

**THE IMPACT OF MOBILE BANKING ON THE FINANCIAL
PERFORMANCE OF SMES IN NAIROBI COUNTY, KENYA**

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DECLARATION

This research project is my original work and has not been presented for an award of a degree in any other university or institution of learning.

Signature.......... Date..... 29/11/2021

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This research project has been presented for examination with my approval as university supervisor.

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DEDICATION

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LIST OF ABBREVIATIONS

CBK	Central Bank of Kenya
MSEs	Micro Small Enterprises
ROA	Return on Assets
ROE	Return on Equity
SMEs	Small and Medium Enterprises

ABSTRACT

The objective of this project was to determine the impact of mobile banking on the financial performance of SMEs in Nairobi County, Kenya. The study employed a descriptive research design to achieve this objective. The targeted populace was the SMEs operating in Nairobi County, whereby the researcher used a formula to estimate the sample size to be 400 SMEs. The sampling of respondents was done randomly to offer an equal opportunity for all the SMEs to participate. The researcher utilized primary and secondary data in the investigation. Semi-structured questionnaires were distributed to the target population to amass the primary data. Then the scholar gathered secondary data via different publications like journal articles, books, government records, bank statements, and others reliable for use in the study. The researcher executed multiple regression analysis and correlation to determine the effect of mobile banking on the financial performance of SMEs. The findings revealed that the highest proportion of the participants detailed that m-banking assisted them to pay bills, transfer money, receive payments, borrow mobile loans, saving money, and pay their suppliers. Hence, m-banking services boosted the efficiency of SME operations and minimized their costs when compared to traditional banking. Additionally, the research revealed that mobile loans have contributed to an increase in the financial performance of SMEs. The study also discovered that a positive, significant, and strong correlation existed between m-banking deposits and the financial performance of SMEs. Likewise, the study revealed that a rise in the utilization of m-banking payment services positively affects the performance of SMEs. The study concluded that mobile banking positively and significantly affects the financial performance of SMEs within Nairobi County.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The rise and use of mobile banking are taking the financial markets by storm. So many people earn low incomes and do not get the opportunity to visit banks or other financial institutions regularly to save or access other services. Therefore, there is a clear gap between those who are banked and the unbanked, which is widening on a day-to-day basis, hence the need to consider other means of banking (Iravonga & Miroga, 2018). The use of mobile banking has changed how financial markets operate worldwide. Society is adopting and advocating a cashless economy at a very high rate, hence there is an increase in electronic transactions in all types of businesses. Mobile banking refers to the process of using any type of banking services like deposits, transfers, balance inquiries, etc., by mobile devices, mostly mobile phones. Mobile banking thus allows an individual to deposit money virtually into his or her bank account, withdraw cash, or make fund transfers from one bank account to another.

There has been a significant growth in mobile banking that has been advantageous to everyone, especially the low-income earners who could otherwise not be served by the banking institutions. In addition, banked individuals can access their accounts from anywhere they are, which makes it more convenient than conventional banking. According to Mauree (2013), mobile banking has achieved the greatest success in Sub-Saharan Africa. Currently, most people use mobile banking to pay their bills, receive money from various sources, transfer money to loved ones, etc. The government of

Kenya and the whole world have been advocating for mobile banking since 2020 because of the Covid-19 pandemic that has shaken the whole world. Consequently, people are avoiding physical contact with nearly everything, which has further increased the use of mobile banking. Currently, 20 million Kenyans utilize M-Pesa or comparable systems (T.S., 2015). Suri & Jack (2016) noted that access to the Kenyan mobile money system M-Pesa has amplified the country's per capita consumption levels and has also elevated 194,000 households (which is about 2% of households in Kenya) out of poverty. Kenya has about 67.8 million registered mobile money accounts and the figure has progressively been growing and experienced a 12.6% growth since there were 60.2 million accounts in 2020 (Faria, 2021). This indicates that the number of registered mobile money accounts in Kenya has surpassed the Kenyan population, which is currently 50 million (Faria, 2021). From this, it is evident that most people prefer mobile banking transactions as opposed to traditional banking. According to FSD (2013), the preference might be due to the inability to meet the banks' requirements or lack of banking facilities around.

The current communication structures are favorable for mobile banking in Kenya because most telecommunication service providers have even reached most local and rural areas. Therefore, most if not all Kenyans can access mobile banking services. In addition, the competition among telecommunication providers and banks has intensified. Therefore, most of them are working tirelessly to provide mobile banking services. Like any other operation, there are challenges faced by mobile banking, but it has brought more advantages to the people outweighing its challenges and disadvantages. For that reason, traders and customers have all embraced the use of mobile banking in making payments. For example, the most noteworthy traders who have adopted mobile banking in Kenya

are the transport ("matatu") businesspersons. Passengers now pay their fares as low as Ksh.20 using their mobile phones. According to T.S. (2015), it is easier to pay for a taxi ride via mobile phone in Nairobi than in New York, owing to M-Pesa (Kenya's world-leading mobile-money system).

The convenience of mobile banking and its availability in every corner of the country is thus a stimulator for its use as compared to the traditional way of banking. Furthermore, it is safer than cash payments. Thus, one can have large sums of money on their mobile phones rather than walk around with large sums of cash, which is risky in Kenya (e.g., in Nairobi) (Mutio, 2019). SMEs are not left behind in the adoption of mobile banking and the service providers have made it easier for them to get the structures for operations. For instance, Safaricom now gives even the smallest business operators like "mama mboga" till numbers so that their customers can easily pay them using mobile banking. Mobile banking also enables business operators to view their transactions at any given time using their phones, which means they can track their sales easily too, thus minimizing the chances of losses (Jamgun & Miroga, 2018). Hence, mobile banking is convenient, safe, and available, which has made it unavoidable in SMEs. There are studies on this topic that have focused on different segments, thus giving room for further research. Again, despite its numerous benefits, there are SMEs that have not fully embraced mobile banking. Therefore, its rising use in business, the research gaps, and failure of adoption by other enterprises have motivated the researcher to conduct the study. The research was anchored on the technology acceptance model, innovation diffusion theory, and task-technology fit theory. Technology acceptance theory helped explain why SMEs adopt and employ mobile banking to conduct their operations. Innovation diffusion theory also

assisted in explaining the adoption and use of mobile banking in SMEs. Task-technology fit theory helped describe why most SMEs find mobile banking better for use in their enterprises in comparison to other modes of banking.

1.1.1 Mobile Banking

Mobile banking refers to the use of mobile devices to process different banking products and services (Venkatesh & Davis, 2016). Mobile banking enables customers to access financial services at any place, time, and situation, thus bringing a competitive advantage among banks. Mobile phone use is increasing in a vast component, and m-banking has made it simple to extend financial services to people who do not bank with traditional banks, and it was among the first developments of mobile commerce (Barnes & Corbett, 2003). Developments in ICT have led to M-commerce because of the growth rate of mobile applications. M-commerce refers to the use of wireless communication networks and devices to perform monetary transactions directly or indirectly (Clarke, 2011).

Owing to the growth of mobile users, there is also a growth in the purchase of goods and services via mobile phones and other mobile devices. Cashless transactions have various advantages, including fewer fraudulent and criminal activities; therefore, many people have embraced them (Moog, 2010). Jack & Suri (2011) discuss that mobile banking is safe, fast, and cheap. From the inception of mobile banking, consumers can carry out their transactions anywhere, so they do not have to visit the banks and can get special services. Thus, all businesses, including SMEs, can perform various banking services using mobile banking, including requesting bank statements, transferring money from one account to another, borrowing money, paying bills, and others.

1.1.2 Financial Performance

Financial performance is defined as a subjective measure of how well an enterprise uses its assets to generate revenues and a measure of the overall financial health of a firm within a certain period. Therefore, financial performance refers to the estimate of a profit or loss within a given time (Iravonga & Miroga, 2018). Established organizations indicate their financial performance through their financial statements. However, smaller firms usually do not keep such statements and only have records of their sales and costs. There is no universal approach used in measuring the performance of SMEs. However, various measures assess the financial performance of firms, like ROE (Return on Equity), sales revenue, profits, and ROA (Return on Asset). ROE refers to the return a corporation generates from effective employment of the total shareholders' equity. Therefore, it is a profitability ratio that indicates the earnings that shareholders should earn on their investments. A higher ROE thus depicts a more stable financial performance as opposed to a lower ROE. ROA is a profitability ratio that illustrates the returns a firm earns from the successful application of its assets. Therefore, a firm with a higher value of ROA has a better financial performance than one with a low ROA.

The financial performance of SMEs is a vital aspect because it is what determines their survival in the competitive market. When SMEs make more sales, they are likely to make more profits as opposed to low sales. SMEs can make high or low sales volumes, which is dependent on the products they offer, their prices, and whether they provide efficient and effective payment services. Making low-value frequent sales can be costly for businesses; but, if they use the appropriate mode of payment that involves low expenditures, they ensure that they reduce costs to the minimum. SMEs using mobile

banking enjoy this advantage because they can receive payments from their customers from anywhere they are, and they can also pay their suppliers from their comfort zones. Therefore, they can cut the cost of operations (Otiso et al., 2013). According to Mbogo (2010), micro-business operators in Africa use mobile banking services, whereby they pay bills, pay suppliers, send money to their accounts, and withdraw money from their bank accounts. For the sake of this study that involved some enterprises that have incomplete financial records, the financial performance of SMEs was measured using their profits generated by them.

1.1.3 Mobile Banking and Financial Performance

Mobile banking provides a potential solution to millions of people and businesses who have access to mobile devices. Mobile banking ensures accessible financial services then minimizes the time and distance one needs to reach the nearest bank branches. In addition, it enables the banking institutions to expand their services to new customers, which increases their market (Mabwai, 2016). Additionally, mobile banking helps cut operating costs and maximize operating revenues for firms and banks. Mobile banking has reached every corner in Kenya, and there is anticipation that the trend will continue in the coming years since people are rapidly adopting technology use. The government is also encouraging the cashless economy, and mobile banking is essential in realizing this.

Mobile banking is linked to a positive financial performance of firms because it helps increase efficiency in operations and cut costs, thus increasing profitability (Ndungu & Njeru, 2014). Mobile banking has various products that people can access, including bill payments, mobile finance, banking, statements, balance inquiries, account top-up or

withdrawal alerts, etc. (Donovan, 2012). Enterprises utilize these products for receipt of payments from their customers and sending payments to their suppliers. Therefore, they can access these services without necessarily visiting any physical bank, thus increasing their efficiency. In addition, they use mobile banking to access credits from financial institutions that they can utilize to grow their businesses. There is empirical evidence that mobile banking use improves the financial performance of firms, so this study will try to find out the impact of mobile banking on the financial performance of SMEs in Kenya.

1.1.4 Small and Medium Enterprises in Kenya

There are different definitions for SMEs depending on the region and the origins, so there is no universal definition of them because its definition majorly occurs in terms of the population of the workers within the firm, the volume of sales, assets size, capital, and yields value. Nyangori (2012) states that employees ordinarily define SMEs as such because this makes them comparable. Therefore, all business enterprises, which have between 1-50 employees, are referred to as small enterprises while those with 50-100 employees are medium enterprises in Kenya. The SME definition includes those businesses in the informal sectors, whose employees work in an unorganized way, thus they are not regulated. Therefore, SMEs include carpentry, saloons, boutiques, tailoring businesses, metal works, general shops, boutiques, saloons, metalworking, carpentry, tailoring, repair shops, groceries, barber shops (Otiso et al., 2013). Most SMEs pay their workers daily or weekly, depending on their agreements and business performance.

There are approximately 7.5 million SMEs in Kenya that offer employment opportunities and an income source for the low-income earners in the economy (Wakiaga, 2021). Out of the 7.5 million, 1.56 million are licensed while 5.85 million are unlicensed, and this

industry plays a vital role in the Kenyan economy as it contributes to about 40% of the GDP (Wakiaga, 2021). SMEs contribute to approximately 80% of total employment in Kenya and more than 92% of new jobs created (International Trade Centre, 2019). Therefore, it is essential for creating employment, providing income, and serving as a foundation for industrializing the country. WEF (2011) states that more than three billion people globally do not have access to banking services. This means that SMEs and the poor fall in the disadvantaged category of people. Mobile banking, on the other hand, has proven to be an excellent financial intermediary for them. There is constant growth in mobile banking, and new products emerge every now and then, including access to mobile loans. Therefore, it was essential to conduct a study on the impact of mobile banking on the financial performance of SMEs in Kenya.

1.2 Research Problem

Mobile banking has attracted many concerns worldwide because it is the next big thing in the financial system. Most people find it convenient and reliable for financial transactions and easier to access credit than traditional banks. SMEs have equally adopted m-banking use, and it has bridged the gap between those businesses that are banked and those that are unbanked. SME financial performance is indispensable in their operations because it will determine their sustainability. Therefore, any strategies that they adopt in their businesses must be those that can enhance their financial performance. In effect, since SMEs have embraced m-banking in their operations, it is essential to conduct a study to determine if it amplifies their financial health.

Globally, SMEs are considered vital in attaining the United Nations 2030 Agenda for Sustainable Development and its objectives. Also, Kenya Vision 2030 seeks to develop

the country and transform it into a high-middle-income country that is newly industrializing; thus, it acknowledges the crucial role that SMEs play in achieving its goals. Equally, SMEs are considered the ‘bedrock’ for manufacturing and recognized as fundamental enablers on the road to realizing the ‘Big Four’ transformational agenda in the manufacturing pillar (International Trade Centre, 2019). The SME sector is thus an essential part of the development of the Kenyan economy that needs attention. SMEs in Kenya employ more than 80% of the working populace in the country and play an essential role in the country’s economic and growth strategies (African Review, 2017). According to Nyangori (2012), SMEs are constantly growing and creating jobs; thus, they are a vital sector in the economy. Malice (2014) notes that approximately 98% of all businesses in Kenya are SMEs, which absorb many school leavers. Therefore, efforts to make SMEs more competitive can assist the country in attaining its development goal through the creation of more jobs, solidification of sectors, and development of functional business models.

However, SMEs have constraints that affect their growth and attainment of economies of scale. Their challenges include working capital, access to finance, human resource development, access to markets, accessibility to modern technology and information. According to Lennar and Bjorn (2010), cash-flow management is the major constraint to SME operations. Nakhaima (2016) states that SMEs face obstacles to financing, so they cannot comfortably grow or expand because most do not qualify for loans from banks; hence, they experience slow or stagnant growth. Amy (2015) explains that SMEs can hardly access financing because they have poor revenues, low capital, do not have assets and finance records, thus cannot acquire credits from the commercial banks. Therefore,

judging from the challenges faced by SMEs, the rapid growth of mobile banking has been a rescue for them because they can now access funds just by using their mobile devices. Hence, mobile banking has offered an efficient payment channel for SMEs; consequently, they can effortlessly pay their suppliers and receive payments from their customers. Also, mobile banking has reduced transactional costs because it enables access to financial services from anywhere. Besides, mobile banking aids them in cash management, which has been an issue for SMEs for so long. Hence, they can now access their accounts and balances at any time.

There are studies already done related to this topic. For instance, Mutio (2019) determined that m-banking services positively correlate with the performance of micro-businesses within the informal sector in Kenya. Jamgun & Miroga (2018) found that mobile banking services significantly affect the financial performance of SMEs within Kakamega County. Most of them in Kenya focuses on micro and small enterprises. Again, most studies were done on some segments, leaving room for further improvements. Hence, this research bridged the gaps by trying to establish answers to the research question: what is the influence of mobile banking on the financial performance of SMEs in Nairobi County, Kenya?

1.3 Research Objective

To determine the impact of mobile banking on the financial performance of SMEs in Nairobi County, Kenya.

1.4 Value of the Study

The findings of this research will be significant to the SMEs management because it will help them know the importance of the use of mobile banking in transacting their finances.

Hence, they will be able to set up strategies that would further help them in integration of mobile banking in their business. In addition, the findings will be vital to the policy makers, as it will guide them in establishing policies that can help SMEs integrate mobile banking in their daily operations.

Then, the results of the study will form the foundation for future research on mobile banking and SMEs since it will give recommendations on which areas that will require further research. Similarly, it will add on to the current literature, thus can be of great reference for the academicians. Moreover, the banks will also benefit from the study since it will highlight the impact of mobile banking on SMEs. Subsequently, they can find better ways of reaching out to SMEs to offer enhanced mobile banking services to them.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a summary of the theories linked to the study's topic, literature evidence from other scholars on the related topic of study (both local and international studies). Then the conceptual framework is presented and summary of literature review at the end of the chapter.

2.2 Theoretical Review

There are theories linked to mobile banking adoption and use including technology acceptance model, innovation diffusion theory and task-technology fit which are discussed below.

2.2.1 Technology Acceptance Model

The Technology Acceptance Model (TAM) works on the belief that the perceived ease of use and usefulness determines the adoption and use of a system (Davis, 1989). These two beliefs help in the adoption and use of IT in firms. Perceived usefulness refers to the degree to which an individual thinks that the employment of a given system leads to better performance. Then Perceived ease of use refers to the degree to which an individual believes that employing a definite system will require little effort (Davis,

1989). TAM helps in explaining and understanding the behaviors of users concerning information system implementation.

Therefore, the theory explains how and why business operators adopt new technologies. Users typically have many considerations that influence their decision to use or not use the technology. These include perceived functionality, in that innovation will enhance productivity, and perceived easiness of use, i.e., they will use technology effortlessly in their operations (Davis,1989). However, these two aspects, which determine the adoption and utilization of new technology, are impacted by other aspects, including cost, security, accessibility, and trust. The TAM model is significant in illustrating how business owners have implemented new technology in carrying out their businesses. Therefore, they utilize m-banking to perform transactions, thus leading to secure, fast, and more accessible finance. This theory in this research also explains why and how SMEs accept and use mobile banking in performing their transactions.

2.2.2 Innovation Diffusion Theory

Developed by Rogers, Innovation Diffusion Theory also helps to explain consumer behavior towards adoption and use of new technology (Rogers, 1995). Innovation refers to an idea, object or practice that is considered new by a person whereas diffusion refers to the process through which an innovation is communicated via some channels among the members of a system over time (Rogers, 1995). Hence, innovation diffusion occurs when the social system accepts and use an idea or technology. Roger noted that innovation diffusion occurs depending on the innovation traits which include compatibility, relative Advantage, Trialability, Complexity, and Observability (Rogers, 1995).

Therefore, according to Rodgers (1995), the cost of adoption of innovation will be reliant on how a business firm perceives its compatibility, relative Advantage, Trialability, Complexity, and Observability. The significance of the viewpoint to the study is because if an institution in Kenya notices the intrinsic worth of m-banking, they adopt and integrate these innovations with contemplation on several characteristics like the availability of the required devices. Incorporation of such novelties is quicker in enterprises that have internet access to and revolutionary ability contrasted with establishments lacking. Mobile banking has perceived ease of use and beneficial to the users, thus these attributes have made several individuals and businesses including SMEs to adopt and use it. Therefore, it links to efficiency of operations which contributes to improved financial performance.

2.2.3 Theory of Task-Technology Fit (TTF)

According to Goodhue (1995), task-technology fit theory believes that technology functionality must match the requirements of tasks and the abilities of individual for it to be adopted. Therefore, users can assess task-technology fit then the one with the highest fit is taken and this leads to enhanced performance. Besides, perceived task-technology fit by the users of technology will be better indicators of value of the system (Goodhue, 1995). Therefore, this theory asserts that the better a technology fits the task environment, the more potential users will get the motivation to adopt it. Nevertheless, a challenge arises in how to conceptualize the task environment to mirror the operator's objectives and the fundamental mechanisms for technology adoption. For instance, mobile banking can augment and advance the task of receiving and sending payments. Consecutively, the

digital service can also boost business finance tasks, which is an added objective. This means that this theory ensures technological efficiency.

However, it also needs to amplify effectiveness. Technology effectiveness means doing the right task, completing activities, and achieving goals. However, technology efficiency means innovation optimizes operations, for instance, by helping carry out tasks in the fastest and least expensive way. Also, TTF theory does not offer a comprehensible understanding of what establishes a task environment and how such an environment influences adoption, even though the theory accentuates the value of fit between task and technology. Hence, the need for other models to explain the adoption of innovations.

2.3 Determinants of Financial Performance of SMEs

There are various factors that determine the financial performance of SMEs which include corporate governance, sales revenue growth, access to finance, market share, assets, human resource capacity, technology (mobile banking), outputs and costs. However, the market share and output vary significantly in SMEs, hence they are difficult to compare. In addition, the total assets of SMEs depend on the capital intensity and certain changes within a given period. Some of the determinants of financial performance of SMEs are discussed in the next section.

2.3.1 Human Resource Capacity

A firm's survival greatly depends on the ability to attract and retain the right personnel. Human resource management is thus a significant aspect in determining the competitiveness of enterprises. According to Bamback and Lawyer (1997), improper management is usually the root cause of various unsuccessful firms. Nakhaima (2016)

notes that professionalism is one of the functions which have led to failures of varied SMEs firms because most of them have unskilled labour with a very small percentage of skilled labour which affects them. Human resource variables such as employee outcomes that is commitment, empowerment, development, competence tend to affect performance of enterprises. Human resource capacity positively influences financial performance of SMEs. Nevertheless, most SMEs ignore the importance of human resources. They also lack resources required to employ human resources.

2.3.2 Corporate Governance

Corporate governance refers to the process in which organizations are lead. Corporate governance boosts the sustainability and better financial performance of SMEs and acts as a catalyst for the expansion and growth. However, various SMEs do not embrace the corporate governance practices because the owners believe that corporate governance is meant for large companies only (Kirui, 2016). Good corporate governance leads to good financial performance of the SMEs whereas weak or lack of corporate governance leads to poor financial performance.

2.3.3 Access to Finance

One of the constraints to the growth and development of SMEs is lack of access to credit/finance. Credit constraints forces business operators to rely on self-financing and borrowing from relatives and friends that is usually insufficient to maximize the SMEs' business activities. SMEs lack access to long-term credit; thus, they are forced to depend on expensive short-term finance. The SMEs face numerous financial challenges that include high bank fees and charges, high cost of credit, and others (Nakhaima, 2016).

Therefore, SMEs are unable to expand, meet urgent customer orders or modernize due to scarcity of finance. Access to finance is necessary for enhancing SMEs competitiveness, so that they can invest in new skills, innovation and technologies that can positively impact their financial performance. Therefore, when SMEs have good access to finance, their financial performance is improved and vice versa. Lack of access to finance lead to use of expensive short-term loans that negatively affect their financial performance.

2.3.4 Mobile Banking

Mobile banking is key in determining the financial performance of SMEs because it brings various benefits to them. Higgins, Kendall & Lyon (2012) states that SMEs use mobile banking to pay large amounts of bills, salaries, supplies and more. Also, it helps SMEs access credits at low costs, assists them access financial services by just use of their mobile devices. Hence, their transactional costs are reduced which enhances their financial performance. According to Onyango et al. (2014), adoption and use of mobile phone technology by SMEs leads to quick response to needs of customers, improved internal efficiency, lower operational costs and increased access to new markets.

2.4 Empirical Review

There are empirical studies that have been carried out both internationally and locally on the topic of mobile banking and financial performance of SMEs. Some of the researches are discussed below.

Mutisya (2016) conducted a study on the role of mobile banking on the growth of micro and small enterprises in Kitui county. The researcher found that use of Mobile Banking significantly contributed to the growth of SMEs by increasing sales volume and net

profits. Mutio (2019) did a research on the influence of mobile banking services on the performance of microbusiness in the Kenyan informal Sector that employed a case study of Jua Kali Artisans within Nairobi County. The findings of the study indicated that m-banking services have positive linear correlation with performance of micro businesses and significant relationship exists between mobile banking services and performance of micro businesses within the informal sector in Kenya.

Jamgun & Miroga (2018) did an analysis on how mobile banking impacts the financial performance of SMEs where they employed an exploratory research. Their target population were SMEs which offer financial services in Kakamega County, and they utilized random sampling technique to get a sample of 373 SMEs. The researchers also used semi-structured questionnaires to collecting data from SMEs businesspersons. They found that there was a positive relationship between accessibility, convenience and efficiency and financial performance of SMEs. Also, they found that a negative relationship exist between mobile banking services costs and the financial performance of SMEs. Their conclusion was that mobile banking services significantly affect the financial performance of SMEs within Kakamega County.

Kirui (2016) evaluated mobile money adoption and use in business operations by SMEs in Nakuru town and the effects on their sales. The target population was 21,139 registered SMEs in Nakuru Town, so the researcher used a stratified sampling technique to select the sample of 246 SMEs. Then a questionnaire was used to collect data. The research findings showed that mobile finance, mobile payment and mobile banking significantly affect MSEs' sales. Therefore, the conclusion was that a significant positive relationship exists between mobile money services and sales of SMEs.

Meher, et al.(2020) analyzed the factors which affect the growth of Micro, Small and Medium Enterprises in India. They used primary data which they got through questionnaire method whereby they seeked the opinions of owners and managers of 454 SMEs in Katihar. The findings indicated that SMEs find digital banking more convenient for accepting and making payments. The study also found that variables like time savings, managing business expenditure, check on misappropriation of cash are insignificant. Moreover, they found that SMEs may not be well conversant with the electronic banking, so they can't gain all benefits of digital banking. They concluded that level of easiness in accepting payments, easiness in payments, easiness in business expenditure management, time saving, and misappropriation checking or cash theft contributes to the growth of MSMEs in India

Odin (2012) conducted a research to find out mobile money use in Nigeria and what motivates the users to make use of m-banking. The researcher found that people use mobile money because of the ease of use, convenience and usefulness. Sibiu (2015) analyzed the effect mobile money transfer on the growth of SMEs in Kenya. The findings showed that mobile money significantly contribute to the SME sector because it leads to development of SMEs. Govil, Lopez & Martin (2014) analyzed the mobile finance products such as savings, credit, payments and insurance and made conclusion that they may contribute to the economic progress of households and businesses. Therefore, savings and credit products increases profits and investment for microenterprises.

Otter & Theuvsen (2012) conducted a research on the influence of mobile phones on performance of farmers whereby they assessed 241 farmers in Chile. The reserchers gathered primary data by use of a standardized questionnaire in two months time. They

used performance indicators like yields and gross margins then utilized a regression analysis. Their results depicted that farmers who use mobile phones in exchange of information with their business partners got higher yields than those farmers who don't use mobile phones. Kakwa (2012) scrutinized the mobile technology use amongst the managers and entrepreneurs of micro and small-scale businesses within the Akuapem area in Ghana. He used 100 businesses as his sample then collected primary data through a questionnaire. The findings of the research showed that mobile use leads to benefits in businesses by improving customer services, lowering operational cost, improving communication with customers and suppliers and increasing savings.

Otiso, et al. (2013) surveyed the impacts of mobile money transfer on the profitability of the micro and small enterprises within Bungoma County. Their sample was 57 SMEs randomly selected. Their findings were that Mobile Money Transfer services lowers risks when sending money, lowers transport cost and other costs. In addition, it saves time and has lower transaction fees when compared to fees charged by most commercial banks. Besides, mobile money transfer is easier to utilize when making payments to clients within their rural places, thus it leads to increase in sales revenues. Wanyonyi and Bwisa (2013) studied the effect of Mobile Money transfer services on the Micro Enterprises performance. They assessed 36 micro enterprises from service, processing and agriculture industries then used semi-structured interviews and questionnaire to collect data. They utilized chi-square in testing the link between business performance and use of Mobile Money Transfer. Their results designated that mobile money transfer use when paying for purchases to suppliers; receipts from customer's payment and debt collection for credit sales led to enhanced performance of the micro enterprises.

2.5 Conceptual Framework

The research will be based on the following conceptual framework

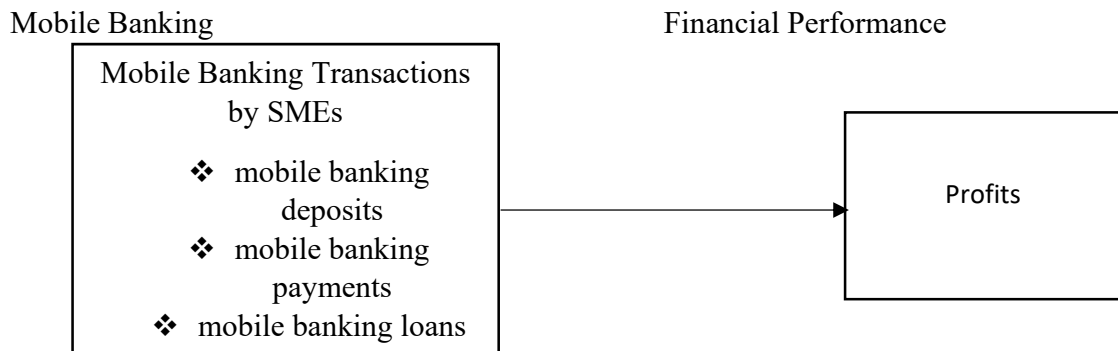


Fig.2.1 Conceptual Framework (Researcher, 2021).

The dependent variable will be financial performance of SMEs and independent variable will be mobile banking. Financial performance will be measured by sales and profits while mobile banking will be indicated by number of transactions (mobile banking deposits, mobile banking payments, mobile banking loans)

2.6 Summary of Literature Review

The researcher has discoursed the technology acceptance model, innovation diffusion theory and theory of Task-Technology Fit that are some of the models and theories which explain adoption and use of mobile banking. Moreover, the researcher has highlighted some of the determinants of financial performance of the SMEs such access to finance, mobile banking, corporate governance and human resource capacity. Additionally, the researcher has mentioned and given a brief discussion on some of the studies done by different academics on related topics. A review of the literature discloses that there are studies already done on mobile banking and performance, but very few exist on SMEs

that creates a gap for further investigation. Also, the available researches have focused on the micro and small enterprises. Hence, the researcher will conduct a research on the impact of mobile banking on the financial performance of SMEs in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the methodology that the researcher employed while conducting the research. Therefore, the chapter highlighted the research design, target population, the sampling size and techniques methods for collecting data and data analysis.

3.2 Research design

According to De Vaus (2016), the research design is the overall strategy that is used to integrate distinct components of a research in a logical and coherent way, thus, ascertains that the researcher addresses the research problem effectively. It thus entails the plan for the data collection, its measurement and analysis. Research design refers to the outline for selection of research areas, subjects, data collection and analysis to find solutions to the research questions (McMillan & Schumacher, 2014).

This research utilized descriptive survey design to determine the influence of mobile banking in the financial performance of SMEs in Kenya. Cooper & Schindler (2011) pinpoints that descriptive design is used when one is collecting information on behaviors, attitudes and sentiments of people. Moreover, descriptive study involves the collection of data that is then used to describe the variables of study, it offers answers to how, what, and who questions. Descriptive research design is suitable for this study because the findings can be applied to all the target population.

3.3 Study Population and Sample

The target population for this study was SMEs in Nairobi. There are several SMEs in Kenya so the researcher will select a sample to use. Cooper and Schindler (2011) define a sampling frame as a list of all the components under which the sample is drawn from the population. The sampling frame for this study will be owners of SMEs in Kenya. The researcher utilized simple random sampling method to select the sample. According to Schindler (2011), simple random sampling is the basic sampling technique that aids the selection of a sample for research from a population. Simple random sampling customarily decreases the sampling error within the population because it is free from classification error. Simple random sampling is also easy to use and infer the collected data that increases the accuracy of the estimation methods utilized in the study.

The researcher used the following formula to calculate the sample size:

$$n = N / 1 + (N \times e^2) \text{ whereby}$$

n= sample size

N=the target population

E is tolerance confidence level $\alpha=0.05$

Given the population, N is 7500000 SMEs (Wakiaga, 2021)

Then the sample size $n=7500000 / (1 + (7500,000 * 0.05 * 0.05)) = 7500000 / 18751$

$=399.98 = 400$

3.4 Data Collection

Creswell (2014) defines data collection as means of getting information from the selected subjects of a research. This research employed both primary and secondary data. For the primary data, structured questionnaires were designed to collect the data. The questionnaire will comprise of four sections whereby the first section asked about the demographic information of respondents; the second section contained queries on mobile banking access and financial performance of SMEs. Then the third section included questions on mobile loan and financial performance of SMEs. The last section had questions on mobile banking payments and financial performance of SMEs. The researcher applied Likert Scale in the study which will use five points rating whereby 1 signaled the lowest level (strongly disagree) and 5 will represented the highest level (strongly agree). The secondary data was got from mobile banking statements and financial records of the SMEs. The period of study was 2017 to 2020.

3.4 Data Analysis

The researcher analyzed data using SPSS (Statistical Package for Social Science) version 26. Pearson's correlation technique utilized in evaluation of the strength of relation between the independent and dependent variables of study. Then the researcher employed

Regression analysis to establish the influence of mobile banking on performance of SMEs. Then the researcher presented data using figures and tables as appropriate.

The following multiple regression model was adopted for the study:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$

Whereby;

Y represent Financial Performance (Profits)

X1 represent Mobile Banking Deposits (Received Payments)

X2 represent Mobile Banking Loans

X3 represent Mobile Banking Payments

α signify constant

μ signifies the error term

β_1 , β_2 and β_3 were the coefficients of independent variables.

3.5.1 Tests of Significance

The researcher performed diagnostic tests to ensure there is no bias in prediction. Therefore, the researcher also utilized F-test to assess the significance of the regression model. Then the researcher employed Pearson's coefficient of determination (R^2) to test for the correlation of the variables of study and show the variations and strength of relationship between the study variables. Also, the researcher perform Analysis of Variance (ANOVA) to ensure there is accuracy of the results of the regression model.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.1 Introduction

This chapter presents the gathered data, analysis, and the results of the research on the effect of mobile banking on the financial performance of SMEs in Nairobi County. The researcher starts with the presentation on the response rate before moving to the data analysis and the research findings. During the research, the scholar employed excel in compilation of the data collected then utilized SPSS to perform the analysis. The presentation of data collected is done using tables and figures. The scholar also used the regression model and correlation analysis to establish the relationship between the mobile banking and performance of the SMEs in Nairobi.

4.2 Response Rate

This study target population was 400 SMEs in Nairobi County. The researcher used a questionnaire to collect data and out of the 400 distributed questionnaires, 365 were received but 15 were incomplete so they were not used for the study. Therefore, the

response rate was 88% which was adequate for use in the study (Mugenda & Mugenda, 2003).

4.3 Demographics of the Respondents

This section gives an analysis of demographic data of the respondents that is, the characteristics of the population including their gender, age, education level and duration in business. Under each subsection is a supporting table or chart where appropriate.

4.3.1 Age

The researcher sought to know age groups of the respondents, and the distribution of the age of the respondents who contributed in this research is given in the following table 4.1.

Table 4.1: Age of Respondents

Age Group	Frequency	Percentage
Below 20	14	4%
21-30	116	33%
31-40	155	44%
41-50	43	12%
Over 50	22	6%
Total	350	100%

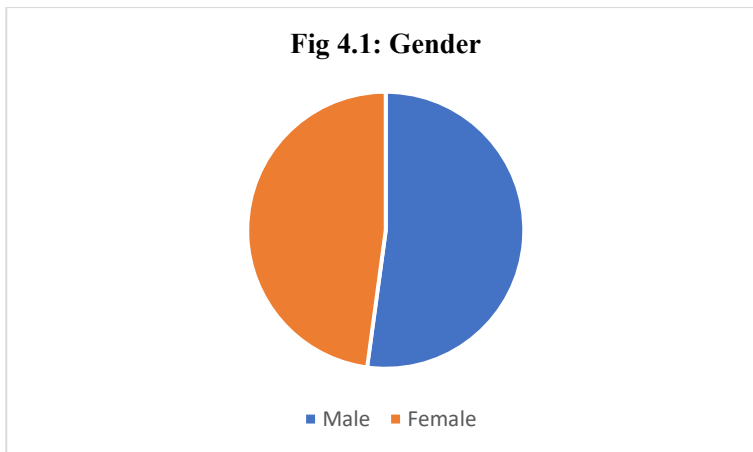
Source: (Researcher, 2021).

From table 4.1, most of the respondents fell in the age group 31- 40 years old with 44%, followed by those in age group 21 -30 years having 33%. The third age group was 41-50 where 12% of the respondents fell in followed by respondents in age group over 50 with 6 % and the least number of respondents came from age group below 20 years (4%). This

result shows that all age groups were represented even though the majority fall between 31-40 and 21-30 years.

4.3.1 Gender Composition of the Respondents

Gender representation of the respondents were as shown in the figure below:



From table figure 4.1 above, male respondents were 52% while female were 48%, so the gender composition was almost balanced even though males were higher than female respondents.

4.3.3 Education Qualification

Table 4.2: Education Qualification

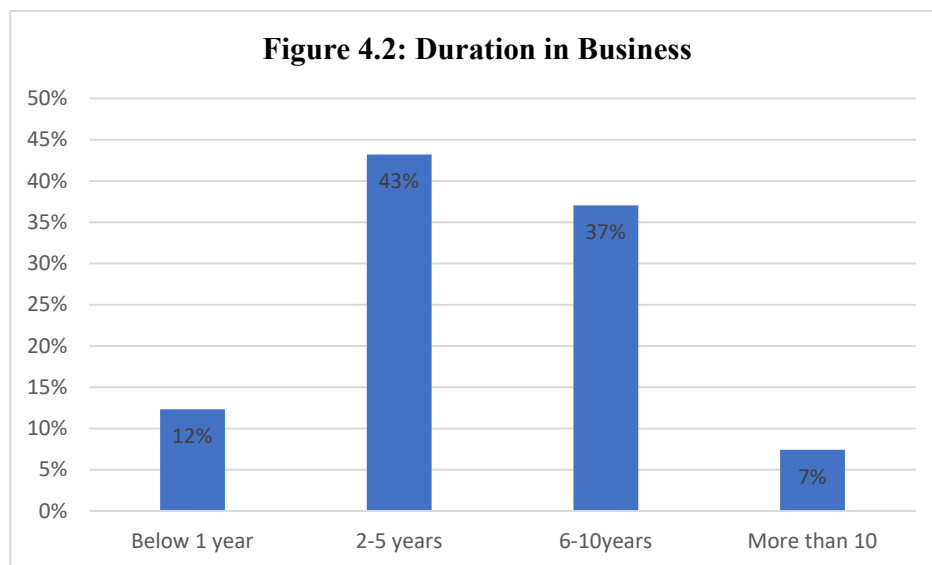
Education Qualification	Frequency	Percentage
Certificate/diploma	182	52%
Bachelor	130	37%
Master	38	11%
PhD	0	0%
Total	350	100%

Source (Researcher, 2021)

From table 4.2 above, majority of the respondents were certificate and diploma holders (52%) followed by bachelor degree holders (37%) then Masters at 11%. There was no respondent who had a PhD. From this result, most respondents were certificate, diploma or bachelor degree holders. The level of education was significant to this study because well-informed individuals are more likely to adopt technology than illiterate.

4.3.4 Duration in business

The researcher also wished to understand SMEs in terms of the period they have been in operation. The findings were as shown in the figure below:



Source (Researcher, 2021).

From figure 4.2 above, most respondents (43%) had been in business operation for a period of between 2 and 5 years followed by respondents (37%) who have operated in 6 to 10 years then 12% were those who had been in the business for a period below 1 year. The least number of respondents (7%) had been operating for more than 10 years. This

result indicates that most of the respondents had a practical experience in the businesses, thus they could offer reliable data for the research.

4.3.5 No of Employees

The researcher wanted to find out the number of employees in every business and the response is indicated in the figure below

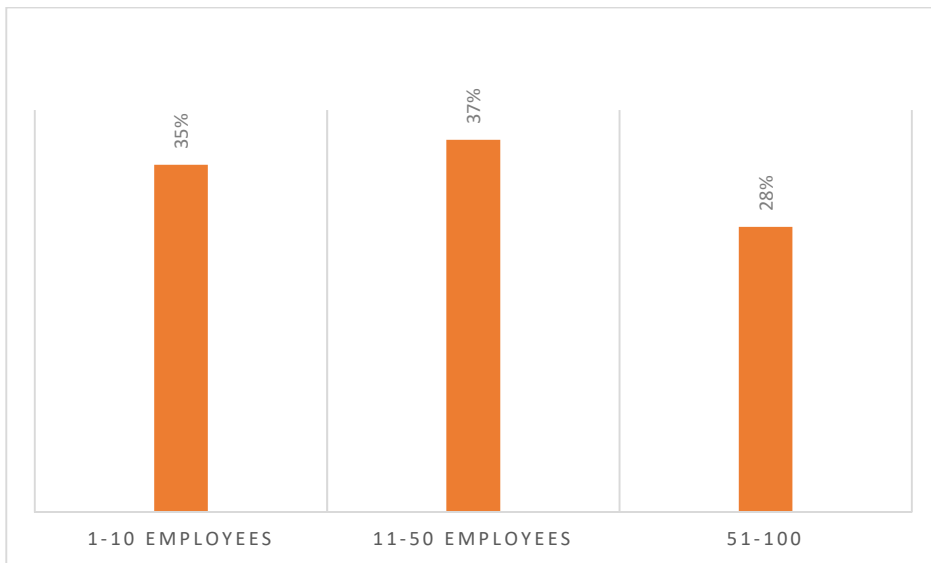


Figure 4.3

Source (Researcher, 2021).

According to Table 4.3 above, most of the participants (37%) had employees ranging from 11 to 50 followed by those who had 1 to 10 employees (35%) and those with 51 to 100 employees were 28%.

4.3.6 Mobile banking access by SMEs

The researcher pursued to establish if the target population have access to mobile banking services. They following chart show the findings



Figure 4.4

Source: (Researcher, 2021).

From figure 4.4, all participants in the study have access and use m-banking in their businesses. Therefore, this can imply that all the SMEs have embraced mobile banking technology. After which, the scholar sought to determine which M-banking service they employed in their business operations and for how long they had utilized the services. The participants were requested to choose from M-Pesa, KCB-Mpesa, Airtel Money, Equitel, Yu Cash, Orange Money and Others. The respondents were free to make multiple choices as applicable to them. The summary of the findings is shown below:

M-banking Services	Users
M-Pesa	340
Airtel Money	10
Orange	0

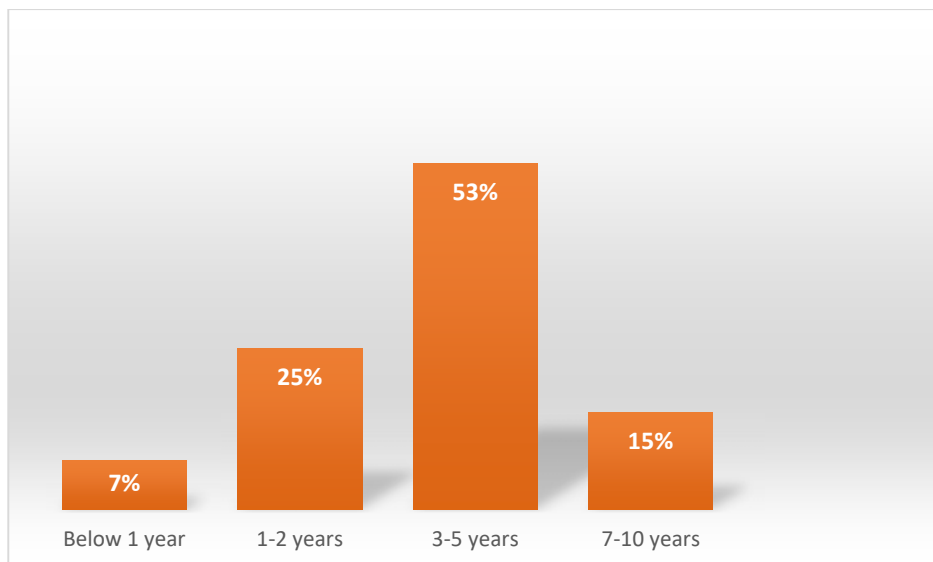
YU	0
KCB-Mpesa	150
Equitel	170
Others	30

Table 4.3

From the research findings, majority of the participants use M-pesa (340), followed by Equitel (170), then KCB-Mpesa (150). About 30 participants employ other mobile banking services and the least number (10) use Airtel Money. This finding reveals that majority of the SMEs prefer M-Pesa services in the business. There were no participants who use Orange money or YU mobile services.

Figure 4. 5: Duration in Business

In terms of the number of years the businesses have utilized mobile banking services, the results is shown below:

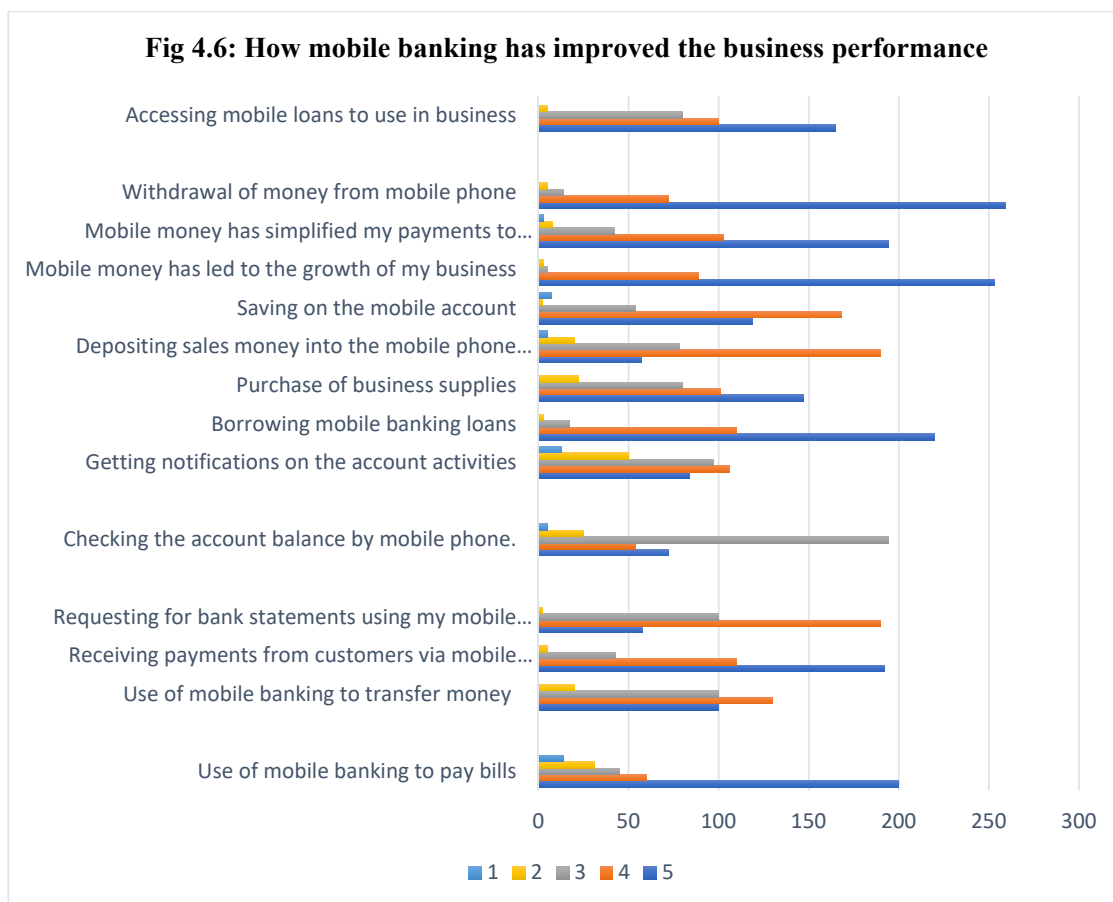


Source: (Researcher, 2021).

The results in figure 4.5 above disclosed that the highest number of SMEs (53%) covered in the study had been using mobile banking services for between 3 and 5 years. Then 25% of the SMEs that participated in the study had utilized m-banking services for about 1 to 2 years. Also, 15% of the SMEs had used mobile banking for about 7 to 10 years and just 7% of the SMEs had used it for less than a year. From these outcomes, it can be assumed that most SMEs operators are well-informed about mobile banking and they have fully embraced it in their dealings.

4.3.7 Mobile Banking and Business performance

The researcher asked the respondents to indicate how mobile banking had improved their business performance on a scale of 1 to 5 whereby 5 signified Strongly agree; 4-Agree; 3-Neutral; 2- disagree; 1- strongly disagree. The following figure is a representation of the results.



Source: (Researcher, 2021).

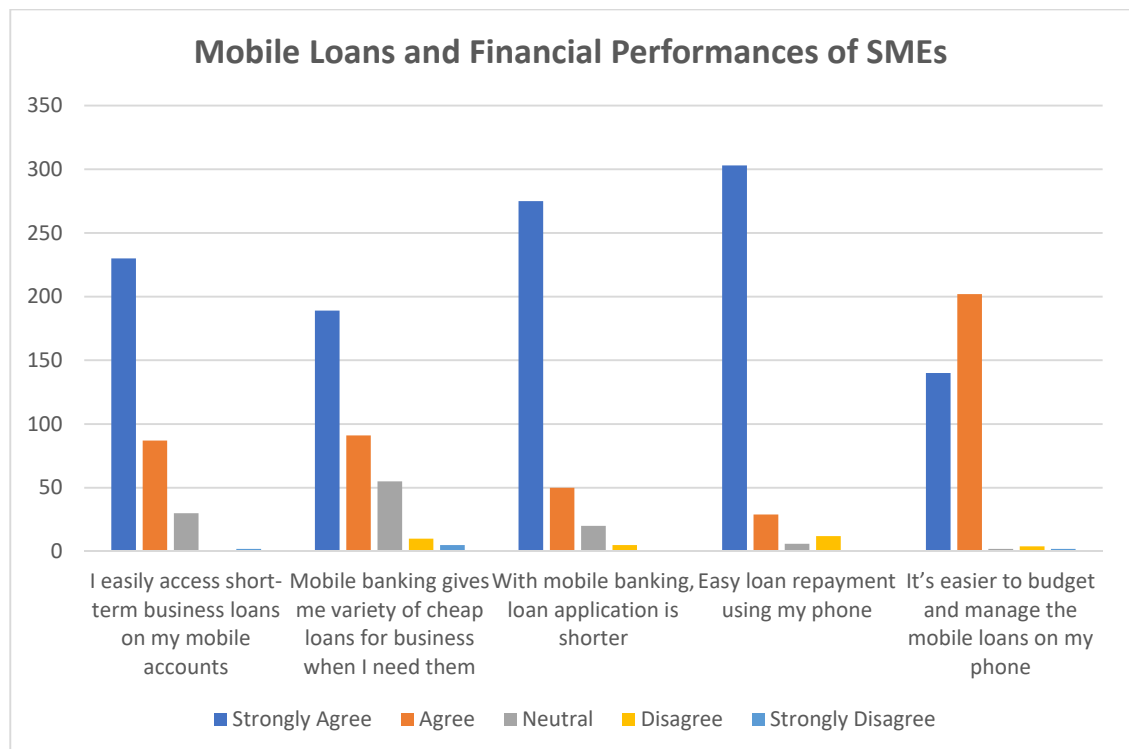
From figure 4.6 majority of the participants strongly agreed that accessing mobile loans and borrowing to use in business had improved their performance. Also, the largest number of respondents strongly agreed that withdrawal of money from mobile phone had improved their operations and mobile money had also simplified their payments to suppliers. The outcome also reveals that majority of the SMEs saving on mobile accounts, depositing sales money into mobile phone, and purchase of business supplies have enhanced their business performance. Many SMEs also agreed that notifications on their account activities, requesting for bank statements using mobile phones and transferring money via their phones have boosted their performance. Besides, majority

were neutral on how checking the account balance by mobile phones have affected their performance. Lastly, majority of the SMEs strongly agreed that receiving payments from customers via mobile phones and utilizing their phones to pay bills had advanced their performance. In a nutshell, the results disclose that most SMEs believe mobile banking has positively influenced and contributed to their upsurge in performance.

4.3.7 Mobile loan and financial performance of SMEs

The researcher also sought to investigate how access to mobile banking loans affect the financial performance of the SMEs. The respondents were requested to indicate their level of agreement with the statements assessing this on a scale of 1-5 (whereby 5- Strongly agree; 4-Agree; 3-Neutral; 2- disagree; 1- strongly disagree). The outcomes were as follows:

Figure 4.7: Mobile Loans and Financial Performances of SMEs



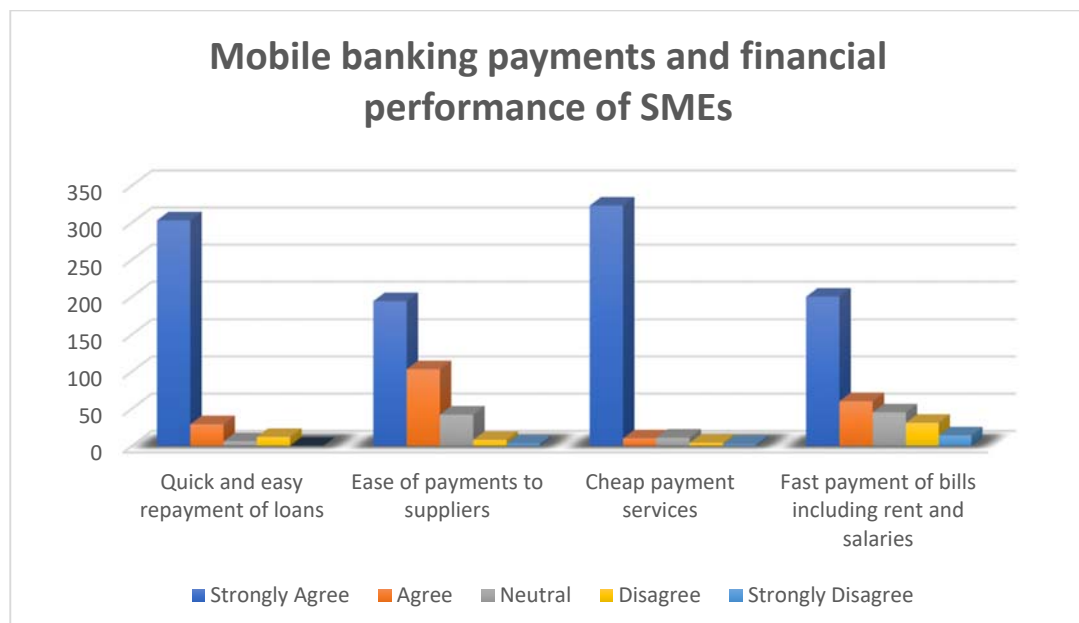
Source: (Researcher, 2021).

From figure 4.7, most SMEs strongly agreed that they can easily access short-term business loans on their mobile accounts. Additionally, a big percentage of the SMEs strongly agreed that mobile banking offers them variety of cheap loans when they were in need and application for such loans was shorter compared to other loans. Moreover, majority of the SMEs confirmed and strongly agreed that the loan repayment is easy using their phones. A big percentage of the SMEs also agree that it is easier to budget and manage mobile loans on their phones.

4.3.8 Mobile banking payments and financial performance of SMEs

The scholar also went deeper into finding whether mobile payments had affected the performance of SMEs under study. Their responses are summarized in figure 4.8 below.

Figure 4.8: Mobile banking payments and financial performance of SMEs



Source: (Researcher, 2021).

From the results indicated in figure 4.8 above, most SMEs strongly agreed that m-banking had enabled quick and easy repayment of loans, ease of payment to suppliers and cheap payment services. Also, they strongly agreed that m-banking has ensured they pay their bills fast including rent and salaries. Hence, mobile banking payments have improved their performance.

4.4 Diagnostic Tests

The academic applied Shapiro-Wilk as well as Kolmogorov-Smirnov to test for normality in the data distribution. The table 4.4 below indicates the results for normality test.

Table 4.4: Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Profits	.150	350	.084	.904	350	.010
M-banking Deposits	.139	350	.145	.919	350	.026
M-banking Payments	.319	350	.000	.639	350	.000
Mobile loans	.193	350	.006	.882	350	.003

Source: (Researcher, 2021).

From the table above, the outcome expresses that there was a normal distribution of the population where the data was gathered since both Shapiro-Wilk test and Kolmogorov-Smirnov test show p-values larger than 0.05. Therefore, the data amassed was appropriate for research.

4.4.2 Multicollinearity Test

Variables	Collinearity Stats	
	Tolerance	VIF
M-banking Deposits	.506	1.975
M-banking Payments	.458	2.184
Mobile Loans	.290	3.444

Table 4.5. Source: (Researcher, 2021).

The table 4.5 above demonstrates that the multicollinearity tests findings had the independent variables with a Tolerance Value that is greater than 0.2. Tolerance was > 0.2 which shows there was no multicollinearity issue. Besides, the independent variables had VIF of less than 10: M-banking deposits had VIF of 1.975; M-banking payments had VIF of 2.184 and mobile loans had VIF of 3.444. Therefore, there was no multicollinearity since their VIF < 10 .

4.5 Correlation Analysis

The researcher executed a correlation analysis to disclose the relationship that was present between the research variables. The results were summarized in table 4.6.

Table 4.6: Correlations

	M-banking Deposits	M-banking Payments	Mobile loans	Profits
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M-banking Deposits	Pearson Correlation	1	.225	.193	.978
	Sig.		.019	.000	.000
	Pearson Correlation	.325	1	.228	.383
	Sig.	.019		.000	.037
	Pearson Correlation	.393	.428	1	.699
	Sig.	.000	.000		.000
	Pearson Correlation	.978	.383	.699	1
	Sig.	.000	.037	.000	

Source: (Researcher, 2021).

From the findings, m-banking deposits possess a strong positive correlation with the financial performance of the SMEs. This is shown by the correlation of 0.978 and sig of 0.000, signifying that $p\text{-value} < 0.05$; thus, there was a significant link between the two variables. The significance level was 5%. For that reason, an increase in m-banking deposits would lead to 0.978 increase in profits. Also, m-banking payments indicated a 0.383 correlation (sig 0.037 < 0.05) with the financial performance. Hence the correlation was significant and an increase in m-banking payments would increase profits by 0.383. Moreover, mobile loans had a 0.699 correlation with performance (sig. 0.000 < 0.05). Therefore, there is a significant positive correlation between the two variables which implies that an upsurge in mobile loans access would increase profits of SMEs.

4.6 Regression Analysis

The student steered a multiple regression analysis to further determine the existing association between the variables of study. The results of the regression analysis is summarized in table 4.7 below.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782	.763	.759	7.257
a. Predictors: (Constant), Mobile loans, M-banking Deposits, M-banking Payments				

Source: (Researcher, 2021).

The table 4.7, depicted that determination coefficient (R-Square) was 0.763. Therefore, this R^2 infers that the research independent variables explain 76.3% of the variations in the profits(performance) of the SMEs within Nairobi County. Hence, other factors not included in the study explain 23.7% of the variations in the financial performance of the SMEs.

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	6801.85	17	400.11	26.23	.000 ^b
	Residual	5064.81	332	15.255		
	Total	11865.85	349			
a. Dependent Variable: Profits						

b. Predictors: (Constant), Mobile loans, M-banking Deposits, M-banking Payments

Source (Researcher, 2021)

The ANOVA table above depicts that the regression model predicted the dependent variable significantly. So, M-banking deposits, m-banking payments and mobile loans together predict the performance of the SMEs since the F-statistic is 38.21 which is big,. The p-value is $0.000 < 0.05$ hence, all the independent variables are statistically significant in predicting the performance of SMEs and the model is a good fit.

Table 4.9: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	6.554	6.483		1.011	.021
M-banking Deposits	.726	.041	.033	17.696	.000
M-banking Payments	.083	.042	.010	1.985	.038
Mobile loans	.063	.033	.033	1.911	.037

a. Dependent Variable: Profits

Source: (Researcher, 2021).

The regression model for the study was

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$

Hence, from the result of the investigation, the regression model became

$$Y = 6.554 + 0.726 \text{ Deposits} + 0.083 \text{ Loans} + 0.063 \text{ Payments} + \epsilon$$

$$\text{Financial Performance (Profits)} = 6.554 + 0.726 \text{ Deposits} + 0.063 \text{ Loans} + 0.083 \text{ Payments} + \epsilon$$

Therefore, holding other independent variables constant, the profits will be 6.554. Then a unit increase in deposits will lead to 0.726 rise in the profit of SMEs. Additionally, an upsurge in mobile loans will lead to 0.063 surge in financial performance of the SMEs. Besides, the findings also expresses that an increase in mobile payments will lead to 0.083 rise in financial performance of SMEs. All the results are significant as shown by their p-values which are all less than 0.05.

4.7 Interpretation of the Findings

The key objective of this research was to determine the effect of mobile banking on the financial performance of SMEs in Nairobi County. The response rate for research was 88% which was adequate. The examination found that all participants in the study had access and used m-banking in their businesses. Also, the findings revealed that nearly all the participants use M-Pesa. This finding revealed that majority of the SMEs preferred M-Pesa services in the business. There were no participants who used orange money or YU mobile services. Additionally, 53% of the SMEs had been using m-banking services for about 3 to 5 years. This showed that most had embraced m-banking in their businesses. Moreover, most participants strongly agreed that m-banking including

deposits, payments and mobile loans had improved their performance. Succinctly, the results disclosed that most SMEs acknowledged that m-banking had positively affected and boosted their upsurge in financial performance. The scholar also found that most SMEs could easily access short-term business mobile loans that were cheaper options and the application time for such loans were shorter. They also confirmed that the loan repayment was easy via their phones and they could easily budget and manage mobile loans on their phones. Besides, most SMEs agreed that m-banking enabled them to easily pay their suppliers, bills and offered them cheap payment services. Thus, m-banking payments improved their performance.

The research results showed that m-banking deposits possessed a strong positive correlation with the financial performance of the SMEs. Because the correlation was 0.978 (p-value was 0.000 <0.05; hence, the link between m-banking deposits and financial performance of SMEs was significant. Therefore, a rise in m-banking deposits would cause 0.978 increase in SMEs profits. Similarly, m-banking payments designated a 0.383 correlation (sig 0.037 <0.05) with the financial performance. The correlation was significant, thus an increase in m-banking payments would increase profits by 0.383. This is because, SMEs had shown that m-banking payments offered them cheaper rates thus they saved money when paying their suppliers and bills. Again, the findings exposed those mobile loans had a 0.699 correlation with performance (p-value 0.000<0.05). Hence, a significant positive correlation existed between the mobile loans and growth profits of SMEs. This is because mobile loans are cheaper, easier to get and pay back as opposed to other loans. Again, this implies that the SMEs can utilize the mobile loans to expand their operations, hence boosting their performance. These results are in

conformity with other scholars who found that m-banking positively affect financial performance of SMEs (Mutisya, 2016; Mutio, 2019; Kirui, 2016).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a review of the results summary and then discusses conclusions and recommendations for the research. The study's objective was to determine the effect of m-banking on the performance of SMEs in Nairobi County.

5.2 Summary of Key Findings

The goal of this investigation was to examine the effect of m-banking on the financial performance of SMEs in Nairobi County. The researcher used a questionnaire to gather primary data and then analyzed it using excel and SPSS. The response rate was 88%, whereby the total number of respondents used in the study was 350. The SMEs were randomly picked from different industries and asked to provide answers to questions listed in the questionnaire. The highest proportions of the participants specified that m-banking assisted them to pay bills, transfer money, receive payments from customers, check their bank statements, borrow mobile loans, save money, and pay their suppliers. M-banking services had improved SMEs' cash management systems, beginning with

payment receipts and continuing with loan budgets, checking balances, and statements. These findings indicate that m-banking services boost the efficiency of SME operations and minimize their costs when compared to traditional banking. It also meant that m-banking provided greater convenience for both SMEs and their customers, as they could initiate and receive payments from anywhere. Hence, this also minimized the costs of coordination and movement. These results are in line with an examination that was conducted by Meher et al. (2020) that established that SMEs find digital banking more convenient for accepting and making payments. Also, the results conform to the findings of Jamgun & Miroga (2018), who found that there was a positive relationship between m-banking accessibility, convenience, and efficiency and the financial performance of SMEs.

One vital aspect to note is that nearly all SMEs (97%) utilize M-Pesa services in their dealings. This could mean that M-Pesa services have brought a significant transformation in the performance of SMEs. Also, M-Pesa has given a platform for all businesses to efficiently receive and process payments since it is easily accessible all over the country. Also, the research outcome revealed that the performance of SMEs has been superb since they began employing m-banking services in their operations. For instance, SMEs have experienced growth in their customer base because of the ease of m-banking payments, an upsurge in business transactions and growth in profits due to increased business efficiency and minimal costs of banking operations.

The research also revealed that mobile loans had contributed to an increase in the financial performance of SMEs. The results depicted that the highest percentage of SMEs could access various cheap and short-term mobile loans. The loan processing was fast

too. This result infers that SMEs can easily access credit to use in business and expand their operations, thus increasing their financial performance. Traditional bank loans are usually more expensive, which means that SMEs that opt for mobile loans can save on financing. Also, conventional bank loans take too long to process and may need security, so not many SMEs can qualify. This finding conforms to Mutio (2019), who established that access to short-term mobile loans and a variety of cheap options for m-banking credits improved the performance of microbusinesses.

Additionally, the scholar performed a multiple regression analysis, and the test of significance comprised a 5% level 2-tailed test. The findings from the regression analysis demonstrated that independent research variables explain 76.3% of the variations in the profitability of the SMEs in Nairobi County. The study also discovered that a positive, significant, and strong correlation existed between m-banking deposits and the financial performance of the SMEs. As a result, the investigator recognized that an increase in m-banking deposits leads to an increase in the financial performance of SMEs. Besides, the study analysis exposed that a positive, significant correlation was present between m-banking loans and the financial performance of the enterprises. As a result, an increase in mobile loans leads to improved financial performance for SMEs. Likewise, the correlation analysis unveiled that a positive, significant association also existed between m-banking payments use and the profits of the SMEs. Consequently, a rise in utilization of m-banking payment services affects the performance of SMEs positively.

5.3 Conclusions

First, the conclusion of the research was that SMEs find m-banking easy to use, convenient, cost-effective, secure, and accessible to all; thus, the majority have fully

embraced it and those who started using it long ago incessantly utilize the m-banking services. Moreover, the researcher concluded that a significant positive association is present between mobile banking and the performance of SMEs in Nairobi County. This is due to a strong positive and significant correlation between m-banking deposits and SMEs' profitability. Also, m-banking payments and mobile loans positively and significantly influence the financial performance of SMEs. Therefore, the results indicate that adoption of m-banking by SMEs has led to a significant relationship with their performance. This suggests that a rise in m-banking implementation would bring about growth in the financial performance of SMEs. So, the scholar concluded that mobile banking positively and significantly affects the financial performance of SMEs within Nairobi County.

5.4 Recommendations

The research recommends that all SMEs should implement m-banking services in their operations to stay competitive. M-banking ensures that enterprises can serve their customers efficiently and conveniently; thus, it is a great tool for all businesses. Furthermore, the current business environment is characterized by various external forces, such as corona, which have made it necessary for virtual business operations. Therefore, m-banking is inevitable for successful businesses.

In addition, the study recommends that communication firms provide more favorable terms for m-banking, which could be tailored specifically for SMEs. Consequently, this would ensure more businesses get on board and relentlessly utilize m-banking for all their operations. Also, the researcher found that no SMEs use the m-banking services of Orange Money and YU Cash, perhaps because of their inaccessibility in most parts of the

country. Hence, the study recommends that these service providers need to improve their outreach by ensuring customers can access their services anywhere at any time.

5.5 Limitations of Study

The key limitation for this research was time. The researcher was compelled to execute the examination within a specified timeline, which offered no opportunity to cover other parts of Kenya. Data collection, compilation, and analysis required time, meaning that covering an extensive area would have required a much longer period than what was available. Hence, the researcher only covered Nairobi County, leaving room for future researchers to explore other areas in the country.

Moreover, there was also a resource constraint in that all the processes of data collection required money, so covering other parts of the nation would have required additional funds, which were limited. Hence, after weighing the options available, the student resolved to investigate in Nairobi County only.

5.6 Areas for Further Studies

The researcher suggests future studies cover a wider area of study than just a particular section of the country. Hence, future scholars can consider carrying out similar research in the whole of Kenya. The researcher can collect data from all parts of the country to analyze the effect of m-banking on SMEs in Kenya.

Moreover, further studies could consider employing other different variables and employing varied measurement approaches to establish the impact of m-banking services on performance. Also, other studies can involve other firms in different industries to determine how m-banking affects their performance. Besides, future scholars can take up

the task of determining how M-Pesa affects business performance. This is because the researcher realized that it is predominantly employed by most SMEs, so such a study could help understand it better and help businesses who have not embraced it get on board.

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APPENDIX: QUESTIONNAIRE

Introduction Letter

Dear Respondent,

I am Simon Mutua, a Masters student at the University of Nairobi carrying out research. on the “Effects of Mobile Banking on Financial Performance of SMEs in Kenya Nairobi County. and This is a requirement for the award of MBA in University of Nairobi, and I humbly request you to take about 10 minutes and complete the questionnaire to help me accomplish the study. Please note that all the information that you offer will remain confidential and only used for this research purpose.

Thank you so for your participation in this study.

Sincerely,

Simon Mutua

Student, MBA Programme

University of Nairobi

PART A: Demographic Information

1. What is your age? *{mark where applicable}*

Below 20 years () 21-30 years () 31-40 years () 41-50 years ()
) Over 50 years ()

2. What is your gender?

Male () Female ()

3. What is your highest education qualification?

Certificate/diploma () Higher diploma () Bachelor () Master ()
PhD ()

4. How long have you been in the business?

Below 1 year () 2-5 years () 6-10 years () More than 10 years ()

5. Which position do you hold in this firm?

6. How many employees does the business have?

1-10 () 11-50 () 51-100 ()

PART B: Mobile banking access and financial performance of SMEs

7. Which bank do you use for your business operations?

.....

8. Does your bank offer mobile banking services?

Yes () No ()

9. Do you use mobile banking services in your business?

Yes () No ()

If yes, please tick the mobile money service that you use (Tick all applicable)

M-Pesa () Airtel Money () YU -Cash () Orange Money

Equitel () KCB-M-pesa () Others ()

10. How many years have you utilized mobile banking services in your business?

Below 1 year () 1-2 years () 3-5 years () 7-10 years ()

Please mark where appropriate using the ratings below indicating how mobile banking has improved your business performance on a scale of 1-5: (whereby 5- Strongly agree; 4-Agree; 3-Neutral; 2- disagree; 1- strongly disagree).

Mobile banking Use	5	4	3	2	1
Use of mobile banking to pay bills					
Use of mobile banking to transfer money					
Receiving payments from customers via mobile banking					
Requesting for bank statements using my mobile phone					
Checking the account balance by mobile phone.					
Getting notifications on the account activities					
Borrowing mobile banking loans					
Purchase of business supplies					
Depositing sales money into the mobile phone account					
Saving on the mobile account					
Mobile money has led to the growth of my business					
Mobile money has simplified my payments to suppliers					
Withdrawal of money from mobile phone					
Accessing mobile loans to use in business					

PART C: mobile loan and financial performance of SMEs

Please indicate level of your agreement/disagreement with the following statements on how access to mobile banking loans affect the performance of your businesses on a scale of 1-5 (whereby 5- Strongly agree; 4-Agree; 3-Neutral; 2-disagree; 1- strongly disagree)

Statement	5	4	3	2	1
I easily access short-term business loans on my mobile accounts					
Mobile banking gives me variety of cheap loans for business when I need them					

With mobile banking, loan application is shorter					
Easy loan repayment using my phone					
It's easier to budget and manage the mobile loans on my phone					

PART D: Mobile banking payments and financial performance of SMEs

Please rate on a scale of 1 – 5 on how mobile banking payments have improved performance of your business (whereby 5- Strongly agree; 4-Agree; 3-Neutral; 2-disagree; 1- strongly disagree)

Statement	5	4	3	2	1
Quick and easy repayment of loans					
Ease of payments to suppliers					
Cheap payment services					
Fast payment of bills including rent and salaries					

In case there is anything else you might wish the researcher to know about how mobile banking has helped improve the performance of your business, please state below.

Appreciation

I would like to thank you very much for accepting to participate in my research and filling the questionnaire.