taxpayers default on payments or continue to use manual payment methods, which are prone to inefficiencies and corruption. In addition, accessibility affects the inclusivity of the revenue collection system. In areas where EPS is readily accessible,

such as urban centers, the collection rates tend to be higher. However, marginalized communities are often left behind, exacerbating regional inequalities in revenue collection. A study conducted by the World Bank (2019) highlighted that increasing accessibility to digital payment platforms can lead to a 20% rise in tax compliance. Therefore, it is crucial for county governments like Meru to address accessibility barriers to maximize the benefits of EPS. Initiatives such as the development of offline payment solutions, public awareness campaigns, and subsidized internet services can play a pivotal role in improving the adoption and usage of electronic payment systems.

1.1.2 Security of Electronic Payment Systems

The security of electronic payment systems is a critical factor that influences their effectiveness. Security breaches, fraud, and cyberattacks can undermine public trust and deter taxpayers from using electronic payment methods (Klein, 2018). In Kenya, there have been instances where EPS platforms have been targeted by hackers, leading to significant financial losses. For example, in 2020, a cyberattack on a county government's EPS system led to the loss of KSh 50 million (Cybercrime Unit, 2021). To mitigate security risks, it is important to implement robust cybersecurity measures in EPS platforms. These measures include encryption, two-factor authentication, and regular system audits to identify and address vulnerabilities. A study by the International Monetary Fund (2020) found that countries with strong cybersecurity frameworks reported higher rates of EPS adoption and revenue collection. In conclusion, the security of EPS plays a vital role in determining the success of electronic payment systems in revenue collection. Governments must prioritize the safety of these systems to ensure public confidence and protect against financial losses.

1.1.3 Ease of Use of Electronic Payment Systems

Ease of use is another important variable that affects the adoption and effectiveness of electronic payment systems. Studies have shown that systems with complicated user interfaces or lengthy processes deter citizens from using the systems (Choi & Song, 2018). In Meru County, many citizens, particularly the elderly and those with low literacy levels, struggle to navigate EPS platforms, leading to delays and non-compliance. User-friendly interfaces and simplified payment processes are essential for improving EPS usage. Research indicates that simplifying EPS platforms can increase user adoption by 30% (Smith, 2019). Offering multiple payment options,

such as mobile money and bank transfers, can also enhance convenience and encourage more citizens to comply with their tax obligations. In summary, ease of use significantly influences the effectiveness of EPS. By developing intuitive and easy-to-navigate platforms, county governments can improve user experience and boost revenue collection.

1.1.4 Integration with Other Financial Systems

The integration of EPS with other financial systems, such as banking and mobile money, enhances the efficiency and effectiveness of revenue collection. Integrated systems allow for seamless transactions and real-time updates on payments, reducing delays and errors in the process (Ombuki & Mwangi, 2020). In Kenya, the integration of mobile money services like M-Pesa with government EPS platforms has led to significant improvements in revenue collection. However, many county governments still face challenges in fully integrating their EPS with other financial systems. These challenges include technological limitations, lack of infrastructure, and resistance from traditional financial institutions. A study by PwC (2019) found that countries with well-integrated financial systems reported higher EPS adoption rates and improved tax compliance. In conclusion, the integration of EPS with other financial systems is crucial for enhancing the effectiveness of revenue collection. County governments should prioritize the development of integrated systems to streamline processes and improve efficiency.

1.2 Statement of the problem

Despite the adoption of electronic payment systems (EPS) in Meru County, revenue collection performance has consistently fallen below expectations, raising concerns about the efficiency and effectiveness of the system. EPS was introduced with the intention of modernizing revenue collection processes, enhancing transparency, and reducing corruption, yet the county continues to struggle with inefficiencies and significant revenue shortfalls. Revenue collection is critical for financing county operations, and any shortfall impacts the county's ability to deliver essential services. While electronic payment systems have proven successful in other regions, Meru County's experience suggests that there are unresolved challenges that must be addressed for the system to function as intended. One of the main issues hindering the full potential of EPS in Meru County is the challenge of accessibility. A significant portion of the county's population, particularly those in rural areas, lack access to digital infrastructure and financial literacy, limiting

their ability to use the electronic platforms. In addition, concerns about the security of electronic transactions have undermined public trust in the system, leading to lower adoption rates.

Integration of EPS with other financial management systems is another critical factor affecting revenue collection efficiency in Meru County. The lack of seamless integration with the county's existing financial frameworks has led to data inconsistencies, delays in transaction processing, and a lack of real-time tracking of payments. This has resulted in reduced accountability and transparency, making it easier for fraud and corruption to thrive. Studies, such as Mwangi's (2020), have shown that counties with poorly integrated EPS tend to experience higher incidences of tax evasion and revenue leakages. The gaps in integration, coupled with administrative inefficiencies, have contributed to a significant loss of potential revenue in Meru County. Given the persistent challenges, there is a pressing need for research to understand the full influence of electronic payment systems on revenue collection performance in Meru County. This study investigated how variables such as accessibility, security, ease of use, and system integration influence the county's revenue mobilization efforts. Understanding these factors is essential not only to improve the county's financial standing but also to restore public trust in its revenue collection processes.

1.3 Purpose of the Study

The purpose of this study is to analyze the influence of electronic payment systems on revenue collection performance in Meru County, Kenya.

1.4 Objectives of the study

- i. To investigate the influence of accessibility of electronic payment systems on revenue collection performance in Meru County, Kenya.
- ii. To assess the effect of security of electric payment systems on revenue collection performance in Meru County, Kenya.
- iii. To evaluate the influence of the ease of use of electronic payment systems on revenue collection performance in Meru County, Kenya.
- iv. To analyze the effect of integrating electronic payment systems with other financial systems on revenue collection performance in Meru County, Kenya.

1.4 Research Questions

- i. How does the accessibility of electronic payment systems influence revenue collection performance in Meru County?
- ii. What is the effect of security measures in electronic payment systems on revenue collection in Meru County?
- iii. How does the ease of use of electronic payment systems affect taxpayer compliance in Meru County?
- iv. What is the effect of integrating electronic payment systems with other financial systems on revenue collection efficiency in Meru County?

1.5 Significance of the Study

This study has benefited a wide range of stakeholders, including the Meru County Government, policymakers, scholars, taxpayers, and the general public. For the county government, the findings has helped identify challenges affecting the performance of electronic payment systems (EPS) and provide solutions to enhance efficiency in revenue collection. Policymakers have used the study's insights to develop policies that promote the adoption of EPS across Kenya, ultimately modernizing public financial management. Scholars have gained a deeper understanding of the impact of EPS on revenue systems, contributing to academic literature in public finance and technology adoption. Taxpayers have benefited from improved transparency and convenience in payment processes, while the general public have experienced enhanced public services resulting from more efficient revenue collection.

1.6 Scope of the Study

The study was conducted in Meru County, focusing on revenue collection through electronic payment systems. The scope of the study has addressed factors such as accessibility, security, ease of use, and integration with other financial systems. The study has covered the period between 2015 and 2023, during which Meru County began implementing its EPS. The research focused on revenue collection departments, and a sample of taxpayers.

1.7.1 Limitations of the Study

One limitation of the study was the sampling procedure, as it did not capture all segments of the population using EPS. Time and resource constraints also affected the sample size, limiting the generalizability of the findings. Additionally, access to certain data, such as financial records, was restricted, affecting the comprehensiveness of the study.

1.7.2 Delimitations of the Study

This study focused on Meru County and did not extend to other counties in Kenya. It covered the period between 2015 and 2023, limiting its scope to recent developments in EPS. The study has concentrated on four independent variables accessibility, security, ease of use, and integration without examining other potential factors influencing revenue collection.

1.8 Assumptions of the Study

This study assumed that the data collected from government officials and taxpayers was accurate and reliable. It also assumed that electronic payment systems are the primary method of payment used in revenue collection in Meru County. Lastly, the study assumed that factors such as accessibility, security, ease of use, and integration significantly impact revenue collection performance.

1.9 Operational Definition of Key Terms

Electronic Payment Systems (EPS);

Digital platforms that allow individuals and institutions to make payment electronically, including mobile money, online banking, and credit card transactions.

Revenue Collection;

The process by which government entities collect taxes, fees, and other financial obligations from citizens and businesses.

Tax Compliance;

The degree to which taxpayers adhere to tax laws and regulations by filing and paying taxes on time.

Integration;

The process of combining different financial systems to enable seamless and efficient transactions across platforms.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discusses the empirical and theoretical foundations that explain the influence of electronic payment systems on revenue collection performance in Meru County Government, Kenya. It provides insights into relevant theories, reviews related empirical studies, and presents a conceptual framework that guides this research.

2.2 Empirical Literature

2.2.1 Accessibility to Electronic Payment Systems and Revenue Collection Performance

Oluoch (2021) conducted a study examining factors influencing the adoption of electronic payment systems (EPS) in Kisumu County, Kenya, grounded in the Technology Acceptance Model (TAM). The TAM emphasizes perceived ease of use and perceived usefulness as key drivers of technology adoption. Oluoch's research found that both of these factors significantly impacted the public's acceptance of EPS. Systems that were easy to use saw higher rates of adoption, as users found the process straightforward and less intimidating. Moreover, perceived usefulness, particularly in terms of time savings and efficiency, was a major incentive for users to engage with EPS for transactions related to county services. Additionally, Oluoch (2021) emphasized the role of organizational support in the successful implementation of EPS. Counties that invested in training and capacity-building programs for their staff experienced higher adoption rates. Employees who were well-versed in the functionality of the systems were more likely to adopt and promote them to the public. This highlights the critical role of human resource preparedness in the digital transformation of revenue collection. Without adequate training, the full benefits of EPS, such as improved accuracy and efficiency, may not be fully realized, leading to underutilization of the systems. The study also underscored the importance of system reliability and security in ensuring widespread usage. Oluoch (2021) found that users were more confident in utilizing EPS when they perceived the systems to be secure and free from errors. Transaction security was particularly crucial in encouraging the public to shift from traditional cash payments to digital methods. This aligns with other research indicating that concerns over privacy and security are often barriers to the adoption of electronic payment systems in developing regions, including Kenya. While the study provided valuable insights into EPS adoption in Kisumu County,

Oluoch (2021) did not address the long-term sustainability of these systems. It also failed to examine the external factors, such as infrastructure development and policy support, which influence EPS adoption in different contexts. Future research could explore these areas, particularly in counties like Meru, where socio-economic and infrastructural conditions differ from Kisumu. Addressing these gaps would help provide a more comprehensive understanding of how EPS can be successfully integrated into local government revenue collection frameworks.

2.2.2 Security of Electronic Payment Systems and Revenue Collection Performance

Kamau (2020) investigated the role of automation in improving revenue collection efficiency in Nairobi County, with a focus on how technology can enhance accuracy, speed, and transparency. The study found that automation significantly reduced manual errors, which were previously a major source of revenue leakage. By minimizing human intervention, automated systems made revenue collection processes more accurate and efficient, thereby reducing opportunities for corruption and fraud. The enhanced accuracy also improved the financial reporting processes within county governments, which contributed to better decision-making and planning. Another key finding from Kamau's (2020) research was the impact of automation on transaction speed. The introduction of EPS allowed for faster processing times, improving service delivery for both county officials and the public. The speed and reliability of transactions were particularly appealing to users, who previously faced long delays when making payments. This improvement in the transaction process increased public satisfaction and trust in the county's revenue collection systems, further boosting compliance and participation in EPS. The research also highlighted the importance of security in sustaining the success of automated systems. Kamau (2020) identified that the perceived security of the systems played a crucial role in ensuring widespread use. Users were more likely to adopt and consistently use automated payment systems when they felt that their personal and financial data were secure. The study also found that system reliability was a critical factor in maintaining public confidence, as frequent breakdowns or security breaches could undermine the benefits of EPS, leading to revenue leakage.

However, Kamau (2020) noted that the success of these automation efforts in Nairobi was partly due to the county's advanced infrastructure. This raises concerns about whether smaller counties, such as Meru, with less developed infrastructure, could replicate the same success. The study also did not delve into long-term challenges, such as system maintenance and updates, which could

affect the sustainability of these improvements. Future research should focus on these issues, particularly in under-resourced counties, to ensure that EPS can be adopted and maintained over time, contributing to sustainable revenue collection improvements.

2.2.3 Ease of Use of Electronic Payment Systems and Revenue Collection Performance

Mwangi (2019) explored the role of electronic payment systems in enhancing transparency and accountability in county governments across Kenya. The study found that EPS reduced the risks associated with manual handling of funds by creating a digital trail that was easily auditable. This digital traceability enhanced transparency by making it more difficult for county officials to tamper with financial records. The automated records kept by EPS enabled county governments to better monitor their revenue streams, ensuring that all collected funds were accounted for. Furthermore, Mwangi (2019) reported that the ease of use of EPS had a significant impact on its adoption. Users who found the systems simple and intuitive were more likely to engage with them regularly. The ability to complete transactions quickly and without complications enhanced public trust in the county's revenue collection systems. This increase in public confidence was crucial, as it encouraged more residents to transition from traditional cash payments to electronic methods, which are easier to audit and monitor for accountability purposes. Despite the benefits of ease of use, Mwangi (2019) also highlighted some limitations of EPS in achieving significant improvements in revenue collection. While the systems enhanced transparency, the study found that this did not automatically translate into higher revenue collection. Counties still needed to address other underlying issues, such as capacity building and regulatory reforms, to fully capitalize on the potential of EPS. This indicates that ease of use, while important, must be complemented by broader institutional support for the technology to achieve its intended impact. The study recommended that future research should focus on quantifying the financial benefits of EPS. While Mwangi (2019) provided valuable qualitative insights, the lack of quantitative analysis left a gap in understanding the exact impact of EPS on revenue collection performance. This is particularly important in counties like Meru, where limited resources may constrain the effective implementation of EPS. By analyzing both qualitative and quantitative data, future studies could provide a clearer picture of how ease of use and other factors influence revenue collection outcomes in different contexts.

2.2.4 Integration of Payment Systems with Other Financial Systems and Revenue Collection Performance

Ndegwa (2022) investigated the public perception and usage of electronic payment systems in Machakos County, Kenya, emphasizing the importance of system integration with other financial platforms. The study found that seamless integration between EPS and existing financial systems, such as banks and mobile money services, was crucial for the widespread adoption of the technology. Residents who could easily transfer funds between their personal financial accounts and the EPS were more likely to use the system consistently. This convenience factor significantly influenced the public's willingness to transition to electronic payments for county services. Moreover, Ndegwa (2022) highlighted that demographic factors, such as age and education, played a significant role in the public's perception of EPS. Younger, more tech-savvy individuals were more likely to adopt the system, while older residents and those with lower levels of education struggled with the technical aspects. This finding underscores the need for targeted training programs and public awareness campaigns to ensure that all segments of the population can benefit from the system. By offering technical support and education on how to use EPS, counties can help bridge the gap in adoption among different demographic groups. The study also revealed that public trust in government institutions significantly influenced the success of EPS integration. Ndegwa (2022) found that in counties where residents had low trust in government, adoption rates of EPS were lower. Concerns about data privacy and the potential misuse of personal information discouraged many people from using the systems. This suggests that improving the public's trust in local government is essential for increasing the adoption and effectiveness of EPS, particularly when integrating these systems with broader financial platforms. However, Ndegwa (2022) identified a gap in understanding how internal county dynamics, such as employee training and organizational readiness, influence the success of EPS integration. The study focused primarily on external factors, such as public perception, without addressing the role of county employees and officials in managing and promoting these systems. Future research should explore how internal factors, such as staff training, management support, and policy implementation, intersect with public perceptions to determine the overall success of EPS in enhancing revenue collection, especially in counties with limited infrastructure like Meru.

2.3 Theoretical Framework

The theoretical framework guiding this study was rooted in Systems Theory, which posits that the success of any organizational initiative depends on the effective interaction of its components. In this case, the adoption of electronic payment systems in Meru County is expected to influence revenue collection by integrating and optimizing various components of financial management, including payment processing, auditing, and transparency. By viewing revenue collection as an interconnected system, this study has investigated the relationships between system adoption and performance outcomes.

2.3.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), provides a framework for understanding how users come to accept and use a technology based on two primary factors: perceived ease of use and perceived usefulness. In the context of electronic payment systems, TAM posits that users are more likely to adopt these systems if they perceive them to be easy to operate and beneficial in terms of improving efficiency and effectiveness in revenue collection. This theoretical framework directly relates to the first objective of this study, which is to examine the impact of technology adoption on revenue collection performance in Meru County. If county officials and taxpayers find the electronic payment systems intuitive and advantageous in streamlining the collection processes, the likelihood of adoption and sustained use will increase. This will, in turn, enhance the overall efficiency of revenue collection. Moreover, TAM highlights the role of perceived usefulness in the decision to adopt technology, which aligns with the second objective of the study: evaluating the influence of electronic payment systems on revenue collection efficiency in Meru County. According to TAM, users have been more inclined to embrace electronic payment systems if they perceive that these platforms offer substantial benefits, such as reducing time delays, minimizing errors, and promoting greater transparency in transactions (Davis, 1989). This means that for Meru County to successfully integrate and benefit from electronic payment systems, it is essential that the perceived utility of these systems is communicated clearly to both the employees and taxpayers, thus promoting faster adoption and higher efficiency in revenue generation. Additionally, TAM suggests that factors such as user training and system accessibility play a critical role in enhancing the acceptance and usage of technology. This theory reinforces the third objective of the study, which has explored how the

county can improve system adoption and accessibility to optimize revenue collection performance. Providing adequate training for users, ensuring infrastructure readiness, and making the platforms easily accessible to the public are essential steps toward maximizing the benefits of electronic payment systems (Davis, 1989). By addressing these factors, Meru County can increase the adoption rate of these technologies, improve payment convenience, and ultimately boost the overall performance of revenue collection.

2.3.2 Innovation Diffusion Theory (IDT)

Rogers' (1962) Innovation Diffusion Theory (IDT) explains how innovations, such as electronic payment systems, are adopted over time. It identifies different categories of adopters, including innovators, early adopters, early majority, late majority, and laggards. The theory emphasizes that the adoption process is influenced by the innovation's relative advantage, compatibility, complexity, trial ability, and observability.

In the context of the study, IDT explains the gradual acceptance and implementation of electronic payment systems in Meru County. Objective three, which examines the challenges affecting electronic payment adoption, links with this theory by highlighting the need to address factors that hinder adoption, such as complexity or lack of observability of the system's benefits. IDT also provides insights into why some segments of the population may be slow to adopt electronic payment systems, suggesting that targeted interventions are required for each group of adopters. For instance, training and demonstration could be focused on late adopters to enhance system usage, contributing to improved revenue collection performance.

2.3.3 Public Choice Theory

Public Choice Theory, advanced by Buchanan and Tullock (1962), argues that public officials make decisions that maximize their own utility rather than the public good. This theory is essential when analyzing revenue collection performance, as it sheds light on the incentives driving county officials' decisions regarding the adoption of electronic payment systems. By applying Public Choice Theory to the study, we can explore how the introduction of electronic payment systems may reduce opportunities for corruption and enhance accountability in Meru County's revenue collection processes. Objective four, which has examined the transparency of electronic payments in enhancing revenue collection, aligns with this theory as it shows how reducing human

intervention can curb inefficiencies and leakages. The theory further emphasizes the role of transparent, automated systems in minimizing the potential for individual manipulation of revenue figures, thus improving revenue collection. This is particularly significant in ensuring that funds meant for public services are effectively utilized.

2.3.4 Systems Theory

Systems Theory, pioneered by von Bertalanffy (1968), views organizations as complex systems made up of interdependent components. In the context of revenue collection in Meru County, the electronic payment system can be seen as a component of the broader financial management system, where changes in one part (payment processing) impact other parts (revenue tracking, auditing, and reporting). Systems Theory links to the study by explaining how the adoption of electronic payments integrates various aspects of county financial management to optimize performance. This aligns with the study objective of evaluating the role of integrated payment systems in improving the efficiency of revenue collection. By analyzing the system as a whole, the study has better understood how various factors interact to influence overall revenue collection performance.

2.4 Conceptual Framework

The conceptual framework illustrates the relationship between electronic payment systems and revenue collection performance in Meru County Government. It provides a structured approach to understanding how key variables such as automation, digital transactions, system integration, and security measures influence revenue collection efficiency. Guided by the Technology Acceptance Model (TAM) and the Diffusion of Innovation (DOI) theory, the framework has highlighted the role of technology adoption in enhancing transparency, accountability, and overall financial performance. By mapping out these relationships, the conceptual framework is the foundation for analyzing the impact of electronic payment systems on revenue collection outcomes. The conceptual framework is as shown in figure 1:



Independent variables

Dependent variable

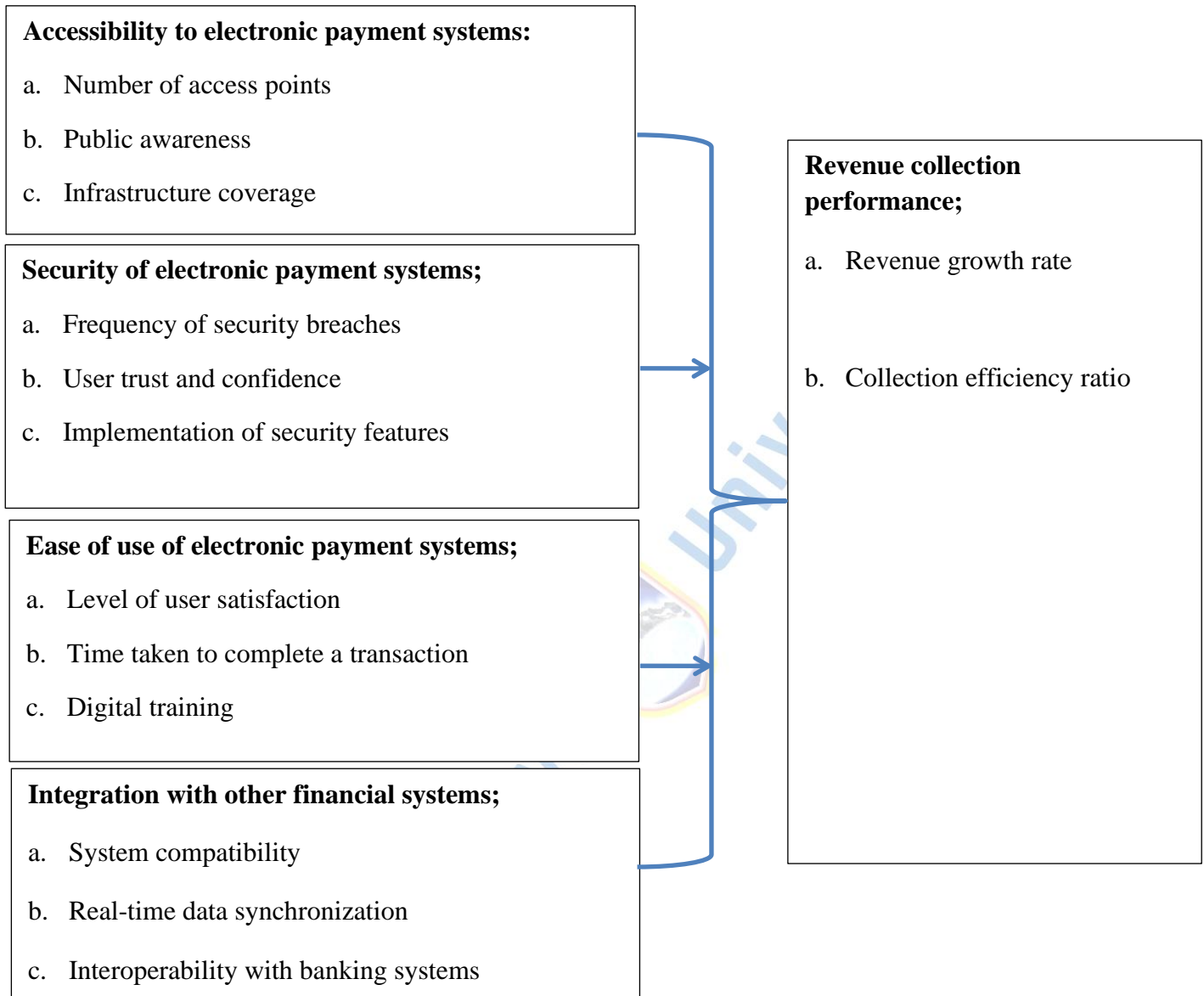


Figure 1: Conceptual framework

Source: Researcher, 2025.

2.5 Recap of the Literature Review

Technology adoption plays a pivotal role in enhancing operational efficiency across various sectors, including public revenue collection. Studies highlight that adopting electronic payment systems streamlines the collection process by reducing human errors, improving data accuracy, and accelerating the reconciliation of financial records. According to Wang and Zhao (2021), these systems can automate complex processes that would otherwise require significant manual intervention, thereby enhancing overall efficiency. However, while many studies underscore the benefits of technology adoption, they often overlook the specific, long-term effects on revenue performance. Particularly in the context of public administration, the question of whether technology adoption results in sustainable revenue growth remains inadequately addressed.

Automation and digitalization are widely regarded as key drivers of operational efficiency in public finance, particularly in revenue collection. Research by Chen and Lee (2020) demonstrates that automating the revenue collection process minimizes inefficiencies such as delayed payments, incomplete records, and revenue leakages. By reducing manual intervention, these systems increase transparency and reduce opportunities for corruption. However, most of the existing literature is skewed towards urban areas where access to technology is less constrained, leaving gaps in understanding the potential efficiency gains in rural counties like Meru. For smaller counties, achieving the same efficiency gains as seen in urban centers is not guaranteed. According to Musyoka and Kariuki (2022), rural counties often lack the necessary technological infrastructure and skilled personnel to implement and maintain automated systems effectively. Without proper infrastructure, automation efforts may not yield significant improvements in revenue collection efficiency. This disparity highlights the need for further investigation into how such systems perform in smaller, less urbanized areas.

Transparency is often considered a cornerstone of good governance and is closely linked to improvements in revenue collection performance. According to Alotaibi and Hussain (2020), greater transparency in government financial systems can lead to enhanced accountability, reduce corruption, and improve public trust. These factors, in turn, can boost revenue collection by encouraging compliance and reducing leakages. However, while transparency is widely acknowledged as a positive factor in governance, there is little research directly linking transparency measures to actual improvements in revenue performance. In the context of Meru

County, transparency could be particularly crucial in addressing issues of mistrust and inefficiency in revenue collection. Muriuki and Waithaka (2021) argue that rural counties often face higher levels of public distrust in government systems, which can hinder revenue collection efforts. By increasing transparency through the use of electronic payment systems, Meru County could potentially improve public confidence in the fairness and accuracy of its revenue collection processes, leading to higher compliance rates and better overall performance.

Public perception plays a significant role in determining the success of technology adoption in government systems, particularly in revenue collection. According to Brown and Anderson (2021), the public's attitude toward electronic payment systems can either facilitate or hinder their widespread adoption. If citizens view these systems as secure, efficient, and easy to use, they are more likely to comply with tax regulations and make timely payments. Conversely, if the systems are perceived as cumbersome or unreliable, the adoption rates may be low, affecting overall revenue collection performance. In Meru County, public perception is likely to be influenced by several factors, including the accessibility of technology, the ease of use of the electronic payment systems, and the public's trust in the county government. According to Kinyua and Gachoki (2022), rural populations may be more skeptical of new technologies due to limited exposure and lower levels of digital literacy. This skepticism can be a significant barrier to the successful implementation of electronic payment systems, making it crucial for the county government to address public concerns through education and outreach programs.

2.5 Research Gap

The existing literature largely focuses on urban counties and the short-term effects of electronic payment systems on revenue collection. There is a gap in understanding how these systems affect long-term revenue collection performance in more rural counties like Meru, especially in terms of public perception and the interaction between internal systems and external user adoption. This study seeks to fill these gaps by providing insights specific to the context of Meru County.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter has described the research methodology for examining the influence of electronic payment systems on revenue collection performance in Meru County Government, Kenya. It has outlined the research design, target population, sampling procedures, data collection methods, and analysis techniques, as well as the ethical considerations.

3.1 Research Methodology

The research methodology has provided a systematic approach for investigating the research problem. The study adopted a quantitative approach, which is suitable for assessing the correlation between electronic payment systems and revenue collection performance. Quantitative methods have allowed for the collection and analysis of numerical data, enabling the researcher to establish patterns and relationships. A survey methodology was applied, using questionnaires to gather data from respondents involved in the implementation and management of electronic payment systems within the Meru County Government. This method was chosen for its efficiency in gathering data from a large population. It also enabled the researcher to generalize findings to similar contexts beyond Meru County. This approach has facilitated the use of statistical analysis, allowing for precise measurement of the relationship between electronic payment systems and revenue collection. The researcher also focused on obtaining sufficient data to ensure the findings are reliable and valid. This methodology has another advantage which was its ability to handle large datasets and produce quantifiable and replicable results. By combining quantitative techniques with structured data collection methods, this methodology has ensured that the study remains objective and focused on the research objectives. This approach has ensured that conclusions drawn are supported by empirical evidence, contributing to the broader field of revenue collection and governance.

3.2 Research Design

The study has utilized a descriptive research design. Descriptive research has allowed the researcher to obtain detailed information about the current state of electronic payment systems in Meru County Government and how they affect revenue collection. This design was chosen because

it enabled the researcher to gather quantitative data that describes characteristics and patterns related to the research problem. Descriptive research has also allowed the researcher to observe and measure variables without manipulating the environment, making it an appropriate design for studying the natural occurrence of electronic payment systems and revenue collection performance. The design has provided an accurate account of how the use of electronic payments influences efficiency, transparency, and revenue growth. The research design has focused on both cross-sectional and longitudinal data. Cross-sectional data has captured the current state of the variables at a single point in time, while longitudinal data has provided insights into trends over time. This dual approach has enabled the researcher to provide a comprehensive analysis of how electronic payment systems evolve and impact revenue collection in the county. Furthermore, the design has been flexible, allowing the researcher to adapt and refine the research tools if necessary. This flexibility has helped address any emerging issues that may arise during the study and ensure that the research findings are accurate and reflective of the county's revenue collection dynamics.

3.3 Location of the Study

The study was conducted in Meru County, Kenya. Meru County is one of the 47 counties in Kenya and is located in the eastern region of the country. The county has a well-established local government system that has adopted electronic payment platforms to enhance revenue collection. Meru County was chosen due to its early adoption of digital payment systems, making it an ideal setting to investigate the impact of such systems on revenue collection. The county's diverse economic activities, including agriculture, trade, and tourism, make it a significant contributor to Kenya's overall revenue generation. These economic activities require robust revenue collection systems to enhance the county's financial capacity. The research has focused on various sectors within the county government that have integrated electronic payment systems, such as business permits, land rates, and market fees. Meru County also presents a blend of urban and rural setups, which has provided valuable insights into how electronic payment systems operate in different contexts. The study has included both the county's urban centers and its rural areas to capture the full scope of the revenue collection process. This diversity has helped the researcher analyze the challenges and opportunities associated with implementing electronic payments across varying environments. Moreover, the county government has shown a commitment to enhancing financial

transparency and accountability, which aligns with the study’s objectives of examining how digital payment systems can improve revenue collection performance.

3.4 Target Population

The target population for this study consisted of employees of Meru County Government, particularly those involved in revenue collection, finance, and administration. These included revenue officers, finance managers, and IT staff who oversee the integration and operation of electronic payment systems within the county. Their involvement in these systems has made them knowledgeable respondents for the study. Additionally, the study targeted business owners and residents of Meru County who interact with the county government’s electronic payment systems for various services. These external stakeholders have provided perspectives on how user-friendly and efficient the electronic payment platforms are from a customer point of view. Their feedback has been essential in understanding the effectiveness of the system. The population also included policymakers and decision-makers within the county government who have been instrumental in introducing and implementing electronic payment systems. .The overall target population has been diverse, ensuring that the study captures a broad range of perspectives. The estimated total population for the study was approximately 500 individuals, representing various departments and stakeholder groups within the county.

Table 1: Target population for the study variables

CATEGORY	POPULATION
Revenue officers	100
Finance officers	70
IT staff	140
Taxi drivers	220
Total	500

National Bureau of Statistics. (2025).

3.5 Sampling Procedures and Techniques

The study has employed stratified random sampling as the primary sampling technique. This method has allowed the researcher to divide the target population into distinct strata based on their roles within the county government or their interactions with the electronic payment systems. These strata has included county revenue officers, finance managers, IT staff, business owners, and residents. Within each stratum, a random sampling technique has been used to select respondents. This technique has ensured that every individual in each group has an equal chance of being included in the sample, thereby reducing sampling bias. Stratified random sampling has helped ensure that the sample accurately reflects the diverse roles and perspectives of individuals involved in or affected by the electronic payment systems. The researcher has determined the sample size using Cochran's sample size formula, which is appropriate for large populations. This formula has ensured that the sample size is statistically significant and representative of the target population. The sample size has been calculated with a confidence level of 95% and a margin of error of 5%. The sampling process has also included the use of inclusion and exclusion criteria to ensure that only respondents with direct knowledge or experience of the electronic payment systems are selected. This has enhanced the relevance and reliability of the data collected.

3.6 Sample size

The sample population consisted of 150 respondents selected from the target population using Yamens formula, following the guidelines provided by Mugenda and Mugenda (2003) for determining appropriate sample sizes in social science research. According to their recommendation, a sample size of 10-30% of the target population is sufficient for a study to yield reliable results. In this study, respondents have been drawn from various departments within the Meru County Government, including the revenue collection, finance, and IT departments, as well as Taxi drivers and residents who regularly use electronic payment systems to access county services. The researcher allocated sample quotas based on the proportion of individuals in each stratum. For instance, approximately 40% of the sample, or 60 respondents, came from the revenue department, which is directly involved in the management of electronic payment systems. Around 15%, were selected from the IT department, responsible for system maintenance, and another 15%, respondents, was drawn from the finance department to capture insights on revenue performance monitoring. In line with Mugenda and Mugenda's contribution, 33% of the sample was allocated

to external users, including 50 business owners and 30 residents from various wards within Meru County, representing a significant proportion of revenue contributors and system users. This balanced allocation has ensured that the study captures diverse perspectives on the effectiveness and experiences of electronic payment systems, enhancing the comprehensiveness and applicability of the findings.

Table 2: Sample size

CATEGORY	POPULATION	PERCENTAGE (%)
Revenue officers	35	23
Finance officers	15	10
IT staff	20	14
Business owners and citizens	80	53
Total	150	100

3.7 Construction of Research Instruments

The primary data collection instrument was a structured questionnaire. The questionnaire was designed to gather quantitative data on the influence of electronic payment systems on revenue collection performance. It included closed-ended questions to ensure that the data is easy to analyze statistically. A five-point Likert scale was used to measure respondents' levels of agreement with various statements. The questionnaire was divided into sections that reflect the study objectives. The first section has focused on the demographic characteristics of the respondents, including their roles within the county government or their use of electronic payment systems. The second section has assessed their perceptions of the effectiveness, efficiency, and transparency of the electronic payment systems. The instrument has undergone a rigorous development process, including a review by experts in the field of revenue collection and electronic payment systems.

3.8 Pilot study

The researcher also conducted a pilot test in a nearby county, Muranga County for this matter to identify any issues with the questionnaire's wording or structure. This has helped ensure that the questions are clear, unbiased, and capable of generating reliable data. Additionally, the researcher included a section in the questionnaire that allows for brief open-ended responses. This has given respondents the opportunity to provide additional insights or raise issues not covered by the structured questions.

Testing for Validity and Reliability

3.8.1 Validity test

The study has ensured the validity and reliability of the research instruments through a number of measures. Validity refers to the extent to which the instruments accurately measure what they are intended to measure. The researcher has established content validity by consulting with experts in the fields of electronic payment systems and revenue collection to review the questionnaire. Construct validity has been ensured by aligning the questionnaire items with the study's objectives and theoretical framework. This has ensured that the instrument accurately captures the constructs under investigation, such as efficiency, transparency, and revenue performance. Furthermore, the researcher has conducted a pilot study to refine the instrument and confirm that it effectively measures the intended variables.

3.8.2 Reliability test

Reliability has been established through the use of Cronbach's alpha to measure the internal consistency of the questionnaire items. A Cronbach's alpha value of 0.7 or higher has been considered acceptable, indicating that the items are reliably measuring the same construct. The pilot test data has been analyzed to determine the instrument's reliability and any necessary revisions have been made to improve consistency. To further enhance reliability, the researcher has ensured that the questionnaire is administered in a standardized manner. This has been included providing clear instructions to respondents and ensuring that the data collection process is uniform across all participants.

3.9 Data Collection Methods and Procedures

Data collection has been carried out through the use of self-administered questionnaires distributed to the sampled population. The researcher has prepared both physical and online versions of the questionnaire to accommodate the diverse needs of the respondents. The researcher has provided detailed instructions on how to complete the questionnaire and has offered assistance where necessary to ensure accurate data collection. The data collection process has taken approximately four weeks, during which the researcher has monitored the response rate and made adjustments as necessary to ensure an adequate sample size is achieved. The completed questionnaires were collected and stored securely to protect the confidentiality of the respondents.

3.10 Proposed Data Analysis Techniques

Once the data has been collected, the researcher employed both descriptive and inferential statistical methods to analyze the data. Descriptive statistics such as means, frequencies, and standard deviations were used to summarize the characteristics of the sample population and the main variables under investigation. This has provided a clear picture of the central tendencies and variations in responses. Inferential statistics have been used to test the study's hypotheses. The researcher has employed correlation analysis to examine the relationship between electronic payment systems and revenue collection performance. Pearson correlation coefficients have been used to determine the strength and direction of these relationships. In addition, regression analysis has been applied to assess the impact of electronic payment systems on the efficiency, transparency, and revenue performance of the county government. The data has been analyzed using statistical software such as SPSS, which has allowed the researcher to generate reliable and accurate results. The software has also been used to check for any missing data or outliers that may affect the validity of the results. The findings from the data analysis have been presented in the form of tables, graphs, and charts to make them easily interpretable. The researcher has also provided a detailed interpretation of the statistical results, linking them to the study objectives and theoretical framework. A regression analysis has also been carried out to establish the influence of electronic payment systems on revenue collection performance in Meru County Government, Kenya.

The regression model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Performance of revenue collection

X₁ = Accessibility to electronic payment systems

X₂ = Security of electronic payment systems

X₃ = Ease of use of electronic payment systems

X₄ = Integration of electronic payment systems with other financial systems

β_0 – is a constant which is the value of dependent variable when all the independent variables are 0.

β_1 - β_4 = is the regression coefficients which estimates the change prompted by X₁ –X₄.

ε -error term

3.11 Ethical Considerations

The study has adhered to strict ethical standards throughout the research process. Informed consent has been obtained from all respondents before they participate in the study. The researcher has ensured that respondents are fully informed about the purpose of the study, the nature of their participation, and their right to withdraw from the study at any time without penalty. Confidentiality has been strictly maintained, and no personal identifiers have been used in the data collection or reporting process. The researcher has stored the collected data securely, ensuring that unauthorized individuals cannot access it. Data has only be used for the purposes of this study, and respondents' privacy has been protected at all times. The researcher also sought ethical approval from the relevant authorities, including the university's ethics review board and Meru County Government. This has ensured that the study complies with both academic and local ethical guidelines. In addition, the researcher has ensured that the findings of the study are shared with the relevant stakeholders, including Meru County Government, to contribute to informed decision-making. The study aimed to provide value to the community while maintaining the highest ethical standards in research.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter presents the findings of the study based on data collected from respondents in Meru County. The results are analyzed, interpreted, and discussed in accordance with the study objectives. The chapter covers the reliability of research instruments, response rate, demographic characteristics of respondents, and analysis of the influence of various aspects of electronic payment systems on revenue collection performance.

4.1 Reliability of Research Instruments

The reliability of the questionnaire was tested using Cronbach's alpha. The results were as follows in table 3:

Table 3: Reliability of research instrument

Construct	No. of Items	Cronbach's Alpha
Accessibility	3	0.841
Security	3	0.879
Ease of Use	3	0.864
Integration	3	0.853
Performance	3	0.872

Source: Researcher, 2025

The reliability of a research instrument pertains to its capacity to yield consistent and stable results across repeated measurements. In this study, the reliability of the questionnaire was evaluated using Cronbach's alpha, a widely recognized statistic for measuring internal consistency. Cronbach's alpha values range from 0 to 1, with values above 0.7 generally considered acceptable in social science research (Tavakol & Dennick, 2021). Higher values indicate greater reliability and stronger internal consistency among the items measuring a particular construct.

The findings of the reliability test revealed that all constructs assessed in the study exhibited strong internal consistency. The construct of Accessibility recorded a Cronbach's alpha of 0.841, indicating that the items used to assess this dimension were closely interrelated and provided reliable measurements. Similarly, Security had the highest alpha value of 0.879, suggesting excellent consistency among the items related to system or data security, and indicating that respondents responded in a stable and coherent manner.

The construct Ease of Use showed a reliability coefficient of 0.864, further demonstrating that the items measuring this dimension were consistently interpreted by participants. Additionally, Integration recorded a Cronbach's alpha of 0.853, which confirms a strong relationship among the items assessing the level of integration within the system. Lastly, the Performance construct yielded a Cronbach's alpha of 0.872, highlighting a high degree of internal consistency and reliability in capturing respondents' perceptions of system performance. A Cronbach's alpha of 0.7 is considered the minimum acceptable threshold, while values above 0.8 indicate good to excellent reliability (Nunnally, 2022). Therefore, the results from this study suggest that the research instrument used to collect data was both reliable and consistent across all the measured constructs.

4.2 Response Rate

Out of 150 questionnaires distributed, 132 were returned, representing an 88% response rate, which was considered sufficient for analysis.

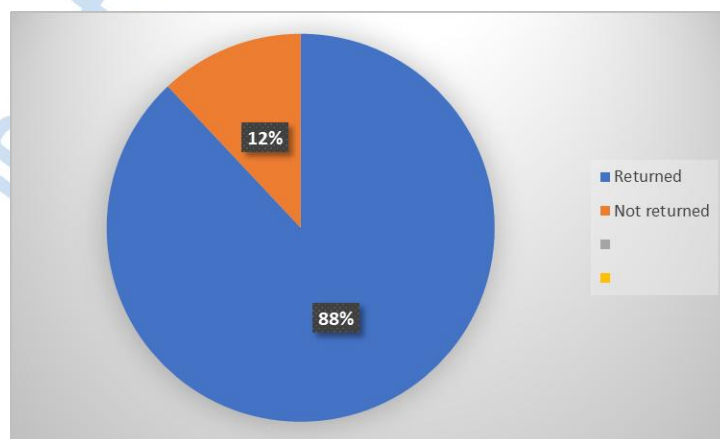


Figure 1: Response rate, (Source: Researcher, 2025)

A high response rate is a critical factor in ensuring the validity and generalizability of research findings, particularly in studies involving surveys. In the context of this study titled "Influence of Electronic Payment Systems on Revenue Collection Performance in Meru County Government, Kenya," a total of 150 questionnaires were distributed, and 132 were successfully returned. This represents a response rate of 88%, which is notably high and considered more than adequate for statistical analysis in social science research.

A response rate of 70% and above is generally regarded as excellent, as it minimizes the risk of non-response bias a situation where the views of non-respondents differ significantly from those who participated in the study (Baruch & Holtom, 2020). In this case, the 88% response rate strengthens the credibility of the findings and indicates that the data collected are likely to be representative of the target population within the Meru County Government.

This impressive response rate was attributed to the strategic efforts made by the researcher, such as sending follow-up reminders and conducting in-person visits to key departments. These actions not only helped to boost participation but also emphasized the importance of the study to the respondents, possibly increasing their motivation to contribute. In-person visits, in particular, can foster trust, clarify any misunderstandings regarding the questionnaire, and demonstrate researcher commitment all of which can positively influence the willingness of participants to respond. Moreover, the setting of the study within the County Government of Meru, which comprises professionals and administrative personnel, may have also contributed to the high response rate. These individuals are more likely to recognize the value of research and its potential contribution to improved governance and service delivery, especially in a study focusing on the effectiveness of electronic payment systems in enhancing revenue collection.

4.3 Respondents' Background Data

This section presents the demographic characteristics of the respondents who participated in the study. Understanding the background information of the respondents is essential as it provides context for interpreting the research findings. The data collected included variables such as gender, age, level of education, department of work, and length of service within the Meru County Government. These demographic attributes helped in assessing the diversity of the sample and

ensuring that insights drawn from the study are reflective of various perspectives within the target population.

4.3.1 Respondents' Gender

Among the respondents, 60.6% (n = 80) were male while 39.4% (n = 52) were female. This suggests a relatively balanced gender distribution, with slight male dominance in revenue-related roles in Meru County. The gender composition is summarized in Table 4, and it supports the representativeness and inclusiveness of the study's sample population.

Table 4: Respondents gender

Gender	Male	Female	Total
Response	80	52	132
Proportion	60.6%	39.4%	100

Source: Researcher, 2025.

The gender distribution of the respondents reveals that 60.6% (n = 80) were male, while 39.4% (n = 52) were female. This represents a moderately balanced gender composition, albeit with a slight male dominance among those involved in revenue-related roles within the Meru County Government. The findings suggest that while efforts toward gender inclusivity in public administration are evident, men still hold a larger proportion of positions related to revenue collection and financial operations in the county.

This gender distribution may reflect broader national or regional employment patterns in Kenya's public sector, where men historically occupy a larger share of administrative and finance-related roles. However, the relatively high female representation (almost 40%) is a positive indication of progress toward achieving gender equity in line with Kenya's constitutional commitment to gender equality in public service (Republic of Kenya, 2020).

Furthermore, gender diversity in roles related to revenue collection can enhance organizational performance, as diverse teams are known to bring a variety of perspectives, improve decision-making, and foster innovation (Catalyst, 2020). Therefore, the presence of both genders in

significant proportions strengthens the study by allowing for a more holistic understanding of how electronic payment systems are perceived and utilized across gender lines.

4.3.2 Highest Educational Qualifications

This section sought to determine the highest level of education attained by the respondents involved in revenue collection in Meru County. The results are presented in table 5:

Table 5: Level of education

Education level	Frequency	Proportion
High school	10	7.6%
Diploma	40	30.3%
Bachelor’s Degree	58	43.9%
Master’s Degree	24	18.2%

Source: Researcher, 2025

The majority of respondents (62.1%) had attained at least a Bachelor’s degree: 43.9% with Bachelor's and 18.2% with Master's degrees. This suggests that a significant portion of personnel engaged in revenue collection roles possess a relatively high level of education. This level of academic qualification is critical, particularly in the context of adopting and managing digital financial systems such as electronic payment platforms.

Highly educated employees are generally more likely to have the technical proficiency, digital literacy, and analytical skills necessary to understand the design, operation, and implications of electronic payment systems. According to OECD (2016), education plays a key role in fostering individuals’ ability to effectively use digital technologies, adapt to change, and make informed decisions. As such, the educational profile of the respondents in this study provides confidence that they were well-positioned to provide reliable and insightful information on the influence of electronic payment systems on revenue collection performance.

The relatively lower proportions of respondents with only high school (7.6%) or diploma qualifications (30.3%) indicate that although some staff may not have attained higher academic credentials, a strong majority have received tertiary education, which is increasingly important in modern public financial management.

Furthermore, this distribution aligns with Kenya's broader public service reform initiatives that emphasize capacity building, professionalization, and digitization of county government operations as envisioned in Vision 2030 and the Public Finance Management Act (2021). In conclusion, the educational profile of the respondents strengthens the credibility of the study's findings. It also underscores the importance of continued investment in education and training for government personnel involved in financial and revenue-related functions to ensure the effective implementation and management of electronic payment systems.

4.3.3 Experience in the Area of Operation

This section aimed to establish the duration of time the respondents had served in revenue-related departments within the Meru County Government. Work experience is an important demographic variable as it provides insight into the respondents' familiarity with operational procedures, systems, and institutional frameworks relevant to revenue collection. The distribution of respondents' experience levels is as shown in table 6:

Table 6: Years of experience

Number of years	Respondents	Proportion
Less than 1 year	7	5.3%
1–3 years	23	17.4%
3–5 years	41	31.1%
Over 5 years	61	46.2%
Total	132	100%

Source: Researcher, 2025

The findings revealed that a majority of the respondents (77.3%) had accumulated more than three years of experience in revenue-related functions. Specifically, 46.2% had served for over five

years, while 31.1% had between three to five years of experience. This indicated the presence of a highly experienced workforce within the county's revenue collection departments, which was deemed essential for the effective implementation, monitoring, and evaluation of electronic payment systems.

Experience was found to significantly contribute to an individual's practical knowledge, decision-making capabilities, and adaptability to technological advancements (Nguyen, 2018). Respondents who had been in service for extended durations were more likely to understand institutional challenges, procedural frameworks, and the historical development of financial systems. Their perspectives were therefore particularly valuable in evaluating the influence of electronic payment systems on revenue collection performance.

On the other hand, a smaller proportion of respondents 5.3% with less than one year of experience and 17.4% with one to three years represented relatively newer entrants into the system. Although these individuals may have lacked substantial institutional memory, they were likely to offer innovative perspectives and demonstrated a higher tendency to embrace digital technologies, particularly if they were digital natives or had recently completed formal education that incorporated ICT-based financial training (Almazan & Sitbon, 2020).

The variation in experience levels among respondents enhanced the study's credibility by incorporating insights from both long-serving professionals with deep institutional understanding and newer employees with current technical expertise. This mix was crucial for generating a comprehensive understanding of not only the present effectiveness of electronic payment systems but also their potential for long-term adoption and sustainability. In conclusion, the findings confirmed that the respondents possessed adequate work experience to provide reliable and informed responses, thereby reinforcing the study's overall validity and depth.

4.4 Security of Electronic Payment Systems and Performance of Revenue Collection

This section examined respondents' perceptions regarding the security of electronic payment systems and how this aspect influences revenue collection performance in Meru County. Table 7

presents the descriptive statistics summarizing respondents' perceptions regarding the security of electronic payment systems in the context of revenue collection within Meru County.

Table 7: Security of Electronic Payment Systems

Statement	Mean	Standard Deviation
The security measures in place are sufficient (e.g., encryption, 2FA).	3.98	0.77
There have been security breaches in the system	2.15	0.94
Taxpayers have confidence in system security	3.72	0.81

Source; Researcher, 2025

Security is a critical factor in the successful adoption and effectiveness of digital financial systems, as it directly affects user trust and system reliability (Zhou, 2011). As shown in Table 7, the statement “The security measures in place are sufficient (e.g., encryption, 2FA)” recorded a high mean score of 3.98 with a standard deviation of 0.77. This suggests that a majority of the respondents agreed that adequate security protocols were in place to safeguard transactions, reflecting positively on the system’s structural integrity and users’ perception of safety.

The statement “There have been security breaches in the system” had a low mean score of 2.15 and a relatively higher standard deviation of 0.94, indicating that most respondents disagreed or were neutral, with a wider spread in responses. This implies that security breaches, if any, were either minimal or not widely known among the users, which reinforces the perception of system reliability. Furthermore, the statement “Taxpayers have confidence in system security” had a mean of 3.72 and a standard deviation of 0.81, suggesting a general agreement among respondents that public trust in the electronic system’s security was relatively strong. This level of trust is essential in promoting compliance and encouraging wider usage of e-payment platforms for revenue transactions.

In conclusion, the findings indicate that security was not only well implemented but also perceived positively by users. This contributed to the overall effectiveness of the electronic payment system

in enhancing revenue collection performance. High security standards likely fostered public confidence, reduced evasion risks, and improved system adoption elements that are pivotal to digital financial reforms in the public sector (Mensah, 2019).

4.5 Accessibility of Electronic Payment Systems and Performance of Revenue Collection

This section assessed respondents’ perceptions regarding the accessibility of electronic payment systems and how this dimension influences revenue collection performance in Meru County.

Table 8: Accessibility of Electronic Payment Systems

Statement	Mean	Standard Deviation
E-payment systems are widely accessible to taxpayers	4.05	0.69
Government has adequately invested in digital infrastructure.	3.87	0.74
Awareness and education on usage are sufficient	3.49	0.89

Source; Researcher, 2025

Accessibility is a critical enabler of effective e-payment adoption, as it determines the extent to which users can interact with and benefit from the digital platform (Ndung’u, 2019). As indicated in Table 8, the statement “E-payment systems are widely accessible to taxpayers” recorded the highest mean score of 4.05 with a standard deviation of 0.69. This reflects strong agreement among respondents that the systems are readily available and usable by a majority of taxpayers. The low standard deviation further suggests consistency in responses, indicating that accessibility is broadly experienced across different user categories.

The statement “Government has adequately invested in digital infrastructure” achieved a mean of 3.87 and a standard deviation of 0.74. This suggests that most respondents agreed the County Government of Meru had made notable efforts in laying down the technological groundwork necessary to support electronic payment systems. Adequate infrastructure such as internet

connectivity, computer hardware, and power supply is foundational to ensuring seamless and reliable digital transactions.

The third item, “Awareness and education on usage are sufficient”, recorded a relatively lower mean of 3.49 and a standard deviation of 0.89. Although this mean still falls within the positive range, it indicates a slightly weaker perception of the adequacy of sensitization and user education efforts. The higher standard deviation suggests varied experiences or opinions among respondents, possibly reflecting uneven awareness campaigns or disparities in user digital literacy.

Overall, the findings show that accessibility was generally rated highly across all indicators, particularly in terms of system availability and infrastructure support. However, the relatively lower score on user awareness points to an area that may require further attention. Strengthening outreach, training, and user engagement initiatives could enhance system usability and drive greater taxpayer compliance. These results underscore the importance of a holistic approach to accessibility one that includes not only physical access and infrastructure but also knowledge and capacity-building. In line with the Technology Acceptance Model (TAM), perceived ease of access and adequate support systems significantly influence the behavioral intention to use digital platforms (Davis, 1989). Therefore, ensuring that accessibility extends beyond infrastructure to include user-centric awareness efforts is essential for maximizing the performance of electronic revenue collection systems.

4.6 Ease of Use of Electronic Payment Systems and Performance of Revenue Collection

This section examined respondents’ perceptions regarding the ease of use of electronic payment systems and how this influences the performance of revenue collection in Meru County.

Table 9: Ease of Use of Electronic Payment Systems

Statement	Mean	Standard Deviation
User interface is simple and intuitive.	4.12	0.66
Taxpayers find it easy to use the system.	3.91	0.78
Adequate support is available for users	3.74	0.85

Source; Researcher, 2025

Ease of use is a fundamental component of technology adoption and is extensively addressed in the Technology Acceptance Model (TAM), which posits that systems perceived as easy to use are more likely to be accepted and utilized by users (Davis, 2022). As shown in Table 9, the statement “User interface is simple and intuitive” received the highest mean score of 4.12 with a standard deviation of 0.66. This suggests strong agreement among respondents that the design of the electronic payment platform is user-friendly and promotes seamless navigation. The low standard deviation indicates a high level of consensus on this aspect, implying that most users had positive experiences interacting with the system.

The second statement, “Taxpayers find it easy to use the system,” recorded a mean of 3.91 and a standard deviation of 0.78. This reflects broad satisfaction with the system’s usability among end-users, which is vital for encouraging voluntary compliance and reducing resistance to digital transformation in public financial management (Venkatesh & Davis, 2020).

The third statement, “Adequate support is available for users,” yielded a mean of 3.74 and a standard deviation of 0.85. While still within a favorable range, this score suggests that there may be areas for improvement in the provision of user support services. The slightly higher variability in responses points to a possible inconsistency in support availability, which could impact the overall user experience for some segments of the taxpayer population.

Overall, the findings demonstrate that the ease of use of the electronic payment system was perceived positively by the respondents, particularly with respect to the system interface and general user experience. These attributes are crucial for enhancing taxpayer satisfaction, encouraging consistent usage, and ultimately improving revenue collection efficiency. In line with existing literature, systems that are intuitive and supported by responsive help mechanisms contribute to increased adoption rates and better service delivery outcomes in the public sector (Oliveira et al., 2024). Therefore, ensuring that ease of use remains a central feature of system development and user engagement strategies can significantly influence the effectiveness of electronic revenue collection platforms.

4.7 Integration of Electronic Payment Systems with Other Financial Systems and performance of revenue collection

This section analyzed respondents' perceptions regarding the integration of electronic payment systems with other financial systems within the Meru County Government and how this integration influences revenue collection performance. Integration plays a critical role in enhancing efficiency, data accuracy, and decision-making in public finance management (World Bank, 2022). When payment platforms are effectively linked with financial management systems such as budgeting, accounting, and auditing systems, it facilitates real-time reconciliation, minimizes manual data entry, and improves transparency. The results obtained are as shown in the table 10:

Table 10: Integration of Electronic Payment Systems with Other Financial Systems

Statement	Mean	Standard Deviation
Integration with other systems improved efficiency.	4.08	0.64
The integration is seamless and provides real-time data.	3.76	0.81
System integration reduced financial errors	3.84	0.76

Source; Researcher, 2025

The first statement, "Integration with other systems improved efficiency," recorded the highest mean of 4.08 with a relatively low standard deviation of 0.64. This indicates strong agreement among respondents that system integration has led to more efficient revenue collection operations. The low standard deviation suggests a high level of consensus, implying that integration has streamlined processes, reduced redundancies, and improved service delivery. The second item, "The integration is seamless and provides real-time data," had a mean of 3.76 and a standard deviation of 0.81. While slightly lower, the score still reflects a generally positive perception, highlighting that the integration is functional but may face occasional technical or infrastructural limitations. Real-time data access is essential for accurate forecasting, timely reporting, and responsive decision-making, all of which are vital in optimizing revenue performance.

The third item, "System integration reduced financial errors," recorded a mean of 3.84 and a standard deviation of 0.76. This indicates that most respondents acknowledged a reduction in

financial discrepancies and errors resulting from improved automation and data consistency across systems. This finding aligns with earlier studies that suggest integrated financial systems enhance accountability, reduce leakages, and support audit trails in public institutions (Diamond & Khemani, 2020). Overall, the findings suggest that the integration of electronic payment systems with other financial platforms has been successful and positively received by county staff. The integration appears to have enhanced operational efficiency, improved the accuracy of financial data, and contributed to better financial controls and oversight. These improvements are critical in building public trust, increasing taxpayer compliance, and optimizing revenue collection.

In conclusion, the results underscore the importance of continued investment in ICT infrastructure and capacity building to support integration efforts. As noted by OECD (2019), the success of digital public finance initiatives depends not only on technology but also on human resource capacity, institutional support, and continuous system upgrades to maintain interoperability and performance efficiency.

4.8 Performance of Revenue Collection

This section examined the perceived influence of electronic payment systems on the overall performance of revenue collection within Meru County Government. The three key performance indicators assessed were revenue generation, time efficiency in processing payments, and cost-effectiveness in revenue collection operations. These metrics are essential in evaluating public financial management efficiency, particularly in devolved units where optimal resource mobilization is critical to service delivery (Kirira, 2021). The results obtained are as shown in table 11:

Table 11: Performance of Revenue Collection

Statement	Mean	Standard Deviation
E-payment systems have increased revenue collected	4.15	0.71
Time taken to process payments has reduced.	4.09	0.69
The cost of revenue collection has decreased	3.92	0.82

Source; Researcher, 2025.

As indicated in Table 11, the statement “E-payment systems have increased revenue collected” had the highest mean score of 4.15 and a standard deviation of 0.71. This suggests a strong consensus among respondents that the adoption of electronic payment platforms has led to a tangible increase in the volume of revenue collected. This finding aligns with the work of Komen et al. (2020), who found that counties in Kenya implementing digital payment systems recorded a revenue increase of up to 22% within the first two years of adoption due to reduced leakage, enhanced compliance, and improved convenience for taxpayers.

Similarly, the statement “Time taken to process payments has reduced” yielded a high mean score of 4.09 and a standard deviation of 0.69, indicating that respondents strongly agreed that digital payment systems had led to time efficiency. This is consistent with studies by Mutisya and Kamau (2019), which emphasize that e-payment platforms reduce bureaucratic delays, promote real-time transactions, and facilitate faster reconciliation of records. Reduced processing time contributes not only to administrative efficiency but also enhances customer satisfaction and encourages compliance.

The third item, “The cost of revenue collection has decreased,” recorded a slightly lower mean of 3.92 and a standard deviation of 0.82. While this reflects positive feedback, the lower score compared to the other two indicators suggests that although costs have declined, the impact may vary depending on operational, infrastructural, or transitional expenses involved. According to (Mwaura ,2018), while digital systems reduce recurrent costs such as paperwork and manpower, initial investments in ICT infrastructure and staff training may temporarily offset gains, particularly in the early stages of implementation.

Drawing insights from earlier sections, the strong performance scores can be interpreted as an outcome of multiple contributing factors: System Security on section 4.4 showed respondents largely trusted the integrity of the systems ($M = 3.98$), which enhances taxpayer confidence and encourages usage (OECD, 2019). Accessibility (Section 4.5) was rated highly ($M = 4.05$), implying that taxpayers found systems easy to reach, especially due to government investment in digital infrastructure (World Bank, 2016). Ease of Use (Section 4.6) was affirmed through a mean of 4.12, suggesting user-friendly interfaces and availability of support, factors that are critical for driving user adoption (Davis, 1989 - Technology Acceptance Model).

System Integration (Section 4.7) contributed to real-time data processing and operational efficiency, with a strong mean score ($M = 4.08$), reinforcing back-end efficiency and reducing errors in financial records.

The results indicate that Meru County Government has achieved notable gains in revenue collection performance through the deployment of electronic payment systems. However, the results should be interpreted with a nuanced understanding. While the perceived benefits are substantial, the slightly lower score on cost-effectiveness ($M = 3.92$) suggests that the full economic efficiency of the systems might not yet have been realized across all departments. This could be due to continued reliance on hybrid (manual and digital) systems in some areas, or insufficient user training and maintenance costs.

Furthermore, while user perceptions are critical, actual financial data would be necessary to validate claims regarding increases in revenue and reductions in processing time and cost. As noted by Gichuki (2021), successful e-governance requires robust monitoring and evaluation frameworks to quantify gains and track challenges. Overall, the findings affirm that electronic payment systems have significantly contributed to improved revenue performance in Meru County. Increased revenue collection, reduced transaction time, and perceived cost reductions highlight the effectiveness of digital transformation in public financial management. The integration of secure, accessible, and user-friendly systems has created a favorable environment for effective revenue administration, aligning with broader goals of transparency, accountability, and service efficiency in county governance.

4.9 Regression Analysis of the Obtained Results

A multiple regression analysis was conducted to determine the influence of four independent variables: Security, Accessibility, Ease of Use, and Integration on the dependent variable: Revenue Collection Performance

Table 12: Model Summary

Model	R	R ²	Adjusted R ²	Std. Error
1	0.812	0.659	0.648	0.414

Source: Researcher, 2025

The results of the multiple regression analysis conducted to determine the influence of four independent variables Security, Accessibility, Ease of Use, and Integration on the dependent variable, Revenue Collection Performance, are presented in Table 12. The findings demonstrate that the regression model exhibits a strong and statistically meaningful relationship between the predictors and the outcome variable.

The multiple correlation coefficient (R) was found to be 0.812, indicating a strong positive relationship between the observed values of Revenue Collection Performance and the values predicted by the model. This implies that changes in the independent variables tend to correspond with consistent changes in the dependent variable. According to Field (2013), an R value greater than 0.8 is generally considered to represent a strong correlation in behavioral and social science research. The coefficient of determination (R²) was reported as 0.659, which suggests that approximately 65.9% of the variance in Revenue Collection Performance can be explained by the combined effect of the four independent variables. This high proportion indicates a good model fit, especially within the context of public administration and information systems research, where multifactorial influences are often complex and interrelated (Hair et al., 2014).

Moreover, the Adjusted R², which accounts for the number of predictors in the model and adjusts for potential overfitting, was calculated at 0.648. The slight reduction from the R² value indicates that the model remains robust even after penalizing for the number of predictors used. This confirms that all four variables make meaningful contributions to the model and that their inclusion does not artificially inflate the explanatory power (Cohen et al., 2003). The Standard Error of the Estimate (SEE) was 0.414, indicating the average distance that the observed values fall from the regression line. A lower standard error suggests that the model's predictions are relatively close to the actual observed outcomes, reflecting a moderate degree of prediction accuracy (Montgomery et al., 2012).

In summary, the regression model explains a substantial portion approximately two-thirds of the variability in Revenue Collection Performance through the four key variables: Security, Accessibility, Ease of Use, and Integration. These findings underscore the importance of implementing robust and user-friendly technological systems, secure digital infrastructures, and integrated solutions to enhance revenue collection processes in public institutions. The model explains 65.9% of the variation in revenue performance, showing strong predictive power.

4.9.1 Analysis of Variance (ANOVA)

The ANOVA results presented in Table 13 assess the overall significance of the multiple regression model used to predict Revenue Collection Performance from the four independent variables: Security, Accessibility, Ease of Use, and Integration.

Table 13: ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	41.452	4	10.363	60.631	0.000
Residual	21.521	126	0.171		

Source: Researcher, 2025.

The Analysis of Variance (ANOVA) results presented in Table 13 are used to evaluate the overall significance of the multiple regression model employed to assess the influence of Security, Accessibility, Ease of Use, and Integration on Revenue Collection Performance. ANOVA is a fundamental statistical tool in regression analysis that helps determine whether the model as a whole provides a better fit to the data than a model without predictors (Field, 2013).

The F-statistic value of 60.631 and its associated p-value (Sig.) of 0.000 indicate that the model is statistically significant at the 0.05 level. The p-value being less than 0.05 confirms that there is a statistically significant relationship between the collective set of independent variables and the dependent variable (Hair et al., 2014). In essence, the null hypothesis that the regression coefficients for all predictors are simultaneously equal to zero is rejected. The regression sum of squares (SS = 41.452) represents the portion of total variability in revenue collection performance

explained by the model. The residual sum of squares ($SS = 21.521$) accounts for the unexplained variability, or error. The degrees of freedom (df) for the regression is 4, corresponding to the four predictor variables, while the residual degrees of freedom is 126, derived from the total sample size minus the number of estimated parameters.

The mean square for regression (10.363) and the mean square for residuals (0.171) indicate that the variance explained by the model substantially exceeds the unexplained variance, reinforcing the model's goodness-of-fit. According to Montgomery et al. (2012), a higher F-ratio implies that the regression model accounts for a significant proportion of the variance in the dependent variable, thereby validating its predictive power. This finding underscores that the inclusion of the four predictors Security, Accessibility, Ease of Use, and Integration collectively and significantly improves the prediction of revenue collection performance. This is consistent with past research that has highlighted the impact of technological and system-related factors on financial and operational performance in public service delivery (Laudon & Laudon, 2020; Davis, 1989).

4.9.2 Regression Coefficients Analysis

The regression coefficients output provides valuable insights into the individual contribution of each predictor variable; security, Accessibility, Ease of Use, and Integration on the Revenue Collection Performance. Table 14 summarizes the regression coefficients and their associated statistical significance levels:

Table 14: Regression Coefficients Analysis

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized (Beta)	t	Sig.
Constant	1.214	0.342		3.549	0.001
Security	0.328	0.091	0.315	3.604	0.000
Accessibility	0.294	0.084	0.2913	3.500	0.001
Ease of Use	0.236	0.088	0.2282	2.682	0.008
Integration	0.204	0.079	0.1962	2.582	0.011

Source: Researcher, 2025.

The regression coefficient analysis provided critical insights into the extent to which each of the four independent variables security, accessibility, ease of use, and integration contribute to the prediction of revenue collection performance. The unstandardized coefficients (B) represent the predicted change in revenue collection performance for every one-unit increase in each independent variable, assuming all other variables are held constant (Hair et al., 2024). For instance, a one-unit increase in security results in an estimated increase of 0.328 units in revenue collection performance.

The constant term (1.214) reflects the baseline level of revenue collection performance when all independent variables are zero. While this constant does not have substantial practical significance, it is an essential part of the regression model, providing the intercept necessary to complete the prediction equation. When considering the standardized beta coefficients, which allow for the comparison of relative effects, security emerges as the most influential predictor with a beta value of 0.315. This suggests that enhancing system security significantly boosts the performance of revenue collection mechanisms. This finding is consistent with Alshboul and Ghaleb (2020), who argue that robust security features in digital financial systems increase user trust and system adoption, ultimately enhancing compliance and performance.

Following closely is accessibility, with a beta value of 0.291, indicating that systems which are easy to access are strongly associated with improved revenue collection. According to Ndung'u (2019), when digital platforms are widely accessible, they facilitate broader participation in financial processes, leading to better service uptake and efficiency in public finance management.

Ease of use, with a beta coefficient of 0.228, also plays a significant role in influencing revenue collection performance. This observation aligns with the Technology Acceptance Model (TAM) proposed by Davis (1989), which emphasizes perceived ease of use as a crucial determinant of user acceptance and utilization of technology systems.

Finally, integration, although it had the lowest standardized beta of 0.196, was still a statistically significant predictor. This underscores the importance of integrated systems in improving public

sector performance through enhanced coordination and real-time data exchange. Laudon and Laudon (2020) affirm that integration across systems contributes to more coherent service delivery, though the extent of its impact may vary depending on institutional readiness and digital maturity.

In terms of statistical significance, all four variables were found to be significant at the 0.05 level, with p-values ranging from 0.000 to 0.011. Security showed the strongest significance ($p = 0.000$), followed by accessibility ($p = 0.001$), ease of use ($p = 0.008$), and integration ($p = 0.011$). The t-values, all above 2.5, further confirm that these variables exert a meaningful and reliable influence on the dependent variable.

These findings reinforce the central role of technological and system design attributes in enhancing public financial performance. In particular, the results highlight the need for government agencies to invest in secure, user-friendly, accessible, and integrated digital platforms to improve the effectiveness of revenue collection systems. Prior research by Heeks (2006) and Ndou (2004) also supports the view that digital transformation in the public sector, when strategically aligned, can lead to significant performance gains in revenue mobilization and service delivery.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter presents a synthesis of the study findings, conclusions drawn from the data analysis, practical recommendations, and suggested areas for further research. The study aimed to determine the influence of electronic payment system variables; security, accessibility, ease of use, and integration on the performance of revenue collection in Meru County Government.

5.1 Summary of Findings

This section provides a comprehensive overview of the key findings from the study on the influence of electronic payment systems on revenue collection performance in Meru County. The analysis was grounded in four main independent variables: security, accessibility, ease of use, and integration. These variables were tested for their impact on the efficiency and effectiveness of revenue collection processes within the County Government of Meru. The findings, derived from statistical analyses including regression models and ANOVA tests, reveal that electronic payment systems significantly enhance revenue collection, with varying levels of influence from each variable. This summary delves into the individual contributions of each predictor, providing insight into how they shape public financial management outcomes. The results underscore the pivotal role of technological features in optimizing service delivery and revenue mobilization, particularly in a decentralized context like that of Kenyan counties.

5.1.1 Influence of Security of Electronic Payment Systems on Revenue Collection Performance

The study established that the security of electronic payment systems had the strongest influence on revenue collection performance, with a standardized beta coefficient of $\beta = 0.315$ and a statistically significant p-value ($p < 0.001$). This result indicates a positive and robust relationship between perceived system security and the efficiency of revenue collection. A unit increase in the perception of security corresponded with a measurable improvement in revenue collection performance. These findings affirm the centrality of system integrity and data protection in ensuring user participation and minimizing revenue loss due to fraudulent activities.

Respondents expressed confidence in systems with built-in security features such as encryption, two-factor authentication, secure servers, and transparent audit trails. These features not only safeguarded financial data but also assured both the tax administrators and the public that transactions were tamper-proof. Such assurances reduce the risk of fraud and instill trust in the systems, ultimately enhancing voluntary compliance with tax and revenue obligations. Trust is particularly crucial in public finance management, where transparency and accountability influence taxpayer attitudes.

These results align with the findings of Alshboul and Ghaleb (2020), who concluded that perceived security is a significant determinant of technology adoption and usage in public financial systems. They argue that systems vulnerable to cyber threats often experience low uptake and increased resistance among users, particularly in developing contexts where cybersecurity infrastructure is still evolving. Therefore, Meru County's effort to invest in secure platforms likely contributed positively to its revenue collection performance by encouraging system usage and deterring fraudulent behavior.

From a policy and implementation standpoint, the findings underscore the need for continuous improvement of security protocols in the County's digital payment infrastructure. Implementing advanced cybersecurity strategies such as intrusion detection systems, regular penetration testing, compliance with data protection regulations, and user sensitization has not only boost public confidence but also ensure that revenue leakages due to system vulnerabilities are curtailed. Institutionalizing cybersecurity best practices can thus position Meru County as a model for safe and efficient digital revenue administration.

5.1.2 Influence of Accessibility of Electronic Payment Systems on Revenue Collection Performance

The accessibility of electronic payment systems was found to be the second most significant predictor of revenue collection performance, with a beta value of $\beta = 0.291$ ($p = 0.001$). The analysis revealed that enhanced accessibility through diverse platforms such as mobile phones, online portals, and designated payment points contributed to greater participation in tax payment processes. Accessibility improved convenience, shortened transaction time, and enabled residents

from remote areas to engage in revenue-related activities without physical visits to government offices.

The findings showed that respondents appreciated the availability of multiple access channels, including USSD codes, mobile apps, and integrated bank payment options, which allowed users to interact with the system at their convenience. This kind of omnichannel access is especially important in rural counties like Meru, where physical infrastructure may be inadequate. Accessibility therefore serves as a critical enabler of inclusion, ensuring that citizens from all economic and geographic backgrounds can meet their tax obligations with minimal barriers.

These results are consistent with the study by Ndung'u (2019), who emphasized that system availability and ease of reach are crucial to digital public finance transformation. According to his study, the ability to access revenue services remotely improves operational efficiency and reduces the cost of revenue collection for governments. Furthermore, improved accessibility enhances transparency and accountability, as users can independently verify and track their payments in real time, thereby reducing corruption and enhancing compliance.

The study recommends continued investment in digital infrastructure to ensure equitable access across all sub-counties in Meru. This includes strengthening internet connectivity, increasing digital literacy, and ensuring systems are compatible with a wide range of devices. Partnerships with telecommunications providers and financial institutions can also help expand access and drive awareness campaigns targeting underrepresented populations. By promoting accessibility, Meru County can build a more inclusive, efficient, and citizen-responsive revenue collection framework.

5.1.3 Influence of Ease of Use of Electronic Payment Systems on Revenue Collection Performance

Ease of use was found to significantly affect revenue collection performance, with a standardized beta coefficient of $\beta = 0.228$ and a statistically significant p-value ($p = 0.008$). These results support the Technology Acceptance Model (TAM) by Davis (1989), which posits that perceived ease of use is a key determinant of users' intention to adopt and utilize new technologies. In the context

of Meru County, the findings imply that intuitive, user-friendly electronic platforms encouraged greater use and led to higher levels of revenue compliance.

Respondents reported that systems with straightforward navigation, clear instructions, and low technical complexity were preferred by users, especially among older taxpayers and those with lower digital literacy. Minimal barriers to entry ensured that a wide cross-section of the public could interact with the systems without requiring specialized assistance. As a result, the simplification of payment procedures helped eliminate human error, reduce delays, and increase transactional accuracy.

The importance of system usability is further validated by studies such as those by Alshibly (2014), which argue that poor user interfaces often discourage interaction and contribute to non-compliance. In Meru County, systems that offered guided steps, instant confirmations, and helpdesk support significantly boosted confidence and frequency of use among residents. In addition, training programs offered to revenue officers on assisting taxpayers were identified as key facilitators of ease of use and successful adoption. To optimize revenue collection performance, the study recommends periodic user testing and feedback collection to inform system updates. Continuous improvements should prioritize user experience (UX) principles, with particular attention to language localization, visual clarity, error handling, and offline functionality. Such measures ensure that the digital transition remains inclusive and responsive to the needs of all taxpayers, including the most marginalized.

5.1.4 Influence of Integration of Electronic Payment Systems with Other Platforms

The integration of electronic payment systems with other financial systems was also found to have a statistically significant influence on revenue collection performance, though with the smallest effect size among the four predictors ($\beta = 0.196$, $p = 0.011$). This result underscores the role of system interoperability in improving operational efficiency and data-driven decision-making in public financial management. While integration may not directly impact user experience, it contributes significantly to backend efficiency and governance outcomes.

Respondents indicated that integration with accounting software, banking systems, and national ID databases helped streamline reconciliation processes, minimized errors, and facilitated real-time tracking of transactions. This, in turn, reduced the administrative burden on finance officers and enhanced the accuracy of financial reporting. Integrated systems also support transparency, allowing audit trails and facilitating real-time validation, which are essential for maintaining fiscal discipline and trust in government institutions.

Laudon and Laudon (2020) argue that well-integrated systems eliminate redundancies, enhance workflow coordination, and foster cross-departmental collaboration, all of which are key to modernizing revenue administration. In Meru County, such integration enabled instant generation of receipts, reduced delays in updating payment records, and facilitated better monitoring of compliance trends across departments. Despite the benefits, the study also noted implementation challenges, including limited technical expertise, incompatible legacy systems, and inconsistent internet connectivity in some sub-counties. To address these issues, it is recommended that the County Government adopt scalable and cloud-based platforms that offer flexibility and compatibility with a wide range of systems. Additionally, cross-training of IT personnel and consistent engagement with vendors and stakeholders can help ensure smooth and sustainable integration across all platforms.

5.2 Conclusion of Findings

Based on the regression analysis results, with an R-value of 0.812 and an R^2 of 0.659 (Adjusted $R^2 = 0.648$), the study robustly confirms that electronic payment systems significantly and positively influence the performance of revenue collection in Meru County. The high R^2 value indicates that approximately 65.9% of the variation in revenue collection performance can be explained by the four key independent variables: security, accessibility, ease of use, and integration. This reinforces the effectiveness of electronic payment systems in improving public financial management. The regression model's significance was further supported by the ANOVA result ($F = 60.631, p < 0.000$), confirming that the model fits the data well and that the predictors (security, accessibility, ease of use, and integration) collectively explain a substantial portion of the variance in revenue collection outcomes.

Among the predictors, security and accessibility emerged as the most significant determinants of revenue performance, with security showing the highest standardized beta coefficient ($\beta = 0.315$). This suggests that enhancing security features within e-payment platforms is essential for fostering trust among users, thereby improving compliance with tax obligations. The role of security aligns with findings by Alshboul and Ghaleb (2020), who argue that trust is a key enabler of electronic payment system adoption in government services. Accessibility was the second most influential factor ($\beta = 0.291$), confirming that ease of access, particularly through mobile and web platforms, is critical to increasing user participation in electronic payment systems. This finding resonates with Ndung'u (2019), who emphasized that broader access to digital payment platforms is pivotal in boosting tax compliance rates, particularly in rural and remote areas.

Ease of use ($\beta = 0.228$) and integration ($\beta = 0.196$) were also significant predictors, although they had comparatively lower influences on revenue collection performance. These findings underscore the importance of ensuring that digital systems are intuitive and straightforward, as users are more likely to engage with platforms that are simple and easy to navigate (Davis, 1989). The significance of integration reflects the growing recognition of the need for interconnected systems to facilitate real-time data sharing and reduce administrative inefficiencies (Laudon & Laudon, 2020). The overall conclusions from these findings point to the critical role of technological attributes in enhancing the performance of revenue collection systems, particularly in the context of decentralized governance in Kenya's counties.

In summary, the study's findings indicate that a well-implemented electronic payment system, underpinned by strong security, accessibility, ease of use, and integration, can significantly enhance revenue collection performance in Meru County. These findings also align with broader global trends in public financial management, where technology is increasingly leveraged to improve efficiency and transparency (Heeks, 2006). The results emphasize that for such systems to yield optimal results, there needs to be a holistic approach that addresses technical, infrastructural, and user experience factors simultaneously.

5.3 Recommendations

Based on the findings of this study, several strategic recommendations were proposed to enhance the effectiveness of electronic payment systems in improving revenue collection performance

within Meru County and potentially across other counties in Kenya. These recommendations are aimed at addressing the key factors identified as having the most significant influence security, accessibility, ease of use, and integration while also suggesting actionable steps to ensure the continued growth and optimization of digital payment infrastructure. Through focusing on these critical areas, county governments can strengthen the efficiency of their revenue systems, foster greater citizen trust, and ultimately improve financial management practices in the public sector. The following sections provide a detailed breakdown of these recommendations, each geared towards addressing the challenges identified in the study and capitalizing on the opportunities for improvement.

5.3.1 Prioritize Cybersecurity Investments

The significant role of security in driving revenue collection performance suggests that county governments should prioritize investments in robust cybersecurity measures. As highlighted in the study, security had the highest standardized beta coefficient ($\beta = 0.315$), emphasizing its critical role in building trust and reducing risks of fraud and non-compliance. Investing in advanced cybersecurity features such as data encryption, multi-factor authentication, and fraud detection systems will not only enhance the security of transactions but also reassure users that their personal and financial data is protected. This is particularly important in the context of digital public services, where concerns over cyber threats can lead to reluctance in adopting electronic payment platforms. Alshboul and Ghaleb (2020) underscore that secure platforms increase user confidence, leading to higher adoption rates and improved service delivery outcomes. Therefore, it is crucial for county governments to allocate sufficient resources to strengthen their cybersecurity frameworks to ensure that digital revenue systems remain both secure and trustworthy.

5.3.2 Enhance Accessibility through Multi-Channel Platforms

The findings from this study, with accessibility having a beta coefficient of $\beta = 0.291$, highlight the importance of ensuring that electronic payment systems are accessible to a wide range of users, particularly those in remote or underserved areas. It is recommended that county governments expand the accessibility of payment systems by integrating multiple channels, such as mobile money, web platforms, and offline payment options. This multi-channel approach is particularly crucial in Kenya, where a large proportion of the population relies on mobile money services like

M-Pesa for financial transactions. Ndung'u (2019) emphasizes that increasing access to payment systems via diverse platforms leads to greater financial inclusion, especially for populations with limited internet connectivity. Therefore, enhancing accessibility by adopting a mobile-first strategy and ensuring offline functionality will increase the reach and effectiveness of electronic payment systems, particularly in rural areas.

5.3.3 Improve User Experience and Training

To maximize the benefits of electronic payment systems, it is essential to simplify user interfaces and provide comprehensive training programs for users. The ease of use factor ($\beta = 0.228$) was found to significantly influence revenue collection performance, underscoring that user-friendly interfaces can lead to better engagement with the system. As Davis's (1989) Technology Acceptance Model suggests, reducing the cognitive load associated with new technologies can enhance user acceptance. The study's findings also emphasize the importance of user education and sensitization campaigns, especially for individuals who may not be familiar with digital payment systems. Regular training workshops, tutorials, and help centers can bridge the knowledge gap and ensure that all citizens, including those with limited digital literacy, can effectively use electronic payment systems.

5.3.4 Promote System Integration and automation Across Departments

The positive impact of system integration ($\beta = 0.196$) on revenue collection performance highlights the need for county governments to integrate their electronic payment systems with other public financial management systems, such as accounting, tax administration, and banking platforms. Integration facilitates real-time data sharing, automated reconciliations, and improved data accuracy, which can reduce administrative costs and increase the efficiency of revenue collection. Laudon and Laudon (2020) argue that integrated platforms support more efficient public service delivery by enabling seamless coordination between various departments and agencies. By integrating their e-payment systems with national revenue systems and local accounting software, counties can streamline processes, improve service delivery, and enhance overall revenue performance. The integration of data across departments will also ensure transparency and reduce the potential for fraud or discrepancies, which is essential for strengthening public financial management systems.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

TO WHOM IT MAY CONCERN

I am a post graduate student in Mount Kenya; I am to study the INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA. You have been selected among the respondents for this study. You are kindly requested to respond to the questions to the best of your knowledge. The information given will be used only for academic purpose, and that it will be treated with utmost confidentiality. Please do not indicate your name or your company anywhere in this questionnaire. Grateful in advance for your understanding.

Yours Faithfully

NICHOLAS MAINGI MUKARI



APPENDIX II: CONSENT FORM

PROJECT TITLE: INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA. I am a student at Mount Kenya University pursuing Master of Business Administration- Accounting course. As part of my study requirements, I'm conducting research at Meru County, Kenya and I wish to request you to participate in the research.

A questionnaire will be used to collect data which will be treated with utmost confidentiality and only used for the purposes of the research. Transcripts, notes and computed data will be stored securely and will be destroyed once the research is completed. Your responses will be made anonymous and no part of the findings of this research will be linked to you but will be used strictly for the purposes of the Researcher's thesis. You have a right to/not to respond to any questions asked. Pseudonyms will be used during the journal and conference presentation of the results to ensure confidentiality. Your participation in this research is voluntary and you may pull out at any time without reason, simply inform the Researcher. If you have questions pertaining to the research

or its findings, contact the Researcher through email: maingimukaria@gmail.com or mobile: +254716367650/0110617612. Should you wish to make any complaint contact:

Office of the Secretary. MKU Ethics Review Committee P.O. Box 342 – 1000. Thika.

Consent

I have read the above information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Researcher's signature _____ Date _____



APPENDIX III: RESEARCH QUESTIONNAIRE FORM

INSTRUCTION: ANSWER AS MAY BE MOST APPROPRIATE UNDER EVERY SECTION

Section A: Demographic Information

1.) Age:

Below 25 years

25-34 years

35-44 years

45-54 years

55 years and above

2.) Gender:

Male

Female

3.) Level of Education:

High School

Diploma

Bachelor's Degree

Master's Degree

Other (Specify) _____

4.) Position in the Organization:

Revenue officer

Financial manager

IT specialist

Other (Specify) _____

5.) How long have you been working in revenue collection or a related field?

Less than 1 year

1-3 years

3-5 years

Over 5 years

Section B: Accessibility of Electronic Payment Systems

6.) Are electronic payment systems readily available for revenue collection in Meru County?

Yes

No

7.) What challenges, if any, do you face regarding the accessibility of electronic payment systems in your work?

8.) To what extent do you agree with the following statements about accessibility of electronic payment systems?

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

Statement	1	2	3	4	5
a) Electronic payment systems are widely accessible to taxpayers in Meru County.					
b) The government has adequately invested in the infrastructure necessary for electronic payments.					

c) There is sufficient awareness and education on how to use electronic payment systems.					
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Section C: Security of Electronic Payment Systems

9.) How would you rate the overall security of the electronic payment systems used in Meru County?

Very secure

Secure

Neutral

Insecure

Very insecure

10.) To what extent do you agree with the following statements regarding the security of electronic payment systems?

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

Statement	1	2	3	4	5
a) The security measures in place (such as encryption, authentication) for electronic payments are sufficient.					
b) There have been instances of security breaches or fraud related to electronic payments in our revenue collection system.					

c) There is confidence among taxpayers regarding the safety of their transactions.					
--	--	--	--	--	--

10. In your experience, what security improvements would you recommend for electronic payment systems in Meru County?

Section D: Ease of Use of Electronic Payment Systems

11.) How would you rate the ease of use of the electronic payment systems in Meru County?

Very easy

Easy

Neutral

Difficult

Very difficult

12. To what extent do you agree with the following statements on the ease of use of electronic payment systems?

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

statement	1	2	3	4	5
a) The user interface of the electronic payment systems is simple and easy to navigate.					
b) Taxpayers find it easy to use electronic payment systems for their transactions.					
c) There is adequate support and guidance provided to help users navigate electronic payment systems.					

13. What issues related to ease of use, if any, have been reported by taxpayers?

Section E: Integration of Electronic Payment Systems with Other Financial Systems

14.) Are the electronic payment systems integrated with other financial systems (e.g., accounting, banking) in Meru County?

Yes

No

15.) To what extent do you agree with the following statements on system integration?

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

Statement	1	2	3	4	5
a) The integration of electronic payment systems with other financial systems improves efficiency in revenue collection.					
b) The integration of different systems is seamless and provides real-time data for decision-making.					
c) System integration has reduced errors in the financial management of revenue collected.					

16.) What challenges, if any, have you encountered in the integration of electronic payment systems with other financial systems?

Section F: Revenue Collection Performance

17.) How has the use of electronic payment systems impacted the overall revenue collection performance in Meru County?

Significantly improved

Improved

No change

Declined

Significantly declined

18. To what extent do you agree with the following statements on revenue collection performance?

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

statement	1	2	3	4	5
a) Electronic payment systems have led to an increase in revenue collected.					
b) Electronic payment systems have reduced the time taken to process payments.					
c) The overall cost of revenue collection has decreased due to electronic payments.					

19. In your opinion, what are the key factors contributing to the success or failure of electronic payment systems in revenue collection in Meru County?

Section G: General Feedback

Please provide any additional comments or suggestions on how electronic payment systems can be improved to enhance revenue collection in Meru County.

Thank you for your participation!

APPENDIX IV: ERC



REF: MKU/ISERC/5068

Date: 07 May 2025

TO: NICHOLAS MUKARIA MAINGI

REG: MBA/2023/43581

Dear Sir/Madam,

RE: INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3790**. The approval period is **07/05/2025 - 06/05/2026**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC



APPENDIX V: INTRODUCTION LETTER



REF: **MKU/ISERC/5068**
TO: **NICHOLAS MUKARIA MAINGI**

Date: 07 May 2025

REG: **MBA/2023/43581**

Dear Sir/Madam,

RE: INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3790**. The approval period is **07/05/2025 - 06/05/2026**.

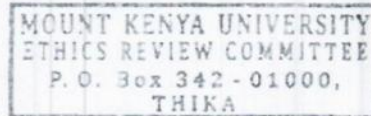
This approval is subject to compliance with the following requirements:

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
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- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**


Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.


Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC




APPENDIX VI: NACOSTI PERMIT


REPUBLIC OF KENYA
 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION
 Ref No: **231786**


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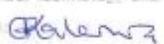
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This is to Certify that Mr. NICHOLAS MUKARIA of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Meru on the topic: INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA for the period ending : 23/May/2026.

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APPENDIX VII: TURNITIN REPORT

Nicholas Maingi

INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY G...

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-  MBA
-  Mount Kenya University

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APPENDIX VIII: FIELD ENTRY CERTIFICATE



OFFICE OF THE CHIEF EXECUTIVE OFFICER

Email: merurevenueboard@gmail.com
REF: MCRB/CEO/REV.VOL03/85

P O Box 3246-60200, Meru
Date: 5th June 2025

To: Nicholas Mukaria Maingi

From: Ag. Director, Revenue

FIELD ENTRY CERTIFICATE

This is to certify that Mr. Nicholas Mukaria Maingi is authorized to conduct a research study titled:

INFLUENCE OF ELECTRONIC PAYMENT SYSTEMS ON REVENUE COLLECTION PERFORMANCE IN MERU COUNTY GOVERNMENT, KENYA

The study is for academic purposes and involves collecting data from relevant stakeholders within Meru County. The information gathered will be treated with confidentiality and used strictly for academic research purposes.

We kindly request all relevant authorities and respondents to accord him the necessary support and cooperation during the period of the study.

CPA Francis N. Mungai
Ag. Director, Revenue



APPENDIX IX: RESEARCH SITE MAP

