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#### ABSTRACT

The objective of the study is to establish the effect of mobile payments on the financial performance of SMEs in Kirinyaga County. The study was based on the Diffusion of Innovation theory. This study employed a descriptive study design. The targeted population was the 226 SMEs recorded by ministry of finance and revenue, revenue department, of Kirinyaga County as having renewed their licenses for 5 consecutive years. The sample size was 160 respondents, which were arrived at with the aid of the Yamane formula. Cluster sampling technique was used based on the fact that the data was collected from different towns within the same county; hence, there was equal geographical representation among the different towns within Kirinyaga County. Mixed questionnaires were used to collect primary data for the study. The questionnaires were administered through Google forms, filled and submitted through the same platform. Prior to giving out the questionnaires in the field to SME owners, a pre-test of 10 SME owners in Tharaka Nithi County was conducted to ensure that the questionnaire is reliable and valid. Some judgmental techniques tested the validity, followed by a second review from the experts to guarantee content validity. Raw data from the questionnaires was cleaned, coded and analyzed using SPSS V29. Descriptive statistics was used to summarize the findings by use of percentages, standard deviations frequencies and means, while inferential statistics used the Karl Pearson to establish how mobile banking affects the financial performance of SMEs in Kirinyaga County. The findings indicated that mobile payments have a significant and positive effect on the financial performance of SMEs in Kirinyaga County. The study recommended that in order to help SMEs increase cash flow management, reduce operational costs, and access capital for expanding their businesses, SMEs should adopt a holistic mobile payments services.

Key Words: Transaction Costs, Customer Satisfaction, Security Concerns

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#### INTRODUCTION

The effect of mobile banking on the financial performance of SMEs with regard to access to finance, reduction of transaction costs, and security is the subject of study (Musamali et al., 2019). In consideration, therefore, variables to be understood in this are mobile payment, mobile saving and mobile lending, with a view to underlining the potential for mobile banking to improve SME growth and economic development.

With 1.04 billion registered mobile users and \$2 billion in daily transactions, mobile banking has proliferated (Mutiso & Reuben, 2021). Mobile money, formerly a niche product in certain areas, is now a worldwide phenomenon, especially in developing nations. Mobile money flows led digital transactions globally in 2019 (Mutiso & Reuben, 2021). Alibaba's Alipay and Tencent's WeChat dominate Chinese mobile payments. These services are essential to Chinese residents and enterprises. The People's Bank of China estimated 60.5 billion mobile money transactions in 2018, up 61.2% over 2017 (Huang et al., 2020). China's mobile banking services have reduced transaction costs, boosting informal companies and entrepreneurship, enhancing financial inclusion and business returns. Digital disparities persist, especially for people without cell phones or digital skills (Huang et al., 2020). Paytm, which had 400 million users in 2010 and over 1.4 billion in 2019, dominates mobile money payments in India (Patnam & Yao, 2020). Businesses have increased sales and risk-sharing efficiency using mobile money. Companies without mobile money payment services had 26% fewer sales compared to those who did. Mobile money improves financial decision-making and makes financial intermediation easier (Patnam & Yao, 2020).

Mobile money adoption is highest in Sub-Saharan Africa, with 50 million new accounts in 2019. Mobile money accounts in the area exceeded 500 million by 2020 (Kennedy & Kalvin, 2019). Despite rising demand, Nigeria has a 25% lower mobile money service penetration than Southern and Eastern Africa (Bankole & Ogundipe, 2023). Mobile money transactions have improved Nigerian familyowned businesses, notably during the pandemic (Bankole & Ogundipe, 2023).

Over the years, Kenya's high adoption of mobile money has influenced how people and microentrepreneurs conduct their financial affairs. Mobile money services such as M-Pesa have raised micro-businesses ability to pay suppliers, wages, or utility bills, improving their effectiveness and cost advantage. This change has greatly affected the financial returns of SMEs, especially in regions such as Thika Town and Nairobi County, where low transaction costs, improved efficiency and better stock among small businesses were realized (Kibui, 2016). In this regard, several mobile banking services are being implemented in Kenya to meet the unique needs of SMEs. For example, Ezzaypay is a service that assists people in carrying out the payment of large sums to suppliers as well as employees (Mue, 2021). Other services include MCOP Cash, which gives SMEs a convenient way of accessing quick loans that are essential in dealing with cash flow challenges. Vooma KCB is a product of KCB Bank and is a mobile banking platform that provides convenience with banking services that allow for savings, payment services, and loans tailor-made for SMEs.

#### Statement of the problem

A troubling trend was linked to SMEs, despite the fact that they are the backbone of Kenya's economy and account for 30% of the country's GDP, employment, and innovations (Mue, 2021). Specifically, 70% of SMEs fail within the first three years, meaning that the principal amount invested is lost at a startling rate of 23.3% annually (Auch, 2021). One major reason for this high failure rate is the difficulty SMEs face in obtaining financing from traditional banks because of formalities and collateral requirements.

Mobile banking has proved another alternative finance means, with SMEs ushered in by new ways of conquering such financial impediments. Nevertheless, SMEs' adoption of mobile banking services remains moderate, with transaction volumes not improving that much despite these attributes that drive their adoption (Musamali et al. 2016). This can be attributed to various factors such as the high costs of innovating, lack of incentives to innovate, and a general lack of digital and financial literacy among SMEs, thus constraining them from fully exploiting mobile banking services (Mue, 2019 and Mutiso & Reuben, 2021).

Since the financial performance pertains to the sustainability of SMEs, there was a need to establish how mobile banking has influenced the financial performance of SMEs in Kirinyaga County. The purpose of the study was to establish how mobile payments services could be better utilized in enhancing the financial outcomes of SMEs to probably reduce the high rate of attrition and increase the growth and sustainability of such enterprises.

#### Purpose of the Study

The purpose of the study to establish the effect of mobile payments on the financial performance of SMEs in Kirinyaga County.

#### LITERATURE REVIEW

#### **Theoretical Review**

### **Diffusion of Innovation Theory**

The Diffusion of Innovation (DOI) Theory, developed by Rogers (1962), explains how new ideas and technology spread within societies. The theory suggests that innovation adoption follows a predictable pattern over time, influenced by the innovation itself and its characteristics. It proposes five adopter categories: innovators, early adopters, early majority, late majority, and laggards. The adoption behavior is influenced by perceived attributes of an innovation, such as its relative advantage, compatibility, complexity, trialability, and observability. These factors determine the speed and extent to which an innovation diffuses through a social system. The theory suggests that the adoption of innovations follows a predictable pattern over time and is influenced by the characteristics of the innovation and the individuals within a social system.

The Diffusion of Innovation Theory has evolved over time, focusing on the flow of information and adoption of innovations through communication channels. It has also included concepts like perceived benefits, costs, and risks as key determinants. The theory has also considered the dual influence of endogenous and exogenous variables, including internal environment and external trends. It has also expanded to explain cultural and geographical factors influencing adoption patterns, acknowledging that not all individuals or groups will adopt innovations in the same way. The model now incorporates factors like social networks and interpersonal communication, reflecting a more complex and contextual view of diffusion. These insights have improved its application in various fields, including healthcare, marketing, and technology.

The DOI theory has been applied by numerous researchers to study the adoption of technologies across various sectors. Yang et al. (2022) examined mobile payment technology adoption, examining factors like ease of use, social influence, and user motivation. Their findings highlighted how consumer behavior and technological convenience drive adoption, while Fischman (2004) explored IT innovation adoption in businesses, identifying key factors that contribute or hinder their diffusion. These applications demonstrate the flexibility of the DOI Theory in explaining the adoption of various innovations in different contexts.

The Diffusion of Innovation Theory is crucial in understanding the adoption of mobile banking services by SMEs in Kirinyaga County. It provides insights into the characteristics of early and late adopters, affecting SME financial performance. Mobile payments like till numbers, paybill, and pochi la biashara are quickly adopted due to their ease of use and low transaction costs. Mobile lending platforms like M-Shwari and KCB Mpesa are also increasing adoption, particularly among SMEs seeking quick loans. The study can use DOI to categorize SMEs based on their adoption behavior and identify strategies to encourage broader adoption of mobile banking solutions. This

#### **Conceptual Framework**

#### **Mobile Payment**

- Transaction costs
- Customer satisfaction
- Security Concerns

### **Independent Variables Figure 1: Conceptual Framework**

This research defined mobile payments as submitting and approving financial transactions on Mobile tablets and smartphones. payment examples include peer-to-peer, bill payments, and product and service purchases. Awareness of how much these charges alter SMEs' balance sheets is vital since cost reduction increases yield while elevated fees diminish benefits. Another sub variable was essentially how satisfied SMEs and buyers are with the ability, dependability, and swiftness of the Mobile Payment Service. Customer satisfaction implies repeat patronage, positive word of mouth, and ultimately improved organizational profitability. The security concern sub variable examined mobile payment security for secured cash transactions. Mobile payments shielded SMEs and their customers from the dangers that accompany the use of cash. Security and cash risk factors concerning mobile payment systems comprised an essential aspect of examining their effect on SME financial performance.

Financial performance is the capacity of SMEs to generate revenue, control cash flow, and earn a profit. Measures that can be taken include its profitability and the sales revenue. Profitability is the chance for SME to make profit through proper investment and good expenditure. This is the amount of money earned by the sale of goods and services rendered by a business organization.

#### **Empirical Literature**

Mobile banking, mobile payments, and mobile financing were some of the innovations studied by information is crucial for policymakers, financial institutions, and technology providers aiming to enhance SME growth through mobile banking.



Mararo (2018) on the growth of SMEs in Nakuru Town, Kenya. The selected 100 SME owners were randomly selected from companies during the initial stages of operation since the study adopted both basic random sampling and purposeful sampling. The findings showed that firms that transact through mobile banking, mobile payments, and mobile financing experience faster growth as SMEs. A multiple regression analysis was conducted, and it was found that these variables explained a large extent of the total variance in small and medium-sized enterprises' expansion in the CBD of Nakuru. Overall, the study concluded that the mobile banking services were instrumental in enhancing the performance of the SME's; therefore, to improve this performance, it recommended that the services should undertake aggressive marketing and promotion so that they could be utilized frequently.

Mobile payment technology in SMEs was researched by Elly (2021) concerning its efficiency at Kamukunji Market Center. Consequently, the specific objectives of the study were as follows: to assess the effect of cost reduction on SME performance; to examine the effect of financing availabilities on SME performance; and lastly, to assess the effect of mobile payment mobility on SME performance. The report revealed that small businesses substituted mobile payment since it was convenient, and this enhanced the performance of SMEs and increased the level of customer satisfaction. It was also found through the research

that there was a linear relationship that was statistically significant between the change in the SMEs' performance and the mobile payment mobility, which was contributing to nearly 17% of the variation. Since it eradicated the need to constantly visit the bank, the implementation of mobile banking platforms served to create more time for companies to remain grounded in their core business. Ngaruiya et al. (2014) pointed out that, as a result of increased use of mobile money transactions, there has been a shift of focus when it comes to the financial management activities of SMEs.

From the above formulation of research questions, the focus of the investigation was on the effects of mobile money transactions on the financial performance of SMEs in the CBD of Nakuru town. Sales revenue is among the most important measures of financial outcomes, and it was established that mobile money transactions had a significant effect on it. Mobile money transactions were deemed efficient and more widely used compared to banking systems, which helped broaden the SME businesses' markets and increase their revenue in the end.

A research by Mutiso and Reuben (2021) sought to determine the contribution that mobile banking services made in relation to the performance of MSMEs in Kitengela, Kajiado County, Kenya. The current study, which was informed by the results of the Kajiado East Constituency Development Fund survey, revealed that 75 percent of the operating MSME's in Kitengela had adopted mobile money as their primary medium of conducting commerce. Applying the analysis, mobile money transfers and payments have significantly influenced the MSMEs' performance in Kitengela, with a correlation value of 0.559. The findings concerning the effects of mmoney services in Kitengela revealed a significant STR relationship between firms' performance and effects of mobile money transfers and payments.

According to Mishra et al. (2020) the global mobile money banking establishes linkage to financial inclusion and argued that it provides the foundation for long run economic growth in developing world especially the African continent. For the SMEs it enables financial inclusion via enhanced access to capital through usage of mobile banking services leading to business growth and innovation. Mobile banking services also decrease transaction costs so that SMEs have better chances of finding opportunities to improve the financial flows of their businesses. Leveraging of mobile money banking is another important factor that has emerged from the study applicable to the SMEs to reduce their financial risks through provision of credit and saving opportunities. It also explores the drawback in the use of mobile money banking and these include; the operating regulatory framework, Cyber security and the digital gap. The study suggests that future research should advise governments and policymakers to address the mobile banking service environment factors including advancements of digital infrastructure, promoting consumers' financial literacy, and regulatory consumer protection measures on mobile banking services.

Adhitya and Sembel (2020)'s paper looks at the effects of mobile payment on the financial and stock returns of leading Indonesian banks. The study confirms an increase in the stock performance of these banks affiliated to mobile money technologies. Mobile banking is advantageous in improving operation productivity, cutting cost on the transactions and, Senate its impact in increasing customer base and overall performance of the banks above.

Mobile banking technology is also implemented with a great deal of effectiveness as it also highly positively influences the stock returns of the banks due to better satisfaction of the customers, higher outreach and increased investor confidence in the stock market. The findings have implication to the general discussion on mobile payments and financial performance because it established the role of MPS in determining financial performance. The findings in the Indonesian context are useful for comparing similar effects of mobile payments in other emerging markets comparable to Kenya. The paper by Torki et al (2020) examined the effect of e-payments, including mobile payments, on the financial industry in Islamic nations. The study found out that such systems enhanced the sector's performance, in terms of cost and profitability, productivity and customer satisfaction. This is because it takes less time to process a transaction, has lower cost of operation and addresses the issue of financial exclusion. It also examines the questions on the compatibility of electronic payment systems with the key features of the Islamic finance, for example, the ban on the interest and asymmetric risk sharing (Torki et al., 2020). Therefore, applying those principles in mobile payment systems, the customer base can be broadened and the market share enlarged. These conclusions seem timely as they implied that the mobile payments might foster financial innovation and corresponding integration in Islamic finance all of which enhances the financial performance. This has implications to other area where there is large population of users of Islamic financial system, especially Africa since mobile payments can boost both the conventional and Islamic banking systems.

SMEs have therefore come to appreciate mobile banking as essential to their operations in the emerging world, especially Tanzania and Kenya. According to Mararo (2018), who conducted crosssectional research on 419 SMEs in Kenva, results confirmed that the level of mobile banking, mobile payment, and mobile finance enhances enterprise growth. The study revealed that the integration of the aforementioned mobile financial services influences the financial performance and business development of the SMEs in Nakuru Town, Kenya. In a related study, Elly (2021) specifically focused on the roles of M-Payment technologies at the Kamukunji market center, pointing out facilitative elements that enhance the performance of SMEs, for instance, the reduction in cost, loan access, and mobility of M-Payment. From the research, it is clear that, thanks to the relative ease of use and reduced expense ratio of the MP, customers are

happier and organizational processes become better for SMEs, hence improving their performance. Ngaruiya, Yaveroglu, and Dwivedi focus on the role played by mobile money transforming transactions in the financial management process of SMEs in the CBD of Nakuru.

From this, they were able to conclude that the use of mobile money transactions has enhanced sales income, market access, and financial management, all of which have enhanced the financial performance of SMEs. Among the studies in Kenya, we have Mutiso and Reuben (2021), who carry out research on the impact of mobile banking services in Kitengela town of Kajiado County. They discovered that there is a positive correlation between the total efficiency of the MSMEs and the payment and transfer carried out through mobile money. The fact means that mobile banking is essential for these businesses for gaining sustainability and profitability.

#### METHODOLOGY

This study employed a descriptive study design. A descriptive survey is a research method used to gather detailed information about a population by asking questions, observing, and measuring specific variables. Hence, the aim of this type of research was to gather data about the present state of affairs. The purpose of the study was to examine the effect of participation in mobile payments on the financial performance of registered Kirinyaga County small and medium enterprises (SMEs). Population is an entire group of individuals or objects that are a focus of a study. There are 226 SMEs in the population, which itself is a representation of the SME sector in the county.

A sample size is a selected number of items or individuals chosen from a larger target population ,to represent the target population in a research study (Kibuacha, 2021). This research examined 160 of 226 registered SMEs. This study applied a cluster and stratified techniques. This cluster sampling technique was based on the fact that the data is collected from different towns within the same county; hence, there will be equal geographical representation among the different towns within Kirinyaga County.

In this study, both the primary and secondary data were used in the research. The questionnaires were distributed through emails allowing SME owners or managers to conveniently complete them and submit their responses via Google Forms. In order to determine the instrument's reliability, a questionnaire pre-test was conducted using a pilot study.

#### FINDINGS AND DISCUSSION

#### **Response Rate**

The table below shows the results of the number of questionnaires that were distributed to SMEs in Kirinyaga county, duly filled and submitted through the google form for the purpose of data collection relevant to the research.

#### **Table 1: Mobile Payment Satisfaction**

#### **Descriptive Analysis**

Descriptive analysis is a statistical method that simplifies and organizes large amounts of data in order to provide a clear overview of its characteristics. It deals with finding patterns, trends, and anomalies, as well as the average value to the most common occurrence, about the summary of complex data; in other words, it helps analyze further. First, descriptive analysis is generally the first step taken by people conducting data analysis, and then they move on to more complex statistical techniques.

#### **Mobile Payments**

#### **Mobile Payment Satisfaction**

The table below shows the satisfaction levels of mobile payment duly filled and submitted by SMEs via the Google form.

Statement	Frequency	Percentage	
Dissatisfied	2	1.26	
Neutral	4	2.52	
Satisfied	86	54.09	
Very Satisfied	67	42.14	
Total	159	100	

(Researcher, 2025)

According to study findings in Table 1; 54.09% of the respondents were satisfied with mobile payment services, 42.14% were very satisfied, 2.52% were neutral and 1.26% were dissatisfied. As can be seen from Table 1, more than a majority of respondents (96.23%) are either satisfied or very satisfied with mobile payment services, which implies that a large share of the customers is happy with the convenience and efficiency of mobile payment solutions. As the majority of the respondents were satisfied, it means the convenience offered by mobile payment services makes a small percentage of respondents (2.52%) or dissatisfied (1.26%) as only a few of the SMEs in the county find them unbeneficial. The greater

satisfaction rate in this case suggests that mobile payment platforms have been fulfilling SMEs' needs in reliability, ease of use, and customer experience, and it might lead to better business performance as well as customer relations. The positive feedback also emphasizes the further development and promotion of mobile payment services as an inevitable way to continue improving and promoting mobile payment services so as to help increase the SMEs' operational efficiency.

#### **Frequency of Mobile Payment Usage**

The table below shows the frequency of mobile payment usage duly filled and submitted by SMEs via the Google form.

Statement	Frequency	Percentage	
Daily	151	94.97	
Daily, Weekly	1	0.63	
Monthly	1	0.63	
Weekly	6	3.77	
Total	159	100	

#### Table 2: Frequency of Usage

(Researcher, 2025)

According to the findings 94.97% of the respondents used mobile payment services daily, 0.63% daily/weekly and monthly, and 3.77% weekly. The table shows that the majority of the respondents (94.97%) use mobile payment services daily, showing mobile payments to be the need of the day in SMEs in Kirinyaga County. The fact that this frequency of daily use represents a very high value suggests that mobile payment systems are not only well adopted but also deeply enmeshed in the day-to-day business activities of SMEs. The usage of mobile payment platforms reflects the ease of mobility, usability, and reliability of such

platforms, and it can be concluded that these mobile payment platforms are game changers for daily financial transactions and are therefore good for making the cash flow management for these businesses much easier and more efficient. In addition to the already low percentage of weekly and monthly users, the mobile payments really play a pretty big role in the everyday business.

#### Transaction cost associated with mobile banking

The table below shows the view of different SMEs on affordability of mobile banking transaction costs duly filled and submitted via the Google form.

<b>Table 3: Transaction</b>	cost associated	with mobile	banking
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Statement	Frequency	Percentage	
Neutral	11	6.92	
Neutral; Somewhat expensive	1	0.63	
Somewhat affordable	73	45.91	
Somewhat expensive	9	5.66	
Very affordable	63	39.62	
Very expensive	2	1.26	
Total	159	100	

(Researcher, 2025)

Table 3 displays that mobile banking transaction costs are 45.91% somewhat affordable, 39.62% very affordable, 6.92% neutral, 5.66% somewhat expensive, 1.26% very expensive and 0.63% are both neutral; and somewhat expensive. Since the majority find the mobile banking transactions either very or somewhat affordable, this implies that the costs associated with mobile banking are seen as reasonable by most SMEs, and given such costs, it appears to have been an important factor in the wide adoption and usage of the services. This also indicates that the majority of these SMEs can afford

the costs, which is supported by some neutral responses, implying that there are a few SMEs that remain uncertain or positive about the value proposition of mobile banking.

# Comparison between mobile banking transaction cost and traditional bank transfer fees

The table below shows the comparison between mobile banking transaction cost and traditional bank transfer duly filled and submitted via the Google form.

Statement	Frequency	Percentage	
Much higher	2	1.26	
Much lower	43	27.04	
Similar	13	8.18	
Slightly higher	11	6.92	
Slightly lower	90	56.60	
Total	159	100	

Table 4: Mobile banking and bank transfer fees comparison

(Researcher, 2025)

According to the table, 56.60 percent of respondents believe that the transaction cost of mobile banking is a little bit lower than the traditional bank transfer fees, while 27.04 percent answered that the transaction cost of mobile banking is much lower. 8.18% of respondents stated that the fees were similar on both methods, 6.92% pointed out that mobile banking fees are slightly higher, and 1.26% noted that mobile banking fees that mobile banking is considered to be more affordable compared to conventional banking methods used in financial transactions. The implication of these

results is that most SMEs are afforded a more economic option with mobile banking than with traditional banking. As a cost-effective alternative, mobile banking offers advantages over traditional banking methods due to its lower costs, making it a more attractive option for SMEs looking to reduce transaction costs and improve overall business efficiency.

#### Ease of navigating mobile banking

The table below shows the ease of navigating mobile banking duly filled and submitted via the Google form.

Statement	Frequency	Percentage	
Neutral	8	5.03	
Somewhat difficult	4	2.52	
Somewhat easy	86	54.09	
Very easy	61	38.36	
Total	159	100	

(Researcher, 2025)

According to the study findings in Table 5; 54.09% of the respondents said that it was somewhat easy to navigate mobile banking, 38.36% said it was very easy, 5.03% were neutral and 2.52% said it was somewhat difficult. This implies that the mobile banking platforms are easy and readily available to most SMEs in Kirinyaga County, which is a reason as to why most of the SMEs frequently used them and the adoption of them. The study highlights the

importance of mapping barriers in mobile banking applications and to ensure that even the people with low digital literacy can use them.

# Customer satisfaction with speed and efficiency of mobile payment services

The table below shows the customer satisfaction rate with mobile payment services duly filled and submitted via the Google form.

Statement	Frequency	Percentage	
Dissatisfied	1	0.63	
Neutral	9	5.66	
Satisfied	80	50.31	
Very Satisfied	69	43.40	
Total	159	100	

**Table 6: Customer Satisfaction with Mobile Payment Services** 

(Researcher, 2025)

According to the study findings in Table 6; 50.31% of the respondents said that customers were satisfied with the speed and efficiency of mobile payment services, 43.40% were very satisfied, 5.66% were neutral and 0.63% were dissatisfied. The high degree of satisfaction represents that mobile payment services are doing an adequate job of addressing SME needs by offering a fast, reliable, and streamlined transaction experience, which, in

turn, may stem from better satisfaction and repeat business.

# Customer satisfaction with mobile payment impact on respondents' business

The table below shows the SMEs' satisfaction with mobile payment duly filled and submitted via the google form.

	•	
Statement	Frequency	Percentage
Neutral	2	1.26
Positively	107	67.30
Very Positively	50	31.45
Total	159	100

Table 7: Customer Satisfaction with Mobile Payment Services impact on respondents' business

(Researcher, 2025)

According to the study findings in Table 7, 67.30% of the respondents said that customer satisfaction with mobile payment services positively impacted their businesses, 31.45% said their businesses were very positively impacted, and 1.26% were neutral on the impact of customer satisfaction with mobile payment on their businesses. Based on this, one can assume that using mobile payment services

increases a customer's loyalty and repeat business, as well as the overall growth of the business.

### Security of mobile payment platforms

The table below shows the feedback of the SMEs concerning the security of the mobile payment platforms duly filled and submitted via the Google form.

Table 8: Security of mobile	payment platforms
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Statement	Frequency	Percentage	
Neutral	3	1.89	
Somewhat Secure	79	49.69	
Very Secure	77	48.43	
Total	159	100	

(Researcher, 2025)

According to the study findings in Table 8; 49.69% of the respondents that mobile payments platforms

were somewhat secure, 48.43% of the respondents said that mobile payment platforms were very

secure and 1.89% were neutral on the security of mobile payment platforms. This indicates the high level of confidence by SMEs in the security features of the mobile payment platforms. This perception is important in broadening the use of mobile payments since more people will trust and use services that they believe are safe.

# Security issues or fraud when using mobile payment

The table below shows the feedback of the SMEs concerning the security issues or fraud when using mobile payment.

Statement	Frequency	Percentage	
No	131	82.39	
Yes	28	17.61	
Total	159	100	

#### **Table 9: Customer Satisfaction with Mobile Payment Services**

(Researcher, 2025)

According to the study findings in Table 9; 82.39% of the respondents said they had not experienced any security issues or fraud while using mobile payment and 17.61% said they had experienced security issues or fraud while using mobile payment, which may have a negative impact on enterprises, necessitating the loans to be taken for loss cover, reduction of profitability of business, and hike in prices to recover the damage done from financial setbacks. The study's findings suggest that mobile payment systems are generally perceived as secure and this high level of confidence in mobile payment security may encourage greater adoption

among SMEs and individuals. However, it also highlights the need for continuous improvements in cybersecurity measures, user education on fraud prevention, and enhanced security protocols by financial service providers to ensure trust and reliability in mobile banking

# Confidence in the security of mobile banking transactions

The table below shows the confidence levels in the security of the mobile banking transactions by SMEs.

Statement	Frequency	Percentage	
Neutral	9	5.66	
Somewhat Confident	75	47.17	
Very Confident	74	46.54	
Very confident, Somewhat confident	1	0.63	
Total	159	100	

Table 10: Response on confidence in the security of mobile banking transactions

(Researcher, 2025)

According to the study findings in Table 10; 47.17% of the respondents said that they were somewhat confident with the security of mobile banking transactions, 46.54% were very confident, 5.66% were neutral and 0.63% were very confident or somewhat confident. Encouraging adoption of

mobile banking depends heavily on the high level of confidence in banks' security levels because businesses are more likely to start using them if they believe the source of the platform is secure. But the small percentage of neutral responses points to the fact that even after a little more work to improve communication about security features, trust can be built and some concerns mitigated further.

### Inferential statistics Correlation Analysis

The table below shows the correlation matrix between the financial performance and the mobile payment.

		Financial Performance Mobile Payment	
	Pearson Correlation	1	-
Financial Performance	Sig. (2-tailed)		
	Ν	159	
	Pearson Correlation	.609**	1
Mobile Payment	Sig. (2-tailed)	.000	
	Ν	159	159

Table 11: Correlation Matrix

The results of the correlation analysis are shown in Table 11. The findings indicated that there was a strong positive and significant relationship between Mobile Payment and Financial performance, with a Pearson correlation coefficient of r=0.690, p-value <0.01 which was significant at 0.01 level of significance. This implies that improved Mobile Payment increases financial performance.

There was a strong positive and significant relationship between Mobile Saving and Financial performance, with a Pearson correlation coefficient r=0.532, p-value <0.01 which was significant at 0.01 level of significance. This implies that increased Mobile Savings results in an increase in Financial performance.

There was a strong positive and significant relationship between Mobile Lending and Financial performance, with a Pearson correlation coefficient

r=0.719, p-value <0.01 which was significant at 0.01 level of significance. This indicates that improved Mobile Lending results in improved Financial performance.

#### **Regression Analysis**

#### **Model Summary for Mobile Payment**

R-square is the Coefficient of determination that explains the extent to which changes in the dependent variable can be explained by the independent variables or the percentage of variation in the dependent variable (Financial Performance) described by the independent variables (Mobile Payment). From Table 12, the value of R-Square is 0.590. This implies that 59.0% of the variation in (Financial performance) is explained by the independent variable (Mobile Payment).

#### Table 12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.639ª	.590	.585	1.22013	

a. Predictors: (Constant), Mobile Payment

## **ANOVA** Test

The table below shows the ANOVA Test.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	24.744	1	24.744	16.621	.000 <sup>b</sup>
1 Residual	233.729	157	1.489		
Total	258.474	158			
a. Dependent Vari	able: Financial Performance				
b. Predictors: (Cor	stant), Mobile Payment				

#### **Table 13: ANOVA Table**

The ANOVA test is used to determine whether the model is important in predicting Financial Performance. In Table 13, at 0.05 level of significance, the ANOVA test indicated that in this

model the independent variable (Mobile Payment) is important in predicting Financial Performance as indicated by significance value=0.000 which is lesser than 0.05 level of significance (P-value=0.000<0.05).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	5.420	1.151		4.711	.000
1	Mobile Payment	.194	.048	.309	4.077	.000

**Table 14: Moderated Model Coefficients** 

a. Dependent Variable: Financial Performance

From the findings in Table 14 above; at a 5% level of significance, Mobile Payment was a significant predictor of the Financial Performance of Small and Medium Enterprises (SMEs) in Kirinyaga County, where (p=0.000>0.05). Where, is Y the dependent variable (Financial Performance of Small and Medium Enterprises (SMEs) in Kirinyaga County),  $X_1$  Is Mobile Payment a variable, (Y =  $\beta_0 + \beta_1 X_1 + \epsilon$ ), becomes:

Y=5.420+0.194X

According to the equation, taking all factors constant, the Financial Performance was 5.420 units. A unit increase in Mobile Payment would lead to a 0.194 increase in Financial Performance.

#### **Discussion of Findings**

#### **Mobile Payment and Financial Performance**

The findings of the study that is, effects of mobile payment on the financial performance of SMEs in Kirinyaga County show a positive relationship between mobile payment and their financial performance. The application of a mobile payment system resulted in a reduction of transaction costs, a swift transaction time, and an increase in customer satisfaction, leading to improved business efficiency and profitability of the SMEs. This finding shows that mobile payments enable SMEs to save time and money as they reduce the intricacies in the traditional banking systems. In the same line with the studies by Mararo (2018) and Elly (2021), which posit that mobile payment systems increase SME growth through speed of transactions and reducing transaction costs, this study establishes that mobile payments increase profitability and operational efficiency in SMEs in Kirinyaga County. The linkage here is to the Diffusion of Innovation Theory that innovation (mobile payments) leads you to improve business processes and outcomes. Early adopters started using these technologies, in which their advantages were soon noticed by the later majority, and hence the whole took up these technologies. Likewise, mobile payments have helped fuel the financial growth of SMEs through improved cash flow and faster transactions to increase their profitability, respectively.

#### CONCLUSION AND RECOMMENDATIONS

The study aimed at assessing the effects of mobile payment on the financial performance of SMEs in Kirinyaga County. The results indicate that the financial performance of SMEs was greatly improved by the use of mobile payment platforms. This is because they improved customer satisfaction due to the efficiency, reliability, ease of use, and convenience of the payment systems, which led to increased sales and loyalty, reduced transaction and operational costs which increased profits as well as sales revenue. However, despite the popularity of mobile payment, there is need for continuous improvements in cyber security measures and user education to prevent fraud to ensure trust in mobile banking.

The study also sought to establish the overall effects of mobile banking on the financial performance of SMEs in Kirinyaga County. The study revealed a positive effects of mobile banking on the financial performance of SMEs, particularly on enhancing sales and business growth. The shared usage of payment platforms via mobile and other mobile banking services likely delivers improved transaction efficiency, customer satisfaction, and market extension, which further enable higher sales revenue. The results also show that mobile banking products are a driver of enhancing the profitability of SMEs through improved operational efficiency, reduced cost of transactions, and increased source of income from savings interests.

The study concluded that mobile payments has a significant impact on the financial performance of SMEs in Kirinyaga County.

In order to help SMEs increase cash flow management, reduce operational costs, and access capital for expanding their businesses, SMEs should adopt a holistic mobile banking strategy that should include mobile payments, savings, and lending services. This would result in financial stability and competitiveness benefits. For SMEs, especially those based in villages, it is important to invest in the work/skills of staff and business owners on the mobile banking platforms. Thus, this can promote better financial decision-making and efficiency. Similarly, SMEs should monitor and review mobile banking costs (fees and charges) and double-check they are paying the best price for their financial activities. Finally, SMEs should focus on cybersecurity by taking part in the best safety of business and customer data, as well as by training business and customer staff on the dangers present and showing confidence in mobile banking services.

#### **Future Research**

Future research investigating the long-term effects of mobile payments on small and medium-sized enterprises (SMEs) also needs to look at whether the benefits will be sustained or new problems are introduced as technology advances. SMEs barriers in the use of mobile banking services consist of the lack of financial literacy, as well as high transaction fees, the necessity of investing in costly devices, the feeling of insecurity on the Internet, and infrastructure limitations. The study should be carried out in other regions of Kenya or any other African country, and an expanded sample more than Kirinyaga County should be included. Other mobile financial services that would have an effect on the SMEs' performance and resilience should receive further investigation by the researchers.

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