EFFECT OF MOBILE MONEY MERCHANTS SERVICES ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN SELECTED WARDS IN NAKURU CITY

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A Research Project Submitted to the Institute of Post Graduate Studies of Kabarak University in Partial Fulfillment of the Requirements of the Award of Master of Business Administration (Finance)

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DECLARATION

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The research thesis entitled " **Effect of Mobile Money Merchants Services on Financial Performance of Small and Medium Enterprises in Nakuru City; A Survey of Selected Wards** " and written by **Edward Njuguna Waithaka** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the research project and recommended it to be accepted in partial fulfillment of the requirement for the award of degree of Master of Business Administration (Finance).

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DEDICATION

I would like to dedicate this thesis to my parents for their support during my studies.

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First, I thank God Almighty for His mercies, unfailing love, and providence and for giving me strength and seeing me through my studies. I also thank my supervisors Prof. Geoffrey Kamau and Dr. Stella Korir for their continued intellectual support during the course of this research. I also recognize the assistance as well as support of many others who made it possible to complete this study. I am greatly thankful to my family for the moral support moreover their inspiration. May the Almighty God's blessings be in abundance.

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ABSTRACT

Mobile money has become a popular payment method for many Kenyan businesses. The goal of this study was to determine how mobile money merchant services affected the financial performance of small and medium-sized businesses. Nakuru is a city in Kenya. The specific goals were to determine the effect of affordability of mobile money merchant services on the performance of small and medium enterprises, the effect of availability of mobile money merchant services on the performance of small and medium enterprises, the effect of effectiveness of mobile money merchant services on the performance of small and medium enterprises, and the impact of Value Added Services available on mobile money platforms on the performance of small and medium enterprises. The theories underpinning the study were; Technology Acceptance Model and Innovation Diffusion Theory (IDT). The study adopted explanatory survey design based on cause-effect relationship. The study targeted 12,250 licensed SMEs Mobile Money Merchants operating in Nakuru City. The study sampled 221 Small and Medium Mobile Money Merchant enterprises using stratified sampling technique. Small and Medium Enterprises in Nakuru City were chosen using simple random sampling. The study relied on primary data gathered through structured questionnaires as the primary data collection tool. The data was analyzed using regression analysis technique. The information was then presented in the form of frequency tables and figures. The study established that the effectiveness of Mobile Money Merchant Services had no effect on the financial performance of Kenyan Small and Medium Enterprises. Mobile Money services, according to the study, are becoming increasingly popular in many countries as a convenient, secure, and cost-effective way to make payments and transfers. The study recommends that the governments should create and enforce legislation that regulates and safeguards the use of Mobile Money services in order to ensure their safety and security.

Keywords: *Mobile Money Services, Value Added Services, Small and Medium Enterprises, Mobile Money Services, Financial Performance*

ABBREVIATIONS AND ACRONYMS

CCK	Communications Commission of Kenya
IDT	Innovation diffusion theory
MIT	Massachusetts Institute of Technology
MM	Mobile Money
MMT	Mobile Money Transfer
MMT	Mobile Money transfers
MPESA	Mobile Money Transfer Service
MVNO	Mobile Virtual Network Operator
PMSs	Performance measurement systems
SIM	Subscriber Identity Module
SME	Small and Medium Enterprise businesses
SMEs	Small and Medium Enterprises
TAM	Technology acceptance model
TTF	Task Technology Fit
UTAUT	Unified Theory of Acceptance and Use of Technology
VAS	Value Added Services

CONCEPTUAL AND OPERATIONAL DEFINITION OF TERMS

Affordability: This the ability of the consumers of Mobile Money Merchant services to be able to purchase these services with relatively constant quality consistent with economic level, measured in terms of the ability to meet all costs related to these services. Definition adopted from (Korir, 2017). This term is used as it is in the current study.

Availability: This is the ability of customers to easily access mobile merchant services (Roberts, 2018). The researcher used the definition as it is.

Effectiveness: The degree to which Mobile Money Merchants deliver their services to the targeted customers (Machuki, 2011). This term is used as it is in the current study.

Financial performance: Measurement for what has been achieved by a company (Yassin & Ahmed, 2014). This definition will be used to mean measurement for what has been achieved by Mobile Money Merchants of Small and Medium Enterprises. This term is used as it is in the current study.

Mobile Merchant Services: These are businesses providing goods and services over mobile services (Lopokoiyit, 2014). This definition used as it is. This term is used as it is in the current study.

Mobile Money: Electronic financial services performed via mobile phone which includes payments and transfers of money (Briggs, 2016). This definition will be used as it is.

Return on Assets This is a profitability ratio that provides how much profit a company is able to generate from its assets. In other words, return on assets (ROA) measures how efficient a company's management is in generating earnings from their economic resources or assets on their balance sheet (White, 2017). This definition was used to describe how much profit a Mobile Money Merchants is able to generate from its assets.

Return on Investment: This is a performance measure used to evaluate the efficiency of an investment or compare the efficiency of a number of different investments. In this study this measure will be used to determine the financial performance of SMEs. (Chen, 2018).

Return on Equity: This is a measure of financial performance calculated by dividing net income by shareholders' equity (Hargrave, 2019). In this study this measure will also be used to determine the financial performance of SMEs.

Small and Medium Enterprises: These are enterprises with 5 to 49 employees (Idea Group Inc., 2013). For the case of this study, these are Mobile Money Merchants with 5-49 employees.

Value Added Services: This is the economic enhancement a company gives its products or services before offering them to customers. (Johnson, Scholes & Whittington, 2008). This definition will be used in this study to mean service enhancement by Mobile Money Merchants gives its products or services before offering them to customers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Mobile Money Service is often used to quickly and securely transfer funds between individuals or from one financial account to another. It is increasingly popular among businesses and consumers to need to quickly and securely send and receive funds. Many people prefer mobile money transfer because it is efficient and affordable. Micro enterprise operators are in the Medium and Small Enterprise (SMEs) Sector. Scholars (Mead and Morrison, 1996) have attempted to define SMEs as enterprises that employ between 10 and 50 people. These businesses are usually family-owned or locally-owned and have limited financial resources. They often specialize in one particular industry or service, and may lack the infrastructure to compete effectively with larger companies. These businesses provide an important source of jobs and economic activity in many communities, and are critical to keeping local economies vibrant. According to the 1999 National Baseline Survey established that microenterprises do not typically employ people aged 5 to 49. This is due to the fact that such businesses are often run by a single owner or a few family members. Moreover, microenterprises typically do not have the resources or the staff to employ people in this age group.

This makes mobile telephony the first and the only accessible telecommunication infrastructure available and affordable to most of the Kenyan population both at home and in businesses, particularly the SMEs. Mobile money services have come to revolutionize the way businesses are transacted. Most people especially those in SME's prefer using mobile transfer services due to their numerous advantages and the little risks involved.

The use of mobile phones in Kenya has enabled SMEs to access a wide range of services and financial products such as payments, credit, savings, and investments. This has drastically improved access to financial services in the country by providing an alternative to traditional banking services. Additionally, mobile phones have enabled easier access to information and communication technology (ICT) solutions, which has allowed SMEs to expand their businesses by utilizing the latest technologies and services. Furthermore, mobile phones in Kenya have enabled rapid development of mobile applications that can be used by SMEs to improve their operations. These applications have allowed SMEs to better manage their customers, track and analyze customer data, and automate their marketing and customer service tasks. This has improved the efficiency and accuracy of their operations, and has enabled SMEs to more competitively engage in the market and expand their business. Overall, the use of mobile phones has enabled access to financial services, increased access to ICT, and enabled development of mobile applications that are beneficial to SMEs in Kenya. This has enabled SMEs to more efficiently and competitively engage in the market and increase their business (Naito & Yamamoto, 2022).

1.1.1 Global Perspective of Mobile Money Services and Financial Performance

In Europe, Aron and Muellbauer (2019) discovered that giant financial institutions in the United Kingdom have been offering mobile payment options to their customers for longer than anyone else, and when 3G networks became widespread, people began using their smartphones instead of their wallets. The biggest surge in mobile payment adoption occurred in 2011, with a 50% increase, and growth has since slowed. Mobile device use for money management, banking, and payment is higher than ever, with 77% of Europeans now using their mobile devices to keep track of their finances and make

everyday payments such as bills, parking, and going out. Restaurants, supermarkets, transit, convenience food and drink, and leisure and entertainment are the top five merchant categories for mobile payments in Europe. According to a survey conducted by the International Monetary Fund (2018), nearly 10% of the country's population preferred mobile devices for financial purposes.

Globally SME sector has been reporting difficulties in access to finance. (Balling, Barnet & Gnan, 2009; Yongqian et al 2012). Access to external finance to SMEs has become more costly and troublesome while their accessibility has sharply declined. SMEs financial constraints limit their investment opportunity and stagnant growth. Access to finance is widely perceived to an essential factor for firms, and especially SMEs to maintain their daily business operation as well as to achieve long term investment opportunities and development targets. The reliance of East African firms on the banking sector for credit can be influenced by several factors, including the presence of general limitations on access to capital markets. Therefore, a well-functioning banking sector plays an important role in channeling resources to the best firms and investment ventures. Financing constraint crucially limit firms' growth, availability of productive resources resulting to sluggish of a sector which might pose threat to the sectors contribution to the economy.

1.1.2 Regional Perspective of Mobile Money Services and Financial Performance

In terms of subscriptions and transactions, mobile money services have been rapidly expanding across Sub-Saharan Africa. In 2017, the total number of mobile money transactions increased by 14.4% while the value increased by 17.9% over the previous year (Global System for Mobile Communications, 2017). By the end of 2017, the region had 135 and 122 million active mobile money services and mobile money accounts,

respectively. Across the continent, mobile money services have been critical in providing financial services to people who have limited access to traditional financial institutions, particularly women and rural residents (Global System for Mobile Communications, 2017). Mobile money is being used globally by a variety of institutions in various sectors, including financial service providers such as banks, which are considering ways to give customers access to their accounts via mobile devices in order to bring banking services closer to them (Kimeu, 2018).

According to Chemingui and Lallouna (2017), there are several barriers to using mobile banking services and adopting mobile money in Tunisia. Customers are hesitant to change their routines and behaviors by allowing interaction with service providers through mobile services and offers. Customers are motivated to use services that are compatible with their needs and behaviors; another factor is whether or not they can try the product or service, the emotional enjoyment they feel while using the service, and how they perceive the word quality, all of which have a positive impact on increasing customers' confidence in the service.

According to Abdi and Mbamba (2017), one of the major reasons for Tanzania's high adoption of mobile money is individual awareness, perceived usefulness, and perceived benefit. Person-to-person payments account for 30% of all money transfers in Somalia, with merchant payments accounting for the remaining 29% (Mohamed & Nor, 2021). Burundi is one of the ten poorest countries in the world in terms of overall development, and one of the five poorest in terms of mobile infrastructure, content, and services. In Burundi, mobile connectivity and mobile money are still quite low (Ahmad, 2020). Despite this, the country's consumer readiness score is significantly higher than that of Rwanda and the Democratic Republic of the Congo, implying that the long-term benefits

of digital inclusion are within reach. Bujumbura's central market is the country's largest, with over 5,000 vendors primarily selling food, warehousing supplies, and new and used clothing. The Bujumbura Central Market Management Company has registered 5,351 traders.

1.1.3 Mobile Money Services in Kenya

Mobile money transfer service refers to the transferring of money from one person to another through use of mobile phone. “Mobile money, also referred to as mobile payment, mobile money transfer, and mobile wallet, generally refers to services operated and performed from a mobile device such as mobile phone transfer, mobile phone based payments.” It is further clarified as the intersection of both banking and telecommunications services (World Bank, 2010). It involves a diverse set of stakeholders from both mobile phone operators or providers and financial service institutions.

Mobile Money Transfer providers help customers conduct mobile money transfers and facilitate transactions between customers and mobile network operators. The services include assisting customers in conducting mobile money transfers, facilitating payments and remittances, and providing other financial services such as balance inquiries, account management, and bill payments. They also provide technical support and customer service. The mobile money services that have been launched in Kenya are: M-Pesa (Safaricom, launched in March 2007), Airtel-Money (Airtel, formerly Zain's ZAP, launched in January 2010), YU-Cash (Essar, launched in December 2009) and Orange Money (Orange, formerly Telkom and Posta, launched in November 2010).

According to Guermond (2022) Mobile Money Transfer (MMT) services enable people to checking account balances, transferring funds, and paying bills. The main benefit of mobile money services is convenience. By offering a safe and secure way to send and receive money, customers can avoid the risks associated with carrying large amounts of cash. Mobile money services also offer customers the ability to access their funds from any location, allowing them to manage their finances more effectively. Furthermore, mobile money services are more affordable than traditional banking services, making them an attractive option for people who cannot afford the fees associated with traditional banking.

Subsequently, mobile phone companies began offering the ability to purchase goods and services directly through their mobile handsets. This enabled users to purchase items such as music, books and tickets directly through their mobile phones, often at a reduced rate. This development was quickly followed by the introduction of mobile banking, allowing customers to send and receive funds directly through their handsets, as well as to transfer money to other customers. This has allowed individuals to access banking services in remote locations, and to make payments even when the user has no access to traditional banking services. In addition to providing banking services, mobile phone companies are also beginning to offer other financial services such as loan and insurance products. This has allowed individuals to access these services from anywhere, at any time, and without having to go through a bank (Silver, Smith, Johnson, Jiang, Anderson and Rainie, 2019).

Overall, the use of mobile phones for financial transactions has had a significant impact on the way people conduct their financial activities. It has allowed individuals to increase their financial autonomy, to access banking services in remote locations, and to purchase

goods and services directly through their mobile handsets. As mobile phone technology continues to evolve, it is likely that the use of mobile phones for financial transactions will continue to grow. Wishart (2006) opine that the introduction of MMT services has been beneficial for the financially underserved segment of the population, providing them with access to credit, savings, and payments services that were not previously available to them. It has also enabled them to save, transfer, and acquire money more easily, particularly through mobile money, an innovation that has rapidly gained popularity in developing countries (Pulver, 2009).

1.1.4 Financial Performance

SMEs approach to performance measurement is informal, not planned and not based on a predefined model; performance measurement is introduced to solve specific problems and the performance measurement system grows out of this process spontaneously rather than as a result of planning (Barnes *et al*. 1998). Consequently, performance measurement in SMEs is characterized by a poor alignment between strategy and measures (Addy *.et al*.1994; Chennell *.et al*.2000), with the exception of SMEs with quality management experiences. In SMEs, planning is usually absent or limited only to the operation levels where performance is measured. Consequently, SMEs do not take advantage of the implementation of the PMS to introduce strategic planning. Moreover, performance measures usually focus on past activities. In other words, the aim is to gather information to support the control activities rather than the forecasting and planning processes.

SMEs have limited resources for data analysis. Data are gathered and the processes analyzed in an imprecise way, and this unformulated approach increases the ambiguity of the measurement objectives. The information is then presented in the same way: SMEs

usually use tables rather than graphs, making it difficult to interpret the information (Antonelli and Parbonetti 2002; Barnes *.et al*. 1998). Only SMEs with quality management experience have started to develop a graphical presentation of the information they gather. The same happens for performance measurement review, which is a process needed to make changes in the PMS according to changes taking place in the internal and external contexts. When Performance measures review is not carried out correctly, the PMS is not being used to achieve strategic objectives. The financial performance measures include profits, revenues, returns on investment (ROI) (Duchesneau and Gartner 1990; Smith, Bracker, and Miner 1987), returns on sales (Kean *.et al*. 1998), and returns on equity (Richard 2000; Barney 1997)

The relevant question in this regard is: Are SMEs in Kenya using the available tools (i.e., financial ratio analysis and bankruptcy prediction models) that have been used for years? Huck and McEwen (1991), Schwenk and Shrader (1993), McMahon and Davies (1994) highlight the importance of financial performance as follows: Successful financial performance in SMEs has a positive association with the capacity to manage financial issues effectively. In conclusion adoption of performance measurement system supports SMEs to manage uncertainty, to innovate their products and services, and to sustain evolution and change processes.

1.1.5 Mobile Money Merchant Services and Financial Performance of SMEs

Mobile money services have increased in Kenya over years. The agent network grew from 47,677 in 2011 to 224,108 in 2019, indicating 370% increase. The increase in the agent network was also occasioned by rapid growth in the number of mobile money transfer services subscribers from 17 million in 2011 to 30 million in 2019. There was also a steady rising trend in the total number of transactions from 577.4 million in 2012

to 1.8 billion in 2019 which indicated growth in utilization of mobile money services. This growth in the number of transactions saw the total grow from 1.2 trillion in 2011 to 4.3 trillion in 2019 (Communication Authority of Kenya Report, 2019) as indicated in Table 1.

Table 1

Mobile Money Services

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mobile Money Transfer Agents	47,677	49,079	93,689	123,703	143,946	165,908	182,472	205,745	224,108
Mobile Money Transfer Service Subscribers (‘000)	17,396	19,319	26,016	26,023	26,753	31,997	30,005	31,627	28,976
Total Transfers (KSh Billion)	1,169	1,544	1,902	2,372	2,816	3,356	3,638	3,984	4,346
Number of Total Transactions in Million	….	577.4	732.6	911.3	1,114.2	1,526.2	1,543.2	1,739.6	1,839
Total Transfers as % of GDP	31.4	36.2	40.1	43.9	44.8	47.8	44.7	44.7	44.6

Source: Central bank of Kenya (2020)

Mobile money transfer includes sending or receiving money for either payment of salaries, settlement of business transactions, payment of school fees, or for family support is a common phenomenon for both businesses and individuals. It requires efficient, reliable and affordable money transfer services whereby money can be deposited in one location and withdrawn in another in both urban and rural areas (Kim, Mirsobit and Lee, 2010). Structural weaknesses in the formal financial industry in Kenya, however, limit the access to money transfer services, especially in rural areas and for People with low income (Hughes and Lonie, 2007). Banks often require minimum

deposits and other fees, which can be hard to come by in rural areas where incomes are typically lower. Banks also require customers to have a certain level of financial literacy in order to make use of their services, which is often difficult in rural areas where educational opportunities may be limited. Additionally, banks often require customers to physically travel to their location in order to access their services, indeed, individuals and businesses in remote areas often face additional challenges when it comes to accessing financial services, including credit (Biljon & Kotzé, 2008).

For local transfers, the fee is usually a flat fee, typically ranging from $1 to $10 depending on the financial institution. For international transfers, the fee can be as much as 10% of the amount sent and can include additional fees for foreign exchange rates, processing, and intermediary banks. Some services, such as Transfer, offer lower fees for international transfers. (Au & Kauffman, 2008). Using a secured and legitimate money transfer service such as banks or online payment platforms (Kim, Mirsobit & Lee, 2010 and Hughes and Lonie, 2007). Sander (2003) MMT services allow people to send and receive money using their mobile phones. These services are increasingly popular, as they provide a convenient, secure, and cost-effective way to transfer money.

Individuals and businesses in remote areas often face additional challenges when it comes to accessing financial services, including credit. Furthermore, MMT services can be used in areas where there is no access to traditional money transfer services, such as rural areas and under-served communities. Additionally, MMT services often offer additional features such as loyalty programs and discounts that can be used to incentivize customers.

Finally, MMT services can provide an additional layer of security, as the money is transferred directly from the sender to the receiver without passing through a third party

(Au & Kauffman, 2008). With the introduction of mobile phone-based money transfer (MMT) services in recent years, this situation has changed dramatically. This has had a significant impact on the way people in these countries access and use services, such as banking, health care, and education. It has also enabled people to communicate more effectively, resulting in increased access to information, increased involvement in the economy, and improved quality of life (Orozco, 2003). This has expanded the range of applications for it is beyond voice communication. Money transfer is at the heart of this experience. The study focused on the effect of mobile money merchant services on the financial performance of small and medium-sized enterprises (SMEs) in Nakuru City which appears to be motivated by a recognition of the unique challenges and opportunities that mobile money services can bring to businesses in urban areas, particularly within the context of Nakuru City.

1.2 Statement of the Problem

The small and micro enterprises (SMEs) play an important role in the Kenyan economy. SMEs face a considerable measure of difficulties in carrying out transaction. Mobile Money offer a range of services to SMEs, such as online payment processing, automated invoicing, mobile commerce, and analytics. Since its introduction in 2007, Mobile Money Transfer has seen tremendous growth in Kenya. The service's affordability and accessibility are credited with its success (Mbogo, 2010). Mobile money accounts also provide users with access to financial services (Njenga, 2009). SME's in Kenya have adopted the utilization of mobile payments in transacting their business because mobile phones are relatively affordable and the services offered are cheap (Mbogo, 2010). Kenya's vision 2030 suggests that use of science, technology and innovation should be intensified to improve productivity and efficiency among the three pillars (economic,

social and political). Mobile Money Transfer Service (MMTS) is an ICT innovation sector with the potential to improve efficiency of businesses when properly utilized. After launching of Safaricom's platform for transfer of money M-Pesa in March 2007, many Kenyans quickly adopted the subscription service. This subscription has rapidly grown over the years with the company hitting 900, 000 subscribers 8 months after the service had been launched, (Omwansa, 2009) and over 8.5 million subscribers by September 2009 (Safaricom, 2009).

Kirui (2021) discovered that group membership, gender, credit access, education, mobile phone ownership, radio ownership, business registration, number of business units, and total number of employees all influenced the use of the services. Mdoe, Kinyanjui, and McMillan (2018) established that that micro, small and medium-sized enterprises that used mobile money, mobile banking and group participation, had 6.05, 8.8, and 1.97 percentage points, respectively, more likely to receive formal credit. Tat (2018) established that the organization domain is the key domain, which affects all other domains and has an impact on the general viability of the business model. Mutinda (2018) also established that there is a positive correlation between MSMEs financial performance and business growth, efficiency in service delivery, access to information and convenience and reliability. Momanyi (2020) study found out that the adoption of cross-network mobile money transfer services has had a positive impact on the performance of businesses, with 71% of respondents who adopted the service indicating improvement. This finding suggests several potential benefits associated with the adoption of cross-network mobile money transfer services in Nakuru City.

The application of mobile phone services in firm operations has been a subject of interest for researchers, and numerous studies have been published on this topic. The use of

mobile phones in business operations can encompass various aspects, including communication, financial transactions, data collection, and more (Matskin & Tveit, 2001; Lee 2001; Kannan *et al*. 2001; Balasubramanian *et al*. 2002. The presence of these services has however not been studied extensively and therefore its implications to small businesses cannot be concluded. As a result, the current study sought to determine whether mobile merchant services influenced the performance of Nakuru City's Small and Medium Enterprises. The following objectives guided the research.

1.3 General Objective

The overall goal of this research was to determine the effect of mobile money merchant services on the financial performance of SME-sized enterprises in Nakuru City.

1.3.2 Specific Objectives

The specific objectives of the study were:

i. To establish effect of affordability of mobile money merchant services on financial performance of small and medium enterprises in Nakuru City.
ii. To evaluate effect of availability of mobile merchant services on financial performance of small and medium enterprises in Nakuru City.
iii. To determine effect of effectiveness of mobile merchant services on financial performance of small and medium enterprises in Nakuru City.
iv. To establish the effect of value-added services on the mobile merchant services platform to the financial performance of small and medium enterprises in Nakuru City.

1.4 Research Hypotheses

$H0_1$ There is no statistically significant effect on the affordability of mobile money merchant services on financial performance of small and medium enterprises in Nakuru City.

$H0_2$ There is no statistically significant effect on the availability of mobile merchant services on financial performance of small and medium enterprises in Nakuru City.

$H0_3$ Mobile merchant services do not statistically significantly affect financial performance of small and medium enterprise in Nakuru City.

$H0_4$ There is no statistically significant effect on the Value added services on financial performance of small and medium enterprises in Nakuru City.

1.5 Significance of the Study

With an increase in technology, mobile merchant services have been used widely by SMEs owners. This study is therefore important as it will form a basis for future mobile merchant services transactions by these categories of individuals in order to improve the performance of their businesses. Communication Authority of Kenya will use the findings to update the existing policies on Mobile Money Technology in Kenya. The study focusing on how mobile money has influenced the financial performance of businesses in Nakuru City, is likely to provide valuable insights into the economic impact of digital financial services on the local economy. Mobile Money service providers like Safaricom and Airtel will be able to use the findings from the study to understand how their services affect SME performance in Kenya. Further the findings of the study will add to the body of knowledge in the finance discipline. Future researchers

will be able to draw lessons from the study and use its empirical findings for future studies.

1.6 Scope of the Study

The study will focus on small and medium enterprises operating in Nakuru City. Nakuru City is ideal because there is a large number of small businesses and mobile money services are largely used. The study will limit itself to three parameters namely: affordability of mobile merchant services, availability, effectiveness of mobile merchant services transactions and value-added services.

1.7 Limitations and Delimitation of the Study

The limited resources of the research team meant that the data collection process was limited to a single location, which could potentially lead to bias in the results. On the first day of data collection, this was accomplished by hiring more research assistants to cover more mobile businesses. The study also discovered a lack of cooperation among entrepreneurs in providing specific income data. This was addressed by stating that the study was only for academic purposes and by conducting data simulation using a few accurate financial performance data. This may have resulted in a bias in the results due to the subjective nature of responses from participants. In order to supplement the results, other methods such as interviews and observations should have been used in the research. Furthermore, the research should have included a larger sample size from different geographical locations in order to generalize the results to a larger population.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the studies of other researchers who conducted research in similar area. The specific areas to be covered here are theoretical review, empirical review, and conceptual framework.

2.2 Theoretical Review

The study was based on the following theories; Technology Acceptance Model, and Innovation Diffusion Theory.

2.2.1. Technology Acceptance Model

The Technology Acceptance Model (TAM) was developed and validated by Davis (1993) to explain the mechanisms that influence and shape users' acceptance and/or adoption and use of new technological infrastructure. It is based on the idea that user acceptance of a technology is based on their perceived usefulness and ease of use. TAM explains how these two factors influence user acceptance and use of technology, and suggests that these two factors are the primary determinants of user acceptance and use. TAM has been used to predict user acceptance of a variety of technologies, including web-based systems, mobile applications, and other forms of interactive media (Adams et al., 1992; Chau and Hu, 2002; Davis and Venkatesh, 1996; Kwon & Chidambaram, 2000; Legris et al, 2003), other studies included Cheong & Park, (2005); Kwon and Chidambaram, (2000); Nysveen et al, (2005). The model suggests that users' acceptance of technology is determined by their beliefs about these two factors. The TAM is based on the idea that users' beliefs determine their attitudes and, ultimately, their behavior toward technology. Therefore, the TAM suggests that if users' beliefs about the

perceived usefulness and ease of use of a system are positive, then they will have a positive attitude toward the system and be more likely to use it (Davis, 1989). These two beliefs produce a favorable disposition or intention toward using IT, which influences its use. The essence of the concept of Perceived Usefulness (PU) accurately. Perceived Usefulness is a key construct in the Technology Acceptance Model (TAM), a widely used theoretical framework in the field of information systems and technology adoption.

Perceived Usefulness (PU) is "the degree to which a person believes that using a specific system will enhance his or her job performance" (Davis, 1989). Other researchers have also found TAM to be an effective tool in understanding consumer behavior. For example, Venkatesh et al. (2003) found that TAM was able to predict user acceptance of health information systems, and So et al. (2010) found that TAM was able to accurately predict attitudes toward mobile banking systems. Also, Legris et al, (2003) conclude that "TAM has proven to be a useful theoretical model in helping to understand and explain user behaviour in information system implementation".

The TAM suggests that two factors, perceived usefulness and perceived ease of use, influence a user's attitude towards a new technology and ultimately their decision to use it. This study used the TAM to examine the factors that influence acceptance of MMM in the context of rural households. Specifically, it will investigate how perceived usefulness and perceived ease of use influence the adoption of mobile money in rural households. The outcome of the study, which focuses on the influence of mobile money on the financial performance of businesses in Nakuru City, can indeed serve as valuable insights for informing the design of interventions and policies, particularly with an aim to increase the uptake of mobile money in rural areas.

2.2.2 Innovation Diffusion Theory

Rogers (1995) developed the Innovation Diffusion Theory (IDT) in 1962. The Rogers' Innovation Diffusion Theory has received similar attention from academics in explaining consumer behavior toward new technology (Rogers, 1995). Diffusion of innovation is the process by which an idea, practice or object is adopted by members of a social system. It typically involves communication channels, such as word of mouth, media, and technology. It is a fundamental process that shapes the development of ideas, practices and objects in a society. It is also a key factor in the success or failure of new products, services, or processes. The diffusion of innovation can be studied from a variety of perspectives including technology, communications, sociology, psychology, and economics. It is a complex process that involves multiple stakeholders and involves the transfer of knowledge, information, and resources. (Rogers, 1995). According to these definitions, innovation diffusion occurs when a social system accepts and begins to use (adopt) an idea or technology.

Everett Rogers' Diffusion of Innovations theory accurately listed four key characteristics that he identified as influencing the adoption of innovations. Which indicates whether the results are visible, then people may be more likely to adopt the innovation, as they can see the benefits it provides. (Rogers, 1995). The theory of Innovation Diffusion is useful for studying technology adoption. The process of communication through specific channels begins with the innovator, who has an idea and then shares it with others. The idea is then shared through social media, word of mouth and other means of communication. As it is shared, it is adapted and modified by the people who receive it, and then they share it further. This process continues until the innovation has been accepted and adopted by the majority of the people within the social system. The

prolonged nature of the adoption process, as highlighted by Everett Rogers in his Diffusion of Innovations theory. The acceptance and adoption of new ideas or technologies indeed often take considerable time, and this timeframe can vary depending on the context, the nature of the innovation, and the characteristics of the adopters. The Technology Acceptance Model (TAM) and the Diffusion of Innovations Theory (DIT) are both influential frameworks in understanding technology adoption, and they offer valuable insights into the factors that influence the acceptance of innovations. The literature also suggests that cultural factors, such as values and beliefs, can affect the rate of adoption. (Bagozzi et al., 1992), investigate technology adoption; however, the diffusion of innovations is more robust. Technology, innovation communication, decision-making processes, social systems involved, and the consequences of technology are all investigated in this theory.

The criticism leveled at this theory is that people do not all adopt innovations at the same rate. Other internal and external factors have an equal impact on innovative adoption. This theory also seeks to explain consumer behavior toward technology, which is the foundation of the current study, so it is very relevant to the current study. The researcher used the Diffusion of Innovations theory, developed by Everett Rogers, as the basis for analyzing the effect of mobile money transfer innovation adoption on the performance of SMEs in selected wards in Nakuru City. Given the key concepts of this theory, such as relative advantage, complexity, trialability and observability, it provides a solid framework for understanding the dynamics of innovation adoption.

2.3 Empirical Review

Several factors influence the financial performance of SMEs. The most common determinant is measuring sales growth over a specific time period. Assets, market share,

profits, and output are also commonly used indicators of SMEs (Davidsson, Delmar & Gartner, 2006).

2.3.1 Affordability of Mobile Money and Financial Performance

The study conducted by Ndunge and Mutinda (2012), which investigated the relationship between mobile money services and poverty reduction in rural eastern Kenyan women's groups, provides valuable insights into the impact of mobile money on the financial performance of SMEs. Ndii (2014) investigated mobile banking's role in financial inclusion. The survey asked participants about how expensive it is in using mobile payment systems, the cost of using banks, and the cost of using money transfer companies. Mobile payment services provide convenience and security in addition to low transaction costs. Users can use mobile payment services to make payments quickly and securely without having to physically visit a bank or store. Furthermore, many mobile payment services include extra features like fraud protection, password protection, and customer support. Instead, the study sought to discover SME owners' perspectives on the pros and cons of using mobile money as a payment method. According to the study, the majority of SME owners considered mobile money to be a convenient and secure method of receiving payments, with the majority of respondents citing time savings, low cost, and convenience as the primary benefits of using the service.

Lennart (2010) studied the service and Usage among Micro and Small Businesses in Tanzania. The results revealed that mobile money transfer helped in reducing the cost of transactions, improved the speed of transactions, and provided more convenience for users. This indicates the service had a positive impact on the financial sector as it allowed for more efficient and cost-effective transactions. Additionally, mobile money

transfer also enabled users to have access to financial services that they were previously unable to access. This indicates that the service opened up new opportunities to users by providing them with access to financial services that they were previously not able to access.

Mbogo (2010) researched on the impact of mobile payments on micro-business success and growth. Additionally, mobile payment systems has more layer of security, as customers are able to confirm their purchases with a pin or fingerprint, while merchants can also accept payments without handling cash or card information. Finally, mobile payments offer businesses the ability to track and analyze customer data, allowing them to better understand customer behavior and preferences.

It was eminent that mobile payments can provide micro-businesses with a better understanding of their customers, allowing them to better meet customer needs. Finally, mobile payments can help to increase trust between micro-businesses and customers, as customers can pay securely and quickly. According to Standard Media (2014), the service is an effective way for them to receive payments for goods and services without having to worry about the cost of setting up a traditional bank account. With the service, MSEs can easily send and receive payments from customers located in different parts of the country and even abroad. This helps them to increase their customer base, improve their financial management, and increase their profits. Furthermore, the service is also a dependable way to make payments, reducing the risk of fraud and increasing customer confidence. Instead, the factors that influence the adoption the service by SMEs in Nakuru City was unveiled. The study discovered that cost, convenience, trust, and access to mobile money services are the most important factors influencing the adoption and use

of mobile money services by SMEs in Nakuru City. Access to financial services, security, and awareness were also important factors in their adoption and use.

Rangan, Chu and Petkoski (2011) investigated the various value creation strategies at the Base of the Pyramid and identified four strategies for different segments of the low-income entity. The most effective strategy for meeting the needs of the low-income population (people earning between $3 and $5 per day); products and services must be appropriate and affordable. In the case of M-PESA, the earning less than $1 per day), the best practice is to form partnerships with governments and non- money transfer service serves a purpose for those who do not have access to the banking sector. Second, for the subsistence population (people living on 1-3 USD per day), the most efficient approach is to involve people in order to provide efficient reach and coverage while also engaging the community in order to co-produce value. In the case of M-PESA, this could be used to recruit M-PESA agents by providing them with a ready-made business model. Finally, the study delves into the impact of mobile money merchant service affordability on the financial performance of SMEs in Nakuru City, especially with a focus on individuals living in extreme poverty. This approach recognizes the potential of mobile money services to contribute to financial inclusion and economic empowerment, particularly for those in vulnerable economic situations.

Aluoch (2021) investigated the impact of mobile money services on the financial performance of hospitality firms in Nakuru County, Kenya, reveals important insights. According to the study, mobile money companies that operate the service platform should make the platform more user-friendly by supporting services aimed at hospitality firms. According to the study, the service companies should lower transaction fees, shorten transaction time, and improve the overall quality of mobile services offered.

2.3.2 Availability of Mobile Money and Financial Performance

According to Njenga (2009) individuals are willing to apply mobile technology to accept and make payments, a trend that is likely to continue as the mobile payments industry grows. According to Omwansa (2009), a lost or stolen mobile phone does not spell disaster because no one can access an M-Pesa account without a valid personal identification number (PIN). He concludes by noting that M-Pesa has been successful in other countries, and that it could be an effective way for the government to encourage financial inclusion. He suggests that the government should consider investing in the technology and making it more widely available. This would give people access to banking services apart from a bank account, which could help reduce poverty and improve the economic situation for many people in the country.

Wambua (2015) investigated the factors influencing the use of the service as a method of payment for administrations and merchandise among middle-level business through a contextual analysis of Mitumba brokers in the Gikomba advertise. The outcome indicate that the individual factors, such as information level, attitudes toward innovation, and administrative authority, may play an important role in the dissemination of the development. This may provide encouraging evidence for controllers assessing the viability of core values on client executives. The findings also show that the development of core values on client relationships by executives is critical for success.

The research conducted by Tat (2018) on the advantages and disadvantages of mobile payment services in Sweden is valuable for understanding the landscape of mobile payments and the perspectives of various service providers. The primary goal of the study was to increase knowledge and understanding of how mobile payment service providers in Sweden address the opportunities and challenges associated with mobile

payment services. This indicates a comprehensive examination of the factors shaping the mobile payment ecosystem. Findings from the research can have practical implications for mobile payment service providers, policymakers, and other stakeholders. Insights into the challenges and opportunities can inform the development of strategies, policies, and innovations to enhance the effectiveness and acceptance of mobile payment services. According to the study findings, the organization domain is the key domain that affects all other domains and has an impact on the overall viability of the business model (Tat, 2018).

The research conducted by Ngaruiya (2014) on the financial performance of Micro, Small, and Medium Enterprises (MSMEs) in Nakuru's central business district, specifically focusing on the impact of mobile payment transactions, provides valuable insights into the role of mobile money in the business environment. The findings reveal a positive impact of mobile money transactions on MSMEs in Nakuru's central business district. Specifically, it highlights that mobile money transactions have contributed to an increase in the number of customers, improved cash flow, and reduced operational costs. The study's findings revealed that mobile money transactions have a significant impact on sales revenue (Ngaruya, 2014).

2.3.3 Effectiveness of Mobile Money Services and Financial Performance

According to Pagani (2004), one of the primary advantages of mobile payment services is accessibility. This refers to the ability to reach the required services conveniently. Mobile payment services, like M-Pesa in Kenya, are designed to be easily accessible, allowing users to conduct financial transactions from various locations. The information highlights that M-Pesa's mobile payment services have significant benefits for small and microbusinesses. As of a specific date in 2009, there were 8,650 M-Pesa agents

providing mobile payments across Kenya. This widespread availability of agents contributes to the accessibility of mobile payment services for businesses, especially those operating on a smaller scale. Small and medium-sized enterprises (SMEs) are mentioned to visit the bank less frequently due to the use of mobile payment services. This reduction in physical visits to banks allows SMEs to save time and dedicate more effort to running their businesses. Mobile payments provide a more convenient alternative for financial transactions.

The growth of mobile money services has also enabled more efficient access to finance for entrepreneurs, including those in rural areas (Zutto, 2010). This has enabled businesses to invest in capital and expand their operations, leading to greater economic growth and job creation in rural areas. Additionally, mobile money services have made it easier for businesses to access credit, which has allowed them to finance larger investments. Overall, mobile money services have enabled greater access to financial services and created opportunities for economic growth in rural areas. They have increased efficiency and reliability of money transfers, reduced transaction costs, and enabled more people to access credit. These benefits have been felt most strongly in rural areas, where the lack of access to finance has been a major constraint on economic development.

According to Pazarbasioglu, Mora, Uttamchandani, Natarajan, Feyen and Saal (2020) in addition to increased convenience and reliability, mobile service providers have also enabled greater access to financial services for people in rural areas who have previously been disconnected from the formal banking sector. This has resulted in increased financial inclusion, as mobile money services have provided people with a safe and secure way to access and transfer funds without having to travel to a bank. The mobile

money services have also provided new opportunities for businesses to increase their sales and reach new customers. For example, small businesses can now accept payments using mobile money, which allows them to accept payments from customers even save for the access to traditional forms of payment like credit cards. Finally, mobile service providers have enabled greater financial transparency and accountability in the transfer of funds, as all transactions are recorded and can be tracked. This has made it easier to trace and recover stolen funds, as well as to report suspicious activity.

As the use of mobile money services increases, so do its benefits. It is more dependable, as money cannot be lost or stolen, and there is no risk of counterfeit or fraudulent money. Furthermore, it is convenient and fast, allowing customers to make payments directly from their mobile phones. Additionally, it is cost-effective as customers don't have to pay commission or transaction fees. This has resulted in a surge in the number of small businesses and entrepreneurs who are using mobile money services to increase their sales and expand their reach. Mobile money services have also made it better for access financial services and products. Customers can now open and manage bank accounts, transfer money, pay bills, and purchase goods and services remotely, reducing the need for physical presence at banks and other financial institutions. This has increased financial inclusion in Kenya, as more people are now able to access financial services at homes. The service has also made it easier for people to transact between family and friends, reducing the costs associated with traditional money transfer methods (Pazarbasioglu, Mora, Uttamchandani, Natarajan, Feyen & Saal, 2020).

According to Subhan et al. (2013), SMEs are often seen as the backbone of the economy, as they are critical for economic growth and development. They enable people to build businesses and earn a living for the growth of the wider economy. SMEs provide an

important support system for entrepreneurs, allowing them to access resources and networks that help them to create new products and services. According to Avendano (2013), The Kenya government has taken several steps to support SMEs through microfinance institutions and commercial banks, providing tax incentives and grants, and simplifying the registration process. Additionally, the government has established the Small and Medium Enterprises Authority (SMEA), which provides SMEs with mentorship, training, and networking opportunities for competitive business (Kihonge, 2014).

Talom and Tengeh (2020) In Douala, Cameroon, did an investigation of the impact of Mobile Money on Performance of MSMEs. This study employed the qualitative/descriptive research method. The data gathered from this study was analyzed using descriptive statistics. This included frequency distributions, percentages, and cross-tabulations. The analysis was performed by reaching out to the various mobile money services providers on MSMEs in Limbe, Blantyre, and Malawi. The findings revealed that the majority of MSMEs are using mobile money services for their businesses, and have found it to be very convenient and an efficient way to conduct their business activities. Outcome revealed that mobile the services increased the speed of transactions, improved customer loyalty, and enabled them to reach more customers. However, the study also identified some of the drawbacks of using mobile money services, such as security concerns and unreliable services.

Results revealed that mobile money services can provide a range of benefits to MSMEs in Limbe, Blantyre, and Malawi. The businesses are already using mobile money services and have found them to be convenient, efficient, and beneficial for conducting business activities. However, the study also highlighted the need for improved security

measures to be implemented to ensure the safety of transactions and the reliability of services. In addition, the study recommends that mobile money providers should consider offering more tailored services to meet the needs of MSMEs in Limbe

Mutinda (2018) conducted examination on the impact of mobile phone-based service on the financial performance of Nairobi County's small and medium enterprises. In this study, the descriptive survey method was used. A target population of over 50,000 formally registered MSMEs was used, 460 sample respondents were chosen as representative, with a provision of 20% above the desired sample size in the event that some of the sample size did not respond. The recommended sample size was determined by Mugenda and Mugenda (2003). The study also found that the most important factor for driving MSMEs' success was access to finance. The study concluded that MSMEs need to access a wider range of financial services and products to improve their financial performance and business outcomes. Access to Information: Access to information in the service services is dependent on the environment in which they are used. For example, most the service services require users to have an internet connection in order to access the service. Furthermore, the type of information available to users may vary depending on the specific service and the user's location.

2.3.4 Value Added MMS and Financial Performance

As noted by Jack and Suri (2014), mobile money has become a popular means of payment in Kenya, with an increasing adoption rate among Micro and Small Enterprises (MSEs) for both receiving and sending payments. Particularly noteworthy is the study's finding that households with mobile money accounts in Kenya are more likely to receive a larger number and value of remittances, especially during negative shock events, compared to households without such accounts. This underscores the vital role of mobile

money in the country's economy, especially in facilitating the flow of remittances. The findings suggest that further promotion of mobile money usage in Kenya could empower households to better cope with economic shocks (Republic of Kenya, 2016).

Bansal (2014) notes a substantial growth in mobile payment systems over the past decade, with a predicted growth rate of 40 percent for 2016, as highlighted by Dennis & Frei (2010). This growth is primarily attributed to the widespread use of smartphones and tablets, coupled with the emergence of digital wallets like Apple Pay and Google Wallet. The adoption of new technologies such as near-field communication (NFC) and biometrics has further enabled financial institutions to offer secure and convenient payment solutions for customers. Building on this, Arunga and Kahora (2007) emphasize that mobile payment services not only enable businesses to reduce costs and enhance efficiency but also contribute to improved customer service. Their study found that mobile payments, being more convenient for customers, not only increase sales but also foster customer loyalty

As noted by Mas and Radcliffe (2014), the advancement in money transfer technology has played a pivotal role in making financial services accessible irrespective of geographical location, particularly benefiting the unbanked poor. Mobile money services have empowered the unbanked to conduct payments and receive money without the need for a traditional bank account. This becomes especially valuable in regions where banking infrastructure is limited or access to a bank is costly or challenging. Furthermore, mobile money opens avenues for the unbanked poor to access various financial services such as savings and credit that might have been otherwise unavailable to them. Additionally, mobile money services contribute to reducing the cost of remittances, providing a quicker and more secure means for sending and receiving

money. The study's results further support these insights, revealing a positive effect of the value addition of mobile money merchant services on the financial performance of Small and Medium Enterprises (SMEs).

According to the study, SMEs that used mobile money merchant services had higher levels of profitability, higher returns on investment, higher sales revenue, higher liquidity, and higher asset turnover than those that did not. The study also discovered that mobile money merchant services improved SMEs' financial performance in terms of cost efficiency, liquidity, and working capital. The findings of this study show that adding value to mobile money merchant services improves the financial performance of SMEs in Nakuru City, Kenya. This research has significant implications for policymakers and practitioners seeking to improve the financial performance of SMEs in developing countries.

According to Nyagilo (2018), a significant positive correlation was established between the value addition of mobile money merchant services and the financial performance of Small and Medium Enterprises (SMEs) in Nakuru City. The study's results also revealed a significant positive correlation between the use of mobile money merchant services and the financial performance of SMEs in the same region. These findings carry important implications for both policy makers and business owners. Policy makers should take into consideration the positive impact of mobile money services on SME financial performance when formulating decisions that may impact the industry.

Mabwai (2016) conducted research to explore the effects of mobile banking on the financial performance of commercial banks. According to the study, capital adequacy, reflecting a bank's ability to maintain sufficient capital to cover risks, was found to be positively correlated with financial performance. Higher levels of capital adequacy

enhance a bank's resilience, reducing the likelihood of failure and improving its capacity to withstand unexpected losses. Additionally, market share emerged as a crucial factor influencing financial performance. Banks with a larger market share tend to attract more customers and deposits, ultimately contributing to higher profits. Furthermore, the study highlighted a positive correlation between asset size and financial performance, underscoring that larger banks have the potential to generate more profits from their operations.

Awinja (2015) conducted research to assess the impact of service delivery channels on the operational performance of Kenyan commercial banks, with a specific emphasis on customers' convenience and flexibility. While this study did not directly consider the influence on financial performance, it emphasized the critical role of customer-centric approaches in the success of internet banking, potentially impacting banks' profitability.

On the other hand, Kamau (2014) delved into the effects of financial innovations, particularly mobile banking, on the financial performance of Kenyan commercial banks. The research revealed a positive impact of mobile banking on the banks' return on assets and return on equity. The increased financial performance was attributed to enhanced efficiency in service provision and improved customer satisfaction. Furthermore, the study highlighted positive effects on non-interest income and loan portfolio growth. The conclusion advocated for the strategic adoption of mobile banking services as an essential tool for enhancing the overall financial performance of banks, emphasizing the importance of technological investments in this regard.

Ndirangu (2013) examined the effect of agency banking on the financial performance of Kenyan commercial banks. The research design consisted of a census of all banks licensed to conduct agency banking as of December 31, 2012. The population of the

study included 44 Kenyan banks that were licensed to operate, while the sample included 10 banks that were doing agency banking at the time of the research. The findings revealed that the number of agents and volume of transactions (deposits and withdrawals) of a commercial bank were not directly related to the bank's financial performance as measured by return on equity.

Kiptoo (2022) also found out that digital finance has had a positive impact on the economic empowerment of vulnerable people, as they have easier access to financial services. The study concludes that digital finance has the potential to improve the financial inclusion of vulnerable people, but more targeted interventions are needed to ensure that digital financial products are tailored to their needs and that they are educated about the advantages of using digital financial products.Kandie (2013) The impact of agency banking on financial inclusion in Kenya was investigated. The study employed a cross-sectional survey approach in terms of research design. Six Kenyan commercial banks provided the population with agency banking services. Secondary data was used because it was readily available. Inferential statistical techniques were used to predict the dependent variable based on its covariance with the relevant independent variable. Financial inclusion and agency banking have a strong positive relationship, according to the findings. The correlation coefficient between agency banking aspects and financial inclusion was found to be 0.727, indicating a strong relationship between the independent variables and the dependent variable. The R-square is 0.529, indicating that the variables related to agency banking aspects could explain and predict 52.9% of the variance.

2.3.5 Financial Performance of SMEs

Macharia (2012) conducted an analysis on the influence of access to finance on the growth of micro and small businesses in Ongata Rongai Township. The majority of respondents reported positive experiences with accessing financial services from institutions. However, a subset expressed challenges, citing the process as complex, lengthy, and costly. The study underscores the need for increased awareness initiatives to inform SMEs about the availability of financial services and products, aiming to reduce barriers to access. Additionally, recommendations include calls for financial institutions to streamline the complexity and cost of credit services, providing flexible repayment terms and improving overall customer service.

Finance stands as a pivotal factor in driving the growth of small businesses, offering the capital necessary for expanding operations and venturing into new products and services. However, the presence of financial constraints can impede a small business's ability to access capital and capitalize on financial opportunities. In developed countries, these constraints may be exacerbated by the absence of market-driven financial instruments, limited independent financial sources, and a reluctance by banks to lend to small businesses. Addressing these constraints is crucial for the success of small businesses. The lack of access to credit and finance not only influences technology choices, restricting options for many SMEs, but also leads to the utilization of less effective technologies due to limited alternatives. Even when credit is available, entrepreneurs may face restrictions on options, such as requirements to purchase heavy, immovable equipment as collateral for loans. In Kenya, with an underdeveloped capital market, credit constraints manifest in various ways, compelling entrepreneurs to resort to self-financing or borrowing from friends and relatives. The consequence is that small

businesses often resort to high-cost short-term financing, lacking access to long-term credit solutions.

Mwania's (2011) study explores factors influencing the performance of Small and Medium Enterprises (SMEs), focusing on the lending process at KCB Ruiru Branch. Critical factors identified encompass access to markets, finance, technology, information, human capital, capacity building, government policies, and infrastructural development. The study reveals KCB Ruiru Branch's well-defined lending process for Business Banking Loans (BBL), involving screening, appraisal, approval, and disbursement. Notably, the BBL has a positive effect on SME performance, despite challenges in the lending process such as the lack of collateral, inadequate record-keeping, and poor credit history. Concluding recommendations for KCB Ruiru Branch include prioritizing training and capacity building for SME customers, fortifying risk management processes, and enhancing awareness about BBL among potential customers. Interestingly, the study finds no conclusive results regarding the relationship between entrepreneurs' education levels and business performance. However, it highlights that 49.5% of respondents who received training in their business areas reported successful business outcomes, emphasizing the positive impact of relevant training on business operations.

Mugo's (2012) did a study in Nairobi's Central Business District (CBD) on factors influencing women entrepreneurs' performance. The study aimed to evaluate financial accessibility, assess the impact of record-keeping challenges, examine the effect of budgeting on financial factors influencing women entrepreneurs' performance, and establish the impact of working capital management on performance and loan accessibility. Additionally, his statement provides valuable context on the challenges faced by many Small and Medium Enterprises (SMEs) in meeting traditional financing

criteria, with banks being hesitant due to perceived risks and lack of information. The pursuit of alternative financing sources, such as venture capital, angel investors, and crowdfunding, is highlighted. However, these sources may pose challenges in terms of cost and availability. The proposed solutions include creating an enabling environment through policy reforms, investment in financial infrastructure and capacity building, incentives for private sector engagement in SME financing, and the development of targeted financing products. To address these obstacles, the statement proposes government intervention by creating an enabling environment through policy reforms and regulations, investment in financial infrastructure and capacity building, and incentives for private sector engagement in SME financing. Additional measures include developing targeted financing products for SMEs, increasing access to alternative financing sources, and providing technical assistance and training to help SMEs meet the requirements of traditional financing sources (Kinyanjui, 2006).

The formidable obstacle of securing start-up finance and sustaining business growth is a pervasive challenge faced by entrepreneurs, as evidenced by research findings from Daniels et al. (2003), Kinyanjui (2006), and studies conducted by Kiiru, Mirero, and Masaviro (2008) for the Kenya Rural Enterprise Programme (K-Rep). Nyambura's (2010) research conducted among small manufacturing enterprises in Nairobi reinforces the notion that finance remains a significant issue in the small business enterprise sector. The impact of these financial constraints on Small and Medium Enterprises (SMEs) is profound, forcing reliance on low-cost technology that often falls short in quality. Consequently, production costs escalate, rendering these businesses less competitive. The financial limitations extend to the inability of SMEs to afford computers or maintain equipment upgrades, further intensifying their competitiveness challenges. Organizations must also have the right resources and personnel in place to support the

implementation process. This includes adequate staff with the required skills and experience to design, implement, and monitor the process, as well as access to the necessary technological infrastructure. Organizations must also ensure that their employees are given the necessary training and support to understand and successfully use the new technology. In addition, there must be clear policies and procedures in place to ensure that the implementation process is properly managed and monitored. Finally, organizations must ensure that they have the right partnerships in place to ensure that their goals are achieved (Wanjohi and Mugure, 2008).

Ali (2011) conducted a study investigating factors influencing the financial sustainability of NGOs in Kenya, with a specific focus on Sisters Maternity Home (SIMAHO) in Garissa. The research revealed that donor relationship management plays a pivotal role in NGO financial sustainability, followed by strategic financial management and income diversification, while own income generation contributes the least. The study emphasized the importance of hiring employees skilled in strategic planning and financial analysis for NGOs to maintain sustainability. Similarly, Kinyua (2014) explored the role of finance, management skills, macro environmental factors, and infrastructure on the performance of small and medium-sized enterprises (SMEs) in Nakuru City's Jua Kali sector. The findings underscored the potential of access to finance in improving SME performance.

Financial performance serves as a subjective measure, indicating a company's ability to generate revenue through the effective utilization of assets within its primary business operations. The process of quantifying efficiency and effectiveness, known as performance measurement, distinguishes effectiveness as compliance with customer requirements and efficiency as the optimal use of organizational resources to achieve

customer satisfaction. Concrete examples of Small and Medium Enterprises' (SMEs) financial performance indicators include sales, business transactional activities such as mobile money purchases, and access to financial services like savings and microcredits. These indicators, rooted in the study's findings, as demonstrated by Rahmat, Megananda, and Maulana (2006), offer tangible metrics for evaluating and monitoring SMEs' financial performance.

The primary challenge in performance measurement for Small and Medium Enterprises (SMEs) lies in the scarcity of resources and time available for managing performance. SMEs face constraints in researching and implementing sophisticated performance measurement systems due to limited time and resources. Financial limitations often hinder their ability to hire external expertise. Moreover, the nature of SMEs makes it challenging to develop and implement comprehensive performance measurement systems. Additionally, SMEs commonly lack the requisite data and information for effective performance tracking.

In the context of Small and Medium Enterprises (SMEs), the inherent lack of communication between departments and functions poses a challenge to effective performance measurement. To overcome these hurdles, research suggests that SMEs should prioritize the development of simple, user-friendly performance measurement systems that are easily implementable and maintainable. Tailoring these systems to the unique needs of the SME, considering constraints in resources and time, is crucial. Additionally, a holistic approach involves creating systems capable of measuring both financial and non-financial performance while fostering communication between different segments of the organization. The ongoing relevance and effectiveness of the performance measurement system are ensured through regular reviews and updates.

Notably, performance measurement in SMEs is characterized as informal, unplanned, and problem-driven, evolving spontaneously rather than being based on a predefined model (Barnes et al., 1998).

Performance measurement in Small and Medium Enterprises (SMEs), except for those with quality management experience, is marked by a notable misalignment between strategy and measures, as identified in studies by Addy et al. (1994) and Chennell et al. (2000). In many SMEs, planning is either absent or confined to operational levels, where performance is the primary focus. Consequently, SMEs often miss the opportunity to integrate strategic planning into the implementation of Performance Measurement Systems (PMS).

There are a few steps that SMEs can take to improve their data analysis resources. First, they should invest in the right tools and technologies to collect and manage their data. This includes data warehouses, analytics tools, and reporting tools. Second, they should create a culture of data-driven decision-making by making data analysis part of their everyday operations. Third, they should create a unified data analysis process by using consistent methods and standards for data collection, analysis, and reporting. Finally, they should use data visualization tools to present the data in a way that is easy to interpret. By following these steps, SMEs can ensure that their data analysis resources are up-to-date and effective. When performance measures are not reviewed correctly, the PMS is not used to achieve strategic goals. Profits, revenues, returns on investment (ROI) (Duchesneau and Gartner 1990; Smith, Bracker, and Miner 1987), returns on sales (Kean et al. 1998), and returns on equity are examples of financial performance measures (Richard 2000; Barney 1997).

Many SMEs in Kenya are not using the available tools for financial performance monitoring. This is primarily due to the fact that a majority of SMEs are small and lack sufficient capacity to acquire the necessary knowledge and resources required for deploying such tools. In addition, these tools may be too costly for SMEs to implement. Furthermore, the cultural environment in which SMEs operate is not conducive for the adoption of these tools, as many business owners lack the understanding of the potential value these tools can bring to their businesses. Risk management is a systematic process of understanding, evaluating, and addressing risks in order to maximize the chances of achieving objectives and ensuring the sustainability of organizations, individuals, and communities. It also makes the organization aware of new opportunities. Risk management, in effect, necessitates an informed understanding of relevant risks, an assessment of their relative importance, and a rigorous approach to monitoring and controlling them. It is the practice of anticipating potential risks, analyzing them, and taking precautionary measures to reduce or eliminate the risk. When a business or organization makes an investment decision, it exposes itself to a variety of financial risks. The magnitude of such risks is determined by the type of financial instrument. Financial risks can take the form of high inflation, capital market volatility, recession, and financial institution bankruptcy, among other things. Risk management is a practice used by financial institution managers and investors to reduce and control the exposure of investments to such risks (Tsevisani, 2007). According to Tsevisani (2007), the interaction between human factors and tangible aspects of risk emphasizes the importance of focusing closely on human factors as one of the main drivers for risk management: a change driver that stems first and foremost from the need to understand how humans perform in changing environments and in the face of risks.

Risk mitigation strategies may include setting up systems to monitor and analyze a customer's financial situation, such as credit scoring and customer profiling. Lenders may also set up guidelines to ensure that loans are given out responsibly and that borrowers have the ability to repay them. Banks may also use collateral to reduce the risk of default. Other strategies include diversifying the loan portfolio by investing in different types of loans, establishing policies and procedures to ensure that loans are monitored, and providing financial education and counseling. Finally, lenders may also use insurance and other financial derivatives to hedge against any potential losses.

Credit policies are written guidelines that establish the terms and conditions for supplying goods on credit, customer qualification criteria, collection procedures, and steps to be taken in the event of customer delinquency. This term is also known as collection policy. It also specifies how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances, and how to deal with delinquent accounts.

According to Lawrence (2003), to ensure that accounts receivable are managed in an effective manner, the company should develop a credit policy and procedure for the review and approval of customer credit applications. This policy should include guidelines for evaluating customer creditworthiness, setting credit limits, and establishing payment terms. It should also outline the process for monitoring customer accounts, identifying customers with slow payment histories, and taking appropriate collection action when necessary. Finally, it is important to regularly review accounts receivable processes to ensure they are effective and efficient. This should include regular internal audits of the accounts receivable process and the use of third-party

auditors when necessary. The review should also include an assessment of the credit policy and procedures to ensure they are up to date and are applied consistently.

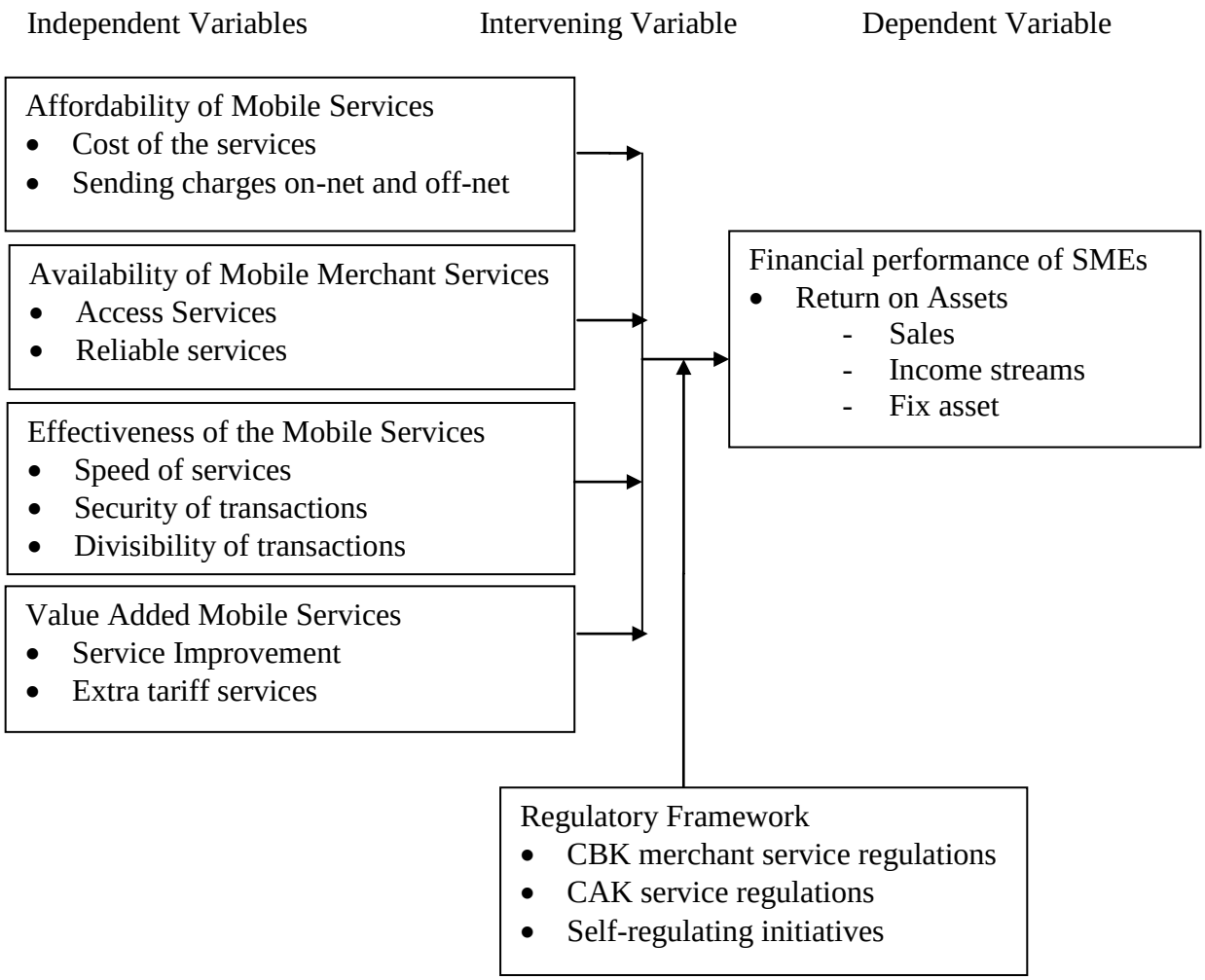
Debtor management also involves proactive actions to ensure that customers pay on time or earlier. This includes setting up payment incentives, such as discounts for early payment or penalties for late payments. It also involves taking steps to inform customers of their payment obligations, such as sending out reminders or making follow-up calls. Additionally, debtor management includes policies to deal with difficult customers, such as refusing credit or writing off bad debts.

2.4 Conceptual Framework

The conceptual framework is presented in both the dependent and independent variables. The dependent variables will be affordability, availability, effectiveness and value-added services and the intervening variable was regulatory framework.

Figure 1

Conceptual Framework



Source: Researcher, (2018)

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter contains information on the research methodology adopted in this study. It discusses the research design, population, and data collection technique to be used, as well as the methods and tools that were used to analyze the data in this study.

3.2 Research Design

The explanatory survey research design was used in this study. Explanatory research designs assess cause-and-effect relationship of the variables. An explanatory study attempts to explain patterns of associations between variables by analyzing a phenomenon, situations, or a problem, (Bhattacherjee, 2012). Survey research design was useful in overcoming time and budget constraints (Cooper & Schindler, 2013).

3.3 Target Population

The study targeted owners of Small and Medium Enterprises (SMEs) who operate as Mobile Money Merchants in Nakuru City and its surrounding areas. According to the Nakuru County Government, there are 12,250 licensed SMEs Mobile Money Merchants in Nakuru City and its environs, constituting the study's primary target population. Information from the Nakuru County business register further specified the population of the study to be SMEs located in the Central Business District (CBD) in 2018.

3.4 Sampling and Sampling Technique

The sample of SMEs that would be used to analyze the entire targeted population based on stratified random sampling. The stratification was determined by the type of business and the region in which it was located. The county of Nakuru is divided into

constituencies, which are further subdivided into wards. Wards were chosen as the study's focal point because they are where businesses are registered. As a result, a representative was assigned to each group. The sample size is then determined using simple random sampling. The sample size for the current study was calculated the formula. The Nassiuma (2000) formula was used to calculate the sample size, which is outlined below.

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

Where; n = sample size

N = population total

C = coefficient of variation; $20\% \le C \le 30\%$

E = margin of error; $1\% \le e \le 5\%$

Substituting for the variable in the formula, a population N of 12,250 gave a sample size of

$$n = \frac{NC^2}{C^2 + (N-1)e^2} = \frac{12{,}250(0.3)^2}{(0.3)^2 + 12{,}250(0.02)^2} = 220.96 \approx 221$$

The study's sample size consisted of 221 Small and Medium Enterprises (SMEs), selected from the target population of 12,250 licensed SMEs Mobile Money Merchants in Nakuru City and its environs. The sampling approach employed for this study was a stratified sampling technique. Given Nakuru's status as a significant urban center with a multitude of small businesses, the sample was designed to provide a representative subset of SMEs for a comprehensive analysis.

Table 2

Sample Distribution

Ward	Population of SMEs	Sample Size
Biashara	2,000	36
Kaptembwa	1700	31
Shabab	1500	27
London	800	14
Free area	1200	22
Kiamunyeki	500	9
Rhonda	700	13
Kapkures	900	16
Menengai	800	14
Flamingo	1000	18
Barut	650	12
Kivumbini	500	9
Total	12,250	221

Source: Nakuru County Records, (2018)

3.5 Data Collection Instruments

A structured questionnaire was the primary method used in this study to achieve the intended goals this is in the collection of primary data. The questionnaires contained both open-ended and closed-ended questions. We used semi-structured questionnaires. Questionnaires are commonly used to gather important information about the population (Mugenda & Mugenda, 2003). Each questionnaire item was created to address a specific study objective or hypothesis.

3.5.2 Data Collection Procedure

The designed questionnaires aimed to gather comprehensive data on several aspects related to the usage of mobile money merchant services (MMMS) by Small and Medium Enterprises (SMEs). Specifically, the questionnaires sought information on SMEs'

utilization patterns of the services, the reasons motivating their usage, their overall experiences with the service, and the challenges encountered in its utilization. Additionally, the questionnaire included inquiries about the cost of the services and sought insights into areas where improvements could be made to enhance the overall user experience.

3.6 Validity and Reliability of the Research Instruments

3.6.1 Validity of Research Instruments

The reliability of the questionnaire ensures that the information provided is consistent over time and across respondents. In addition to reliability, the validity of the questionnaire is crucial, as it determines whether the instrument accurately measures the intended constructs, ensuring the gathered data is both reliable and valid. The researcher made sure that the questions were clear and unambiguous, and that the questions were not leading or biased. The researcher also took steps to ensure that the data collected was consistent and could be used to draw valid conclusions. This was done by using methods such as pilot testing and making sure that the questionnaire was administered in a consistent manner across different subjects (Wallen, 2009).

3.6.2 Reliability of Research Instruments

Instrument reliability, as defined by Wallen (2009), refers to the consistency of scores from one use of the questionnaire to the next. To assess reliability, the test-retest technique was employed with 10% of the study sample using the same tools. The researcher applied the Cronbach Alpha Method to calculate a reliability coefficient between the two sets of scores. The analysis resulted in a coefficient demonstrating high internal reliability, which falls within the acceptable threshold. Typically, a Cronbach's

Alpha coefficient of not less than 0.7 is considered acceptable for ensuring reliable measurement in most research.

3.7 Pilot study

A pilot study was conducted prior to the main study, with questionnaires distributed to respondents of a few selected SMEs. The researcher conducted a study on SMEs in the Bahati Trading Center which is not within the catchment of Nakuru City and was not part of the study. Bahati Trading Center was chosen for the pilot because it is an agricultural centre with many trading on farm products and therefore require mobile money services. Ten (10) questionnaire were distributed for the pilot study and was collected back for reliability analysis. As noted by Mugenda and Mugenda (2003), the validity and reliability of data collection instruments play a pivotal role in ensuring the accuracy of the collected data. The robustness of these instruments directly influences the trustworthiness and quality of the research findings.

Table 3

Overall Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.869	0.848	10

The Cronbach Alpha was 0.869, which was greater than 0.7 but less than 0.9, indicating that the data collection tool was reliable enough in collecting the necessary data to answer the set objectives.

3.8 Data Analysis Techniques and Presentation

The collected data was processed, coded then nalyzed using the Statistical Package for Social Sciences (SPSS). The data was analyzed using descriptive statistics (frequency

distribution and chi-square of agreement test) as well as inferential statistics (correlation and multiple regression). A frequency distribution, a percentage, and a chi-square agreement test were used to present the descriptive statistics. Prior to performing inferential analysis, a diagnostic test was performed to test the assumption of Pearson correlation and multiple regression analyses. The Shapiro-Wilk test for normality, the Durbin Watson test for autocorrelation, the VIF & Tolerance test for multicollinearity, the ANOVA test for linearity, and the Levene test for homogeneity were all included. The regressions model presented:

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$$

Where:

y = Financial Performance

β_0 = Constant Term

β_1= Beta coefficients

X_1= Affordability

X_2= Availability

X_3= Effectiveness

$_{X4}$= Value Added Services

Ɛ= Error term

3.9 Ethical Considerations

Throughout this study, discretion was strictly enforced. The researcher kept the respondents' identities and privacy private. The respondent was assured that the information he or she provided would be used solely for academic purposes. There was no form of coercion or inducement used to persuade respondents to participate in the research study. Participants had the option to opt out of the process if they so desired.

The researcher followed the University's and other statutory bodies' data collection procedures. The researcher ensured that the participants do not indicate their names on the questionnaires and no one would question their responses. The study then checked for plagiarism levels to ensure no academic fraud was committed and also all sources of literature that was used were cited in accordance with required APA format.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents data analysis and findings. The demographic results, descriptive statistics, and inferential statistics are presented in the first section of the chapter.

4.2 Response Rate

The study had a sample size of 221 respondents, and the researcher was able to collect all of the questionnaires, representing a 100% return rate. This was achieved because the researcher readmitted the same number of questionnaires which were not collected back and built up to the expected sample size. From the data, it can be seen that the respondents were more willing to complete the questionnaire. This could be an indication of the high level of engagement of the respondents in the survey and their willingness to contribute.

4.2 Descriptive Statistics Results

4.2.1 Gender of the Respondents

The gender distribution among respondents showed that the majority, 59%, were female, while 41% were male. This finding indicates that the female gender is dominant in the use of mobile money services compared to the male gender.

4.3 Descriptive Statistics Summary

4.3.1 Affordability of Mobile Money Merchant Services

The current study also sought to find out whether affordability of mobile money merchant services affected the performance of SMEs and the findings are presented and discussed in Table 4.

Table 4

Affordability of Mobile Money Merchant Services

Description	1	2	3	4	5	Chi-Sq	P>ChiSq
(i) On-net sending	19.46	12.08	22.15	18.79	27.52	9.4	0.05
(ii) Off-net sending	46.21	13.1	14.48	14.48	11.72	62.6	0.0001
(iii) On-net withdrawal	19.86	10.27	22.6	30.14	17.12	15.5	0.004
(iv) Off-net withdrawal	45.14	9.03	8.33	16.67	20.83	64.8	0.0001

Results on on-net sending established that about half (46.31%) of the respondents (to Great Extent) significantly (χ^2 = 9.4, P ≤. 001) agreed that mobile merchants services were comparatively fair because of having a service of on-net sending of money to the recipients. Majority (58.69%) of the respondents (to little Extent) significantly (χ^2 = 62.6, P ≤. 001) disagreed that mobile merchants services were comparatively fair because of having a service of off-net sending of money to the recipients. About half of the respondents (47.26%) of the respondents (to Great Extent) significantly (χ^2 = 15.5, P ≤. 001) agreed that mobile merchants services were comparatively fair because of having a service of on-net withdrawal of money from the recipients. Lastly, majority (54.17%) of the respondents (to little Extent) significantly (χ^2 = 64.8, P ≤. 001) disagreed that mobile merchants services were comparatively fair because of having a service of off-net withdrawal of money from the recipients. The findings of this study are consistent with Donner's (2009) conclusion that a mobile phone has a significant potential to increase MSE productivity.

4.3.3 Level of Availability of Mobile Merchant Services

Table 5

Level of Availability of Mobile Merchant Services

Availability of Mobile Merchant Services	1	2	3	4	5	χ^2	P> χ^2
Mobile merchant services readily available	7.48	2.72	15.65	19.05	55.1	125.5	.0.001
Mobile merchant services easy to use	6.21	2.76	19.31	26.9	44.83	83.5	0.031
Mobile merchant services understandable	4.14	4.83	17.93	35.17	37.93	75.2	0.041
Mobile merchant services is convenient	4.76	2.04	14.97	37.41	40.82	96.8	0.037
Mobile merchant services are easily accessible	3.42	2.05	13.01	39.73	41.78	110.2	.0.016
Mobile merchant services are near me	5.41	3.38	16.89	33.78	40.54	82.2	0.029
Mobile money agents visit my business	27.4	9.59	17.12	21.23	24.66	14.2	0.013

Table 5 presents results of availability of mobile merchants' services. The results on Mobile merchant services are readily available established that majority (72.15%) of the respondents (to Great Extent) significantly (χ^2 = 125.5, P ≤. 001) agreed that Mobile merchant services are readily available to the customers. Findings on easily of use indicated that majority (71.73%) of the respondents (to Great Extent) significantly (χ^2 = 125.5, P ≤. 0.031) agreed that Mobile merchant services were easy to use by the customers. Further findings on ease of understanding indicated that majority (73.1%) of the respondents (to Great Extent) significantly (χ^2 = 125.5, P ≤0.041) agreed that Mobile Merchant Services were easily understood the customers. The findings therefore

indicated that the Mobile merchant services are readily available and that were easily understood by the customers. Additionally, mobile banking provides an efficient way for individuals and businesses to manage their finances, enabling them to make payments, transfer money, and even access credit (Pandey, 2004; Bowen 2008). The ability to access financial services through mobile banking makes it easier for SMEs to manage their finances, giving them more control over their money and allowing them to make better and more informed decisions.

Other findings on convenience revealed that the majority (75.23%) of respondents (to a Great Extent) agreed that Mobile Merchant Services were convenient for customers (X^2= 75.2, P 0.037). According to the findings on acceptability, the majority (81.51%) of respondents (to a Great Extent) significantly (X^2= 125.5, P 0.016) agreed that Mobile Merchant Services were acceptable among customers. The findings on Mobile Merchant Services being near customers revealed that the majority (75.0%) of respondents (to a Great Extent) significantly X^2= 82.2, P 0.029) agreed that Mobile Merchant Services were within customers' reach. Finally, findings on Mobile Merchant Services agents visiting customers revealed that the majority (45.89%) of respondents (to a Great Extent) agreed that Mobile Merchant Services agents visited customers (X^2 = 14.2, P 0.013).

4.3.4 Effectiveness of Mobile Merchant Services

Table 6

Effectiveness of Mobile Merchant Services

Variable	1	2	3	4	5	χ^2	P> χ^2
Mobile merchant services is fast	7.48	2.04	12.24	21.09	57.14	141.1	<.0001
Mobile merchant services has a well-developed user interface	4.83	5.52	18.62	40.69	30.34	70.8	<.0001
Mobile merchant services is convenient for business	3.47	5.56	25.69	34.72	30.56	60.7	<.0001
Mobile merchant services saves time	4.93	4.93	17.61	42.25	30.28	75.3	<.0001
Mobile money services have accurate calculations	4.79	5.48	21.23	34.93	33.56	62.1	<.0001
Mobile money services help my business grow	4.83	7.59	22.76	34.48	30.34	51.4	<.0001
Mobile money services improve customer services	8.28	10.34	20	30.34	31.03	33.3	<.0001

According to the findings on the effectiveness of Mobile Merchant Services, the majority (78.19%) of respondents (to a Great Extent) agreed that Mobile Merchant Services were fast (X2= 141.1, P. 001). The majority (71.03%) of respondents (to a Great Extent) agreed that Mobile Merchant Services had a well-developed user interface, according to the findings on user interface. Further research on business convenience discovered that the majority (65.28%) of respondents (to a Great Extent) agreed that Mobile Merchant Services were convenient for business (X2= 14.2, P. 001). According to the findings on time, the majority (72.53%) of respondents (to a Great Extent) agreed that Mobile Merchant Services saved their customers' time. As a result of the findings, Mobile Merchant Services were fast and had a well-developed user interface. Furthermore, the study by Lennart (2010) revealed that the service helped in reducing the cost of transactions, improved the speed of transactions, and provided more convenience for

users. The service had a positive impact on the financial sector as it allowed for more efficient and cost-effective transactions. The service not only facilitated access to existing financial services but also opened up new opportunities for users by granting them access to financial services that were previously beyond their reach. This underscores the transformative impact of the service, empowering users with avenues to financial inclusion that were previously inaccessible to them.

Further findings on accuracy established that majority of respondents (68.49%) of the respondents (to Great Extent) significantly (χ^2 = 14.2, P ≤. 001) agreed that Mobile Merchant Services had accurate calculations during transactions. Findings on business growth established that majority (64.82%) of the respondents (to Great Extent) significantly (χ^2 = 14.2, P ≤. 001) agreed that Mobile Merchant Services helped businesses grow. Lastly findings on customers service improvement established that (61.37%) of the respondents (to Great Extent) significantly (χ^2 = 14.2, P ≤. 001) agreed that Mobile Merchant Services led to customers service improvement. The finding indicated that Mobile Merchant Services had accurate calculations during transactions leading to helped businesses grow and customers service improvement. This finding is supported further by Higgins et al. (2012) by the SMEs that the use of accounting systems has enabled SMEs to have better control over their finances, improve their understanding of business performance, and make more informed decisions. Additionally, the use of accounting systems has enabled SMEs to increase their efficiency, reduce errors, and save time. The study concluded that the use of accounting systems has been beneficial for SMEs, as it has allowed them to better manage their finances and improve their decision-making capabilities.

4.3.5 Value Added Services and Performance of Mobile Merchant Services

Table 7

Value Added Services and Performance of Mobile Merchant Services

	1	2	3	4	5	χ^2	P> χ^2
(i) It is fast	7.53	2.74	10.27	21.23	58.22	146.7	<.0001
(ii) It is cheaper	40.97	6.25	20.83	11.81	20.14	50.2	<.0001
(iii) It is convenient	4.14	5.52	23.45	31.03	35.86	61.4	<.0001
(iv) It makes accounting easy	4.14	4.83	24.14	28.97	37.93	65.3	<.0001
(v) It is safe to transact on	3.45	5.52	17.93	37.93	35.17	75.4	<.0001
(vi) Mobile money improves service delivery	4.79	5.48	8.22	39.04	42.47	105.7	<.0001

This section summarizes the outcomes of Mobile Merchant Services enhancements. The results on speed revealed that the majority (79.46) of respondents (to a Great Extent) agreed that Mobile Merchant Services were very fast (= 146.7, P. 001). This finding is supported by the fact that the speed and security of mobile money services have made it possible to transfer money quickly and easily. By increasing money circulation and boosting local consumption, this has fueled the expansion of various economic activities, particularly in rural areas (Zutt, 2010). Thus, the finding is supported if the cost of a payment transaction is passed on to customers (Mallat 2007).

On the cost of the services, It was revealed that (47.12%) of the respondents (to Least Extent) significantly (χ^2 = 50.2, P ≤. 001) agreed that Mobile Merchant Services were cheaper to customers. Further findings on convenience established (66.89%) of the respondents (to Great Extent) significantly (χ^2 = 61.4, P ≤. 001) agreed that Mobile Merchant Services were convenient to customers. Further findings indicated that

majority established (66.9%) of the respondents (to Great Extent) significantly (χ^2 = 65.3, P ≤. 001) agreed that Mobile Merchant made accounting easy to the customers. On safe transaction, majority established (75.1%) of the respondents (to Great Extent) significantly (χ^2 = 75.4, P ≤. 001) agreed that Mobile Merchant Services were safe for transaction by customers. Lastly, findings on mobile money improves service delivery established that majority (81.51%) of the respondents (to Great Extent) significantly (χ^2 = 75.4, P ≤. 001) agreed that Mobile Merchant Services mobile money improves service delivery to customers. The finding indicated Mobile Merchant Services were cheaper to customers, safe and made accounting easy to the customers. This is also consistent with the findings of a study by Arunga and Kahora (2007) which found that mobile payment services enabled businesses to reduce costs, increase efficiency, and provide better customer service. Additionally, the study found that mobile payments were more convenient for customers, which increased sales and customer loyalty.

4.4 Diagnostic Tests

In the context of inferential statistical analysis, it is imperative to assess the assumptions underlying Pearson correlation and multiple regression analyses. To ensure the robustness and reliability of our findings, a battery of diagnostic tests was employed. The normality of the data distribution was scrutinized using the Shapiro-Wilk test, evaluating departures from normality. Multicollinearity, a critical consideration in multiple regression, was rigorously examined through the calculation of Variance Inflation Factors (VIF) and Tolerance. Additionally, the linearity assumption was assessed via an analysis of variance (ANOVA), while homogeneity was scrutinized using the Levene test. These comprehensive diagnostic tests were instrumental in validating the assumptions essential for accurate inferential statistical analyses.

4.4.1 Shapiro-Wilk Normality Test

Table 8

Shapiro-Wilk Normality Test

Performance	Statistic	df	Sig.
Affordability	.724	114	.117
Availability	.716	117	.113
Effectiveness	.709	117	.094
Value addition	.709	117	.081

The Table 4.6 presents the results from the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The dependent variable for this test was the indicators of financial performance of the Mobile money Merchants SMEs in Nakuru County. The independent variable was service tipping. Since *p*-value generated out of Shapiro-Wilk Test was greater than 0.05, then the study statistically confirmed that the data used was normally distributed.

4.4.2 Multicollinearity Test

Table 9

Multicollinearity Test

Model		Unstandardized Coefficients		Standardized Coefficients			Tol	VIF
		B	Std. Error	Beta	T	Sig.		
1	(Constant)	1.6105	.275		5.867	.000		
	Affordability	0.1703	.047	.05353	3.310	.001	1.0	2.12
	Availability	0.2971	.113	.06030	4.93	.000	1.6	1.83
	Effectiveness	0.0231	.090	.05067	0.460	.654	1.1	1.92
	Value Added Service	0.14345	.099	.05100	2.560	.012	1.3	2.06

a. Dependent Variable: Financial Performance

Table 9 was utilized to assess multicollinearity between the variables. Multicollinearity is typically considered to exist when the Variance Inflation Factor (VIF) is either less than 1 or greater than 10. In our analysis, since the VIF was found to be greater than 1 but less than 10, there was statistical evidence to conclude that the data collected in this study did not exhibit multicollinearity, thus passing the normality test.

Table 10

Data Normality Test

	Levene Statistic	df1	df2	Sig.
Affordability	2.947	17	96	0.209
Availability	2.944	17	99	0.315
Effectiveness	3.616	17	99	0.384
Value addition	2.053	17	99	0.629

The F value for Levene's test was highest for effectiveness F = 3.616 and lowest for value addition and availability 2.053 with a Significance (p) value of 0.384, 0.629 and p=0.315 respectively ($p > .05$). Because the Sig. value is greater than alpha of .05 ($p < .05$), there was evidence that the assumption of homogeneity of variance was met and therefore passed the normality test (See Table 11).

4.5 Correlation of Mobile Merchant Services and Financial Performance

Table 11

Correlation Analysis between Mobile Merchant Services and Financial Performance

	Affordability	Availability	Effectiveness	Value_addition	ROA1
Affordability	1	.185*	.173	.336**	.624**
		.036	.056	.000	.000
Availability	.185*	1	.726**	.738**	.703**
	.036		.000	.000	.000
Effectiveness	.173	.726**	1	.729**	.996**
	.056	.000		.000	.000
Value_addition	.336**	.738**	.729**	1	.069
	.000	.000	.000		.422

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

First, the study discovered a significant relationship between the affordability of MMM services and the financial performance of Nakuru City's small and medium enterprises, r=0.624**, p=0.0000.05. Second, the study established a significant relationship, r=0.703**, p=0.0000.05, between the availability of mobile money merchant services and the financial performance of Nakuru City's small and medium enterprises. Third, the study discovered a significant relationship between the effectiveness of mobile money merchant services and the financial performance of Nakuru City's small and medium enterprises, r=0.996**, p=0.0000.05. Fourth, the study discovered a non-significant relationship (r=0.422, p=0.000>0.05) between the value addition of mobile money merchant services and the financial performance of Nakuru City's small and medium enterprises. The finding is supported by Aluoch (2021) who established a positive, moderately strong, and statistically significant relationship between the cost of the service services and the financial performance of hospitality firms.

4.6 Effect of Mobile Money Merchant Services and Performance

The affordability of mobile money merchant services, availability of mobile money merchant services, and value added services of mobile money merchant services were positively correlated with the financial performance of small and medium enterprises in Nakuru City. The effectiveness of mobile money merchant services, however, had a negative association with the financial performance of these businesses. The outcomes of this study underscore the pivotal role of mobile money merchant services in enhancing the financial performance of small and medium enterprises (SMEs) in Nakuru City. This discovery aligns with the research conducted by Mutinda (2018), who similarly identified a significant positive impact of these services on the performance of SMEs in Nairobi County. Furthermore, our findings emphasize the critical importance for businesses to ensure that their mobile money merchant services are not only affordable and readily available but also encompass value-added features. By doing so, businesses can optimize their financial performance and capitalize on the full potential of mobile money services in the dynamic economic landscape.

Table 12

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.897a	0.894	0.893	0.10553

a. Predictors: (Constant), affordability, availability, effectiveness and value added services

This data yields R^2 value of 0.894, indicating that the research variables are highly correlated. The R-squared value, determined to be 0.894 in this study, indicates that approximately 89.4% of the variation in mobile money merchant services can be

explained by the variables under investigation. In other words, the factors considered in this study account for the majority of the observed variability. Conversely, approximately 10.6% of the variation is attributed to factors not addressed in this study, highlighting the presence of other influential variables outside the scope of our research.

Table 13

Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31180.9	4	7795.200	1115.580	.000[b]
	Residual	978.300	140	7.000		
	Total	32159.200	144			

a. Predictors: (Constant), affordability, availability, effectiveness and value added services.

Table 13 displays the model significance results, which show that F(4, 978.300) = 1115.58, p 0.000 with p=0.000< 0.05 indicates a statistically significant relationship at a 95% confidence level. This demonstrates that the developed model remained significantly good at explaining the relationship between independent variables and the dependent variable.

Table 14

Effect of Mobile Money Merchant Services and Performance

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.6105	.275		5.867	.000
	Affordability	0.1703	.047	.05353	3.310	.001
	Availability	0.2971	.113	.06030	4.93	.000
	Effectiveness	0.0231	.090	.05067	0.460	.654
	Value Added Service	0.14345	.099	.05100	2.560	.012

a. Dependent Variable: Financial Performance

The study's results revealed a significant and positive association between affordability and financial performance, indicating that the affordability of Mobile Money Merchant Services (MMMS) has a favorable impact on the financial performance of small and medium-sized businesses in Nakuru City. The regression analysis demonstrated a statistically significant relationship between affordability, as a component of MMMS, and the financial performance of these businesses ($\beta = 0.1703$, $p < 0.001$). This suggests that increasing the affordability of Mobile Money Service Providers is associated with an improvement in the financial performance of small and medium-sized businesses in Nakuru City, with a change of 0.1703 units for every one-unit increase in affordability.

The rejection of the first hypothesis (H01), which posited that there is no statistically significant effect of the affordability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City, underscores a meaningful impact. This rejection implies that the affordability of mobile money merchant services among Nakuru City's small and medium-sized businesses does influence their financial performance positively. This result aligns with the findings of Ndunge and Mutinda

(2012), who also identified a significant positive relationship between the use of mobile money merchant services and the financial performance of SMEs. Thus, our study contributes further evidence supporting the importance of affordability in shaping the financial outcomes of businesses utilizing mobile money services.

This finding is bolstered by the widespread usability and affordability of mobile phones, empowering low-income micro and small enterprise (MSE) traders to actively participate in economic activities. The accessibility of mobile phones, coupled with their affordability, has facilitated crucial functionalities such as internet access and seamless money transactions. This is particularly significant for individuals residing in rural areas, as it opens up new opportunities for cashless transactions and access to banking services. Beyond financial transactions, mobile phones serve as a gateway for accessing essential services, including medical advice, government services, and information, as well as financial resources. The cumulative effect of these factors has resulted in MSEs becoming more efficient, competitive, and ultimately more profitable, as highlighted by Lennart (2010).

The M-PESA service has enabled users to transfer money to other users, pay bills, purchase goods, and withdraw and deposit money at ATMs. This has enabled a greater access to banking for the majority of Kenyans who do not qualify for traditional banking services. The M-PESA service has also allowed for the safe and secure transfer of funds between individuals and businesses, reducing the risk of theft and fraud. This has enabled informal sector businesses to operate more securely, reducing the risk associated with their operations. In addition, this service has enabled individuals to save money and access credit more easily, further aiding the development of the informal sector. In conclusion, the use of the service has had a positive impact on the informal sector in

Kenya. It has enabled individuals and businesses to undertake financial transactions more securely and has enabled individuals to access banking services more easily. This has resulted in greater access to credit and capital for businesses, as well as improved liquidity and cash-flow management, ultimately leading to an increase in the productivity and profitability of the informal sector (Lennart, 2010).

The second objective of this study was to assess the influence of the availability of Mobile Money Merchant Services (MMMS) on the financial performance of small and medium-sized businesses in Nakuru City. The predictor variable was the availability of MMMS, and the dependent variable was the financial performance, measured by the Return on Assets (ROA) ratio. The study revealed a significant relationship between the availability of the second component of MMMS and the financial performance of small and medium-sized businesses in Nakuru City ($p = 0.000 < 0.05$, $\beta = 0.2971$). This finding suggests that an increase in the availability of Mobile Money Merchant services by one unit, facilitated by Mobile Money Service Providers, positively impacts the financial performance of small and medium-sized businesses.

The second hypothesis (H02), asserting that there is no statistically significant effect of the availability of mobile merchant services on the financial performance of small and medium enterprises in Nakuru City, was rejected. This rejection stems from compelling evidence indicating a substantial impact of mobile money merchant services on the financial performance of businesses in the region. This is underscored by the prevailing circumstance where a majority of Kenyans lack bank accounts but have widespread access to mobile phones. The introduction of M-PESA, a text messaging (SMS) service, effectively addressed the banking needs of the majority, reinforcing the idea that mobile

money merchant services significantly contribute to the financial well-being of businesses in Nakuru City.

The third objective of this research was to assess how the effectiveness of Mobile Money Merchant Services (MMMS) influences the financial performance of small and medium-sized businesses in Nakuru City. Efficiency, as a component of MMMS, served as the predictor variable, while the financial performance was measured by the Return on Assets (ROA) ratio for Nakuru City's small and medium-sized businesses. The study revealed a non-significant relationship between the effectiveness of the second component of MMMS and the financial performance of small and medium-sized businesses in Nakuru City ($\beta = 0.0231$, $p > 0.654$). As a result, hypothesis H03, asserting that mobile merchant services do not statistically significantly affect the financial performance of small and medium enterprises in Nakuru City, was accepted.

The study's findings unveiled a significant positive effect of the effectiveness of mobile money merchant services on the financial performance of small and medium-sized businesses in Nakuru City, reflected by a coefficient of 0.291. This implies that as the effectiveness of mobile money merchant services increases, so does the financial performance of businesses in the region. Businesses reported heightened efficiency and productivity attributed to the use of MMMS, which facilitated quicker and easier access to data. Moreover, MMMS played a pivotal role in enhancing customer service and satisfaction by providing instant access to information and services. Additionally, businesses leveraged MMMS to expand their customer base through mobile marketing campaigns, reaching out to new customers for the sale of goods and services, as well as acquiring raw materials. The versatility of MMMS was further exemplified by users' ability to deposit money into a cell phone account via SMS technology, transfer balances

to other users, including sellers, and redeem deposits for regular currency (Suri & Jack, 2010).

According to Olga (2010), the success of the MPESA system is attributed to its robust network of agents, widespread availability, and key features like convenience, flexibility, and security for users. The system has effectively addressed various needs, particularly in the developing world, by providing solutions for issues like remittances, offering a streamlined process for individuals to send money to their relatives globally. Beyond remittances, MPESA has played a vital role in extending financial services to individuals previously excluded from the formal financial system. Moreover, it has contributed to reducing the cost of doing business and providing a capital access platform for small businesses. The success of MPESA in Kenya serves as a compelling example of how mobile money technology can bring about positive transformations in the developing world. Its achievement in fostering financial inclusion and meeting diverse needs underscores the potential of mobile money technology to significantly impact and improve the lives of people in developing nations.

The study's results revealed a significant positive impact of providing value-added services as part of Mobile Money Merchant Services (MMMS) on the financial performance of SMEs in Nakuru City ($p = 0.012 < 0.05$, $\beta = 0.14345$). This suggests that enhancing value-added services within MMMS can contribute to the improvement of financial performance for SMEs in Nakuru City. The acceptance of the fourth hypothesis (H04), which initially stated that value-added services of mobile money merchant services have no significant impact on the financial performance of Nakuru City's small and medium enterprises, was reconsidered. Contrary to the initial hypothesis, the study found that the value-added services provided by Mobile Money Service Providers to

Mobile Money Merchants in Nakuru City did have a significant positive impact on their financial performance. This conclusion is consistent with the findings of Nyagilo (2018), who established a significant positive correlation between the value addition of mobile money merchant services and the financial performance of SMEs in Nakuru City.

Ngaruya (2014) observed that a majority of respondents reported an increase in sales revenue following the adoption of mobile money transactions, aligning with the findings on value addition services in Mobile Money Merchant Services (MMMS). However, the study also revealed that debt collection showed no significant improvement before and after the adoption of mobile money services. When assessing cash management performance, SMEs were found to perform poorly after the adoption of mobile money. Notably, the study emphasized that the perceived impact of mobile money transactions on sales revenue, debt collection, and cash management was statistically significant, but this was solely based on subjective perceptions rather than objective measures.

The overall regression model was as presented below;

$$Y = 1.6105 + 0.1703X_1 + 0.\ 0.2971X_2 + 0.0231X_3 + 0.14345X_4$$

Where: Y = Financial performance

X_1 = Affordability

X_2 = Availability

X_3 = Effectiveness

X_4 = Value Added Services

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides an overview of the effect of MMM services on the financial performance of Nakuru City's small and medium-sized businesses. The chapter provides summary of the major findings of this study as well as the major recommendations and suggestions for future research.

5.2 Summary of the findings

The primary goal of the research, which is to investigate the impact of mobile money merchant services on the financial performance of small and medium-sized businesses in Nakuru City, indicates a focus on understanding how these services influence key aspects of business operations. According to the findings on Mobile Merchants Services affordability, the service had on-net lending and on-net withdrawal rather than off-net lending and on-net withdrawal. When the internet went down, the Mobile Merchants Services also went down, forcing service providers to send customers back up until the internet went back up. The service providers did not have an alternative method of providing non-online services, such as accepting customer payments manually and uploading them to Mobile Merchants Services when internet services were restored. The high proportion of the users of mobile money services indicated increased uptake of these services due to their affordability and availability to the majority of Kenyan households. The high utilization rate was attributed to the rapid growth of mobile money agents, which are prevalent in both urban and rural areas, as opposed to commercial banks, which are mostly concentrated in urban areas.

The findings on the availability of Mobile Merchant Services established the services were easily accessible, simple to use, and understood by customers. The services were also convenient, easily accessible, and always within reach of customers, and Mobile Merchant Services agents were on hand to visit customers for further explanation of the service. According to the findings of descriptive statistics on service effectiveness, Mobile Merchant Services were effective because they provided fast services with a well-developed user interface, which is convenient for businesses because it saved customers transaction time. Mobile Merchant Services provided accurate calculations during customer transactions, as well as assisting customers' businesses in growing and generally improving their services. The study discovered that Mobile Merchant Services provided a variety of value additions that were quick, cheap, and convenient. The services also made accounting easier, transactions safer, and the expansion of mobile money improves customer service delivery.

5.3 Conclusions

This study aimed to investigate the impact of mobile money merchant services on the financial performance of small and medium-sized businesses in Nakuru City, appears to have made a significant finding related to the affordability of these services. One specific objective of the study was to establish the effect of the affordability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City. The null hypothesis (H01) posited that there is no statistically significant effect of the affordability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City was rejected. Based on the findings and the rejection of the null hypothesis, the study concludes that the affordability of Mobile Money Merchant Services has a significant effect on the financial performance of small and medium enterprises in Nakuru City.

The second specific objective of the study was to establish the effect of the availability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City. The null hypothesis (H01) posited that there is no statistically significant effect of the availability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City was rejected. Based on the findings and the rejection of the null hypothesis, the study concludes that the availability of Mobile Money Merchant Services has a significant effect on the financial performance of small and medium enterprises in Nakuru City.

The second specific objective of the study was to establish the effect of the availability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City. The null hypothesis (H01) posited that there is no statistically significant effect of the availability of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City was rejected. Based on the findings and the rejection of the null hypothesis, the study concludes that the availability of Mobile Money Merchant Services has a significant effect on the financial performance of small and medium enterprises in Nakuru City. The third specific objective of the study was to establish the effect of the effectiveness of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City. The null hypothesis (H01) posited that there is no statistically significant effect of the effectiveness of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City was accepted. Based on the findings and the acceptation of the null hypothesis, the study concludes that the effectiveness of Mobile Money Merchant Services has no significant effect on the financial performance of small and medium enterprises in Nakuru City.

The fourth specific objective of the study was to establish the effect of the Value added services of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City. The null hypothesis (H01) posited that there is no statistically significant effect of the Value added services of mobile money merchant services on the financial performance of small and medium enterprises in Nakuru City was rejected. Based on the findings and the rejection of the null hypothesis, the study concludes that the Value added services of Mobile Money Merchant Services has a significant effect on the financial performance of small and medium enterprises in Nakuru City.

5.4 Recommendations

5.4.1 Policy Recommendations

The study's findings, as mentioned, have led to several policy implications for both households and Micro and Small Enterprises (MSEs) in Kenya. The study identified various factors influencing the uptake of mobile money services by Kenyan households and MSEs. These determinants could include factors such as affordability, accessibility, awareness, and perceived usefulness. Recognizing these factors is crucial for tailoring policies that address the specific needs and barriers faced by different segments of the population. The study suggests the need for the government, through its regulatory authorities, to play a proactive role in designing supportive policies. This involvement can include creating an enabling regulatory environment that fosters innovation, competition, and consumer protection within the mobile money sector. This is based on the study's finding that using mobile money services can improve household resilience to financial shocks while also improving MSE financial performance.

Mobile money transactions have been shown to increase financial inclusion by making it easier for people in underserved areas to access and use financial services. This can be particularly beneficial for people in rural and remote areas, who may not have access to traditional banking services. By providing access to mobile money services, people are able to save money, send and receive payments, and even take out loans. This can help individuals to achieve financial security and stability, as well as providing them with greater access to financial opportunities. SMEs' owners/managers should be interested in tracking performance using mobile money. According to the study's findings, the following recommendations were important in terms of the effects of mobile money service on the financial performance of Small and Medium Enterprises; that those Small and Medium Enterprises should continue to use Mobile Money Merchant Services on a regular basis in the future. SMEs' owners/managers should be interested in tracking their financial performance using mobile money. Mobile Money Merchant Services allow businesses to receive payments from customers in real-time, and to access and manage their funds anywhere, anytime. This allows businesses to better manage their finances, as well as to reduce transaction costs associated with traditional banking services. Furthermore, businesses that use Mobile Money Merchant Services benefit from increased customer convenience, as customers can make payments using their mobile phones from anywhere in the world.

In addition, the study recommends that Mobile Money Merchant Service providers work to improve customer service and support. More training for customer service representatives and ensuring that customers have access to a wide range of channels for customer service support, such as phone, email, and live chat are needed. Having a system that generates receipts improves the system and makes tracking payments and receipts easier. As a result, service providers should make the system more reliable and

secure so that users can have confidence when using it. This recommendation is that transactions are sometimes completed and then reversed to the detriment of the business. Furthermore, reliability is based on the fact that the service occasionally experiences delays. Businesses should have the ability to track and control their expenses, while individuals should have the ability to access funds quickly and securely. Providers should also provide an audit trail of all transactions to enable businesses to detect fraudulent use. Additionally, service providers should offer secure authentication methods, such as two-factor authentication, to protect against unauthorized access to accounts. Finally, service providers should have dedicated customer support teams that are available to answer questions and provide assistance. The government should also partner with financial institutions to ensure the security of mobile money transactions and ensure customer protection. Finally, the government should establish a regulatory body to ensure the proper usage of mobile money services and to ensure customer protection. This body would be responsible for setting standards for mobile money services, monitoring transactions, and resolving disputes. By taking these steps, the government can ensure that mobile money services are secure and easily accessible. This will spread of a digital economy and ensure the protection of customers and their money.

5.4.2 Recommendations for Further Study

The purpose of this study was to look into the contribution of MMM services on the financial performance of small and medium-sized businesses in Nakuru City. The investigator recommends that more research should be done to find out how small and medium-sized businesses use financial innovations like M-shwari, M-Benki, and Lipa Na M-PESA.

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APPENDICES

Appendix I: Letter of Introduction

Edward Njuguna
P.O. Box Private Berg
Kabarak University
Kabarak

Dear Sir/ Madam,

Re: Data Collection

I am a student at Kabarak University undertaking a study entitle "***the effects of mobile money merchant services on the financial performance of Small and Medium Enterprises (SMEs) In Nakuru City***" towards the award of Master of Business Administration Degree. I therefore humbly request you to fill in the questionnaire issued to you to the best of your ability. The research is purely academic in nature and any information obtained from this questionnaire will be confidential.

Thank you in advance.

Yours faithfully,

Edward Njuguna

Appendix II: Questionnaire

Kindly fill all the questions in the questionnaire below. The answers you provide in this questionnaire will be used for academic purposes only and will be held with maximum confidentiality

Section A: Affordability of Mobile money merchant services

1. Does the cost of services affects the use of mobile money merchant services?

   Yes ☐ No ☐

2. How can you rate the cost of mobile money services?

   Very Expensive ☐

   Expensive ☐

   Affordable ☐

3. Do you think the cost of mobile merchant services affects the profitability of your business?

   Yes ☐ No ☐

4. In a scale of 1 to 5 rate your observation about the following. Respond for your Mobile merchant of choice

Description	1	2	3	4	5
The Mobile merchant is comparatively fair on On-net sending					
The Mobile merchant is comparatively fair on Off-net sending					
The Mobile merchant is comparatively fair on On-net withdrawal					
The Mobile merchant is comparatively fair on Off-net withdrawal					

Section C: Availability of Mobile merchant services

5. How do you agree or disagree with the following statements on availability of Mobile Merchant Services. To a very great extent 4. To a great extent 3. To a moderate extent 2.To a little extent 1. Not at all

6.

Availability of Mobile Merchant Services.	**1**	**2**	**3**	**4**	**5**
i. Mobile merchant services are readily available					
ii. Mobile merchant services is easy to use					
iii. Mobile merchant services is easily understandable					
iv. Mobile merchant services is convenient					
v. Mobile merchant services are easily accessible					
vi. Mobile merchant services are near me					
vii. Mobile money agents visit my business					

Section B: Effectiveness of Mobile merchant services

7. Please indicate how you agree or disagree with the following statements in relation to effectiveness of Mobile merchant services? To a very great extent 4. To a great extent 3. To a moderate extent 2.To a little extent 1. Not at all

	1	2	3	4	5
Mobile merchant services is fast					
Mobile merchant services has a well developed user interface					
Mobile merchant services is convenient for business					
Mobile merchant services saves time					
Mobile money services have accurate calculations					
Mobile money services help my business grow					
Mobile money services improve customer services					

Others (Specify)

.....

.....

.....

8. Which mode of payments do you most prefer?

Mobile Money ☐

Manual system ☐

Are mobile money services readily available?

Yes ☐

No ☐

How long do you walk to access mobile money services?

100 meters ☐

200 meters ☐

500 meters ☐

Section E: Value Added services on mobile merchant services platform

9. Does mobile money have benefits according to you?

Yes ☐ No ☐

10. Has mobile money transactions had an impact on the profits in your business

Yes ☐ No ☐

10. Please indicate how you agree or disagree with the following statements in relation to benefits of Mobile merchant services?

To a very great extent 4. To a great extent 3. To a moderate extent 2.To a little extent 1. Not at all

	1	2	3	4	5
It is fast					
It is cheaper					
It is convenient					
It makes accounting easy					
It is safe to transact on					
Mobile money improves service delivery					

Section F: Performance of the SMEs

11. To a very great extent 4. To a great extent 3. To a moderate extent 2.To a little extent 1. Not at all

Return on Asset	1	2	3	4	5
The asset base of the businesses increased greatly					
The businesses increased on its banking of sales					
The businesses increased its stock					
The business income stream expanded					
The businesses annual income increased					

Appendix III: KUREC Approval Letter

KABARAK UNIVERSITY

Private Bag - 20157
KABARAK, KENYA
http://kabarak.ac.ke/institute-postgraduate-studies/

Tel: 0773 265 999
E-mail: directorpostgraduate@kabarak.ac.ke

BOARD OF POSTGRADUATE STUDIES

9th May, 2019

The Director General
National Commission for Science, Technology & Innovation (NACOSTI)
P.O. Box 30623 – 00100
NAIROBI

Dear Sir/Madam,

RE: EDWARD NJUGUNA WAITHAKA- REG. NO. GMB/NE2217/09/16

The above named is a Master of Business Administration student at Kabarak University in the School of Business & Economics. He is carrying out research entitled ***"Effects of Mobile Money Merchant Services on the Financial Performance of Small and Medium Enterprises (SMEs) in Nakuru Town, A Survey of Selected Wards"***. He has defended his proposal and has been authorized to proceed with field research.

The information obtained in the course of this research will be used for academic purposes only and will be treated with utmost confidentiality.

Please provide him with a research permit to enable him to undertake his research.

Thank you.

KABARAK UNIVERSITY
DIRECTOR
POST GRADUATE STUDIES
09 MAY 2019
PRIVATE BAG - 20157, KABARAK

Yours faithfully,

Dr. Betty Jeruto Tikoko
DIRECTOR, POSTGRADUATE STUDIES

Kabarak University Moral Code
As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord. (1 Peter 3:15)

Appendix IV: NACOSTI Research Permit

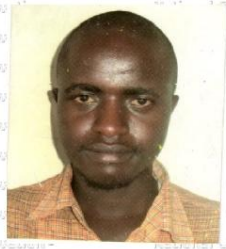
REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **824948**

Date of Issue: **16/September/2019**

RESEARCH LICENSE



This is to Certify that Mr.. edward njuguna of Kabarak University, has been licensed to conduct research in Nakuru on the topic: EFFECTS OF MOBILE MONEY MERCHANT SERVICES ON THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NAKURU TOWN for the period ending : 16/September/2020.

License No: **NACOSTI/P/19/811**

824948

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Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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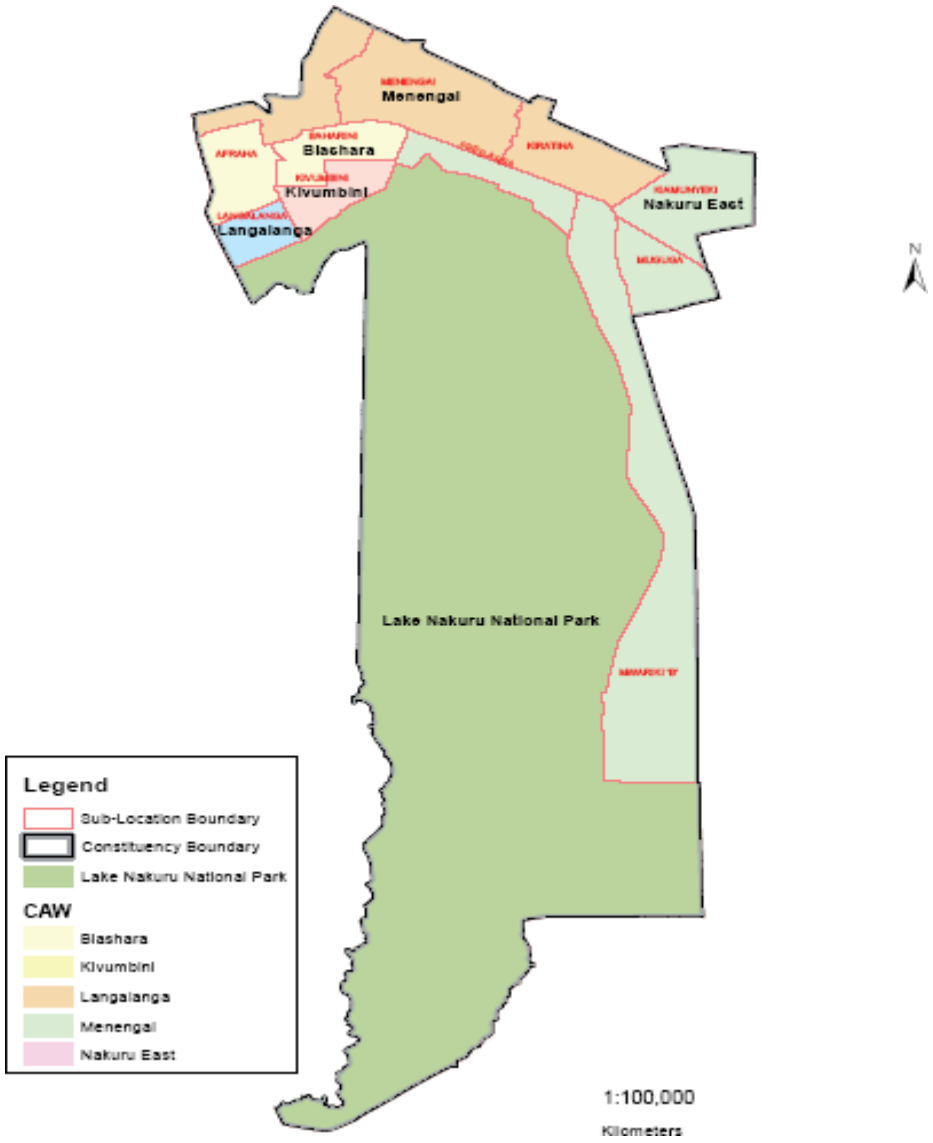
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix V: Map of Nakuru City



Appendix VI: List of Publications

International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. VIII, Issue 7, July 2020

http://ijecm.co.uk/

THE EFFECT OF VALUE ADDED SERVICES ON THE FINANCIAL PERFORMANCE OF THE MOBILE MERCHANT SERVICES PLATFORM ENTERPRISES IN NAKURU, KENYA

Edward Njuguna Waithaka
Department of Commerce, Kabarak University, Kenya
enjuguna46@gmail.com

Philip E. Ragama
Department of Mathematics and Actuarial Science, Kabarak University, Kenya

Geoffrey Kamau
Department of Commerce, Kabarak University, Kenya

Abstract

Mobile money has become a very prominent payment used by many enterprises in Kenya whose significance has not received the necessary research investigation. The aim of this study was to find out the effect of Value Added Services available on the mobile money platform to financial performance of small and medium enterprises. The study adopted explanatory research design. Stratified sampling technique used to sample SMEs in Nakuru town. The study established no significant linear relationship between value added services of mobile money merchant services and financial performance of small and medium enterprises in Nakuru Town, (=0.069, p>0.422). Thus the hypothesis H0 that value added services of mobile money merchant services does not significantly affect financial performance of small and medium enterprises in Nakuru Town was accepted. Based on the findings, recommendations were made.

Keywords: Mobile merchant services, Value Chain, Small and Medium Enterprises, Financial Performance

Appendix VII: Evidence of Conference Participation

KABARAK UNIVERSITY

Certificate of Participation

Awarded to

Edward Njuguna Waithaka

for successfully participating in the 13th Annual Kabarak University International Research Conference held from 30th – 31st October 2023 and presented a paper entitled ***"Effect of Mobile money Merchant services on the financial performance of Small and Medium Sized Entreprises in Nakuru City".***

Conference Theme

Empowering Youth Through Digital Commerce

Dr. Patrick Kibati
Dean, School of Business & Economics

Dr. Moses Thiga
Director - Research, Innovation and Outreach

Kabarak University Moral Code

As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord.

(1 Peter 3:15)

Kabarak University is ISO 9001:2015 Certified