MOBILE TECHNOLOGY AND GLOBALIZATION OF FINANCIAL INCLUSION BY NCBA BANK, KENYA

BY

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DECLARATION

I declare that this research project is my original work and has not been presented for the award of degree in any other university or institution of higher learning.

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

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ABSTRACT

Global financial inclusion is considered essential for promoting sustainable economic development and reducing poverty, as it enables individuals and businesses to access financial services that help them manage their resources and achieve their financial objectives. The objective of the study was to determine the effect of mobile technology on globalization of financial inclusion by NCBA bank. The constructs that were deemed to affect global financial inclusion were mobile banking, mobile money, mobile payment and mobile –based insurance. The study adopted a case study research design with an interview guide being the main data collection instrument. The bank mobile payment service is convenient and accessible to many individuals to conduct financial transactions such as money transfer, pay bills, and make purchases using their mobile phones without the need for visiting a physical bank branch. The cost of transacting using mobile technology was found to be significantly lower to both the customer and the bank. The challenges faced by the bank in extending its mobile money technology include infrastructure and connectivity, lack of stable telecommunications infrastructure that hinder the effectiveness of mobile banking services, lack of interoperability among the different operators in the region, safety and data privacy challenges, and cultural and social stigma towards the use of the mobile money technology. Despite challenges related to infrastructure and connectivity, collaborative efforts with industry stakeholders and the deployment of agents in remote areas have expanded access to financial services in East Africa. The study recommends that robust security measures and education to customers is needed on safety practices and also the bank should forge greater alliances with agents and financial institutions in the region to increase its product coverage. Similarly, regulatory authorities should come up with policies aimed at protecting consumer data and also lead to greater interoperability among different actors in the mobile technology ecosystem internationally.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Since poverty is a more intricate phenomenon than deprivation, gaining access to basic financial services such as credit, remittances, and savings may be the key to escaping poverty for many individuals throughout the globe. Financial inclusion is expected to have an impact on economic growth, as well as extra trickle-down impacts on development in sectors such as education, health, and women's empowerment. This is in addition to its role in poverty reduction (Mhlanga, Dunga & Moloi, 2020). When more people have access to financial management tools, their capacity to accumulate wealth and manage spending enhances not only the welfare of their own households but also opens up new opportunities for entire economies. Because of this range of advantages, some of the new Sustainable Development Goals that the UN established in September 2015 specifically call for financial inclusion (Ghosh & Vinod, 2017). Financial inclusion, a fundamental component of social inclusion, is particularly helpful in addressing income inequality and poverty by enhancing career options for underprivileged populations in emerging economies. So, the question that arises is how mobile technology adoption might improve financial inclusion from the perspective of globalization, given that financial inclusion has shifted from focusing on a local part of a community to the entire world's population. M-Pesa, a mobile money service offered by Safaricom and first launched in Kenya but which has since expanded to many other sub-Saharan African countries, is a good illustration of how successful mobile money services can be. According to the statistics of Findex, in the countries of Cote d'Ivoire, Somalia, Tanzania, Uganda, and Zimbabwe, a greater number of individuals currently have access to mobile money than to regular bank accounts (Koomson, Villano & Hadley, 2020).

According to Nyagah (2013) globalization is the diversification of cultural and national resources such as technology, ideas and products. The goal of globalization is to provide a channel for effective transfer of products; labor force and ease of trading across boundaries resulting to the World operate like a financial village. Globalization has contributed to the drive to help banks respond to the ever increasing growth of competition threats in the environment and improve response to better financial performance results. Globalization strategies include partnerships, licensing, wholly-owned entry mode, joint ventures and exporting (Nthambi, 2015).

Several theories help in understanding the effect of mobile technology in realizing financial inclusion. These theories include Diffusion of Innovation theory, Technological Determinism Theory and the Financial Development Theory. According to Rogers and Shoemaker's (1983) Diffusion of Innovation theory, new mobile technologies like mobile banking services expand over time to various society groups. This suggests that the adoption of mobile technologies by businesses and individuals can be utilized to access financial services can be explained by the diffusion of innovation hypothesis. Technology Determinism theory was advanced by McLuhan, (1967) and points out that technology has a significant impact on society and also is a critical catalyst for change. Mobile technology thus has the ability to change the existing banking system and expand the access of financial services to the unbanked persons. Financial development theory was advanced by a number of economists in the 20th century, with notable contributions from (Eugene, Merton & Michael, 2019). The theory opines that for economic growth and development to be realized, then access for economic growth is paramount. As a result, financial institutions that have implemented mobile technology that enables remittances into the country will play a significant role in broadening access to financial services (Waihenya, 2012).

To bring financial services to the unbanked population in Kenya and its neighboring nations of Uganda, Tanzania, and Rwanda, NCBA Bank is one of the first local banks to consciously partner with the mobile money company Safaricom. M-Shwari, a savings and loan service linked to M-PESA, and Fuliza, a lending product available to customers who are registered on MPESA, were both launched by the bank in collaboration with Safaricom. According to statistics from the bank's products, one in five adult Kenyans will be M-Shwari customers by the end of 2021. With only 4 million Kenyans having active bank accounts, this indicates that over 10 million Kenyans have access to financial services (CBK, 2021). Numerous advanced solutions are utilizing a popular and widely recognized electronic payments system as a platform to offer innovative "over-the-top" (OTT) services, which include micro-leasing, data analytics, and micropayments. Similar to this, organizations like M-KOPA in Kenya have embraced mobile money platforms to collect payments after installing solar panels for residents.

1.1.1 Mobile Technology

Mobile technology, according to Njogu (2020) represents the use of such devices as smartphones, tablets, laptops, wearable devices and cellular networks that enable users to access information and connect with others through the internet on-the-go. The way individuals communicate, obtain information, and do business has changed as a result of mobile technology, making it a crucial part of modern life. According to Martin and Ertzberger (2013), mobile technology refers to a technology that uses wireless communication, exchange and storage of data over a network of mobile devices. These mobile devices include smartphones, laptops, wearable devices as well as underlying networks that enable their use. At present, mobile technology has become part and parcel of day-to-day life, work and communication, and continues to evolve rapidly (Muhandachi, 2020).

Mobile technology has the potential to increase financial inclusion by supplying necessary financial services, increasing financial inclusion and literacy among the general public, and ultimately fostering financial stability and growth (Ndung'u, 2018). As compared to the traditional banking system, the adoption of mobile technology has been associated with improved financial inclusion due to its increased reach to a wider traditional banking especially in the remote and underserved areas where the physical bank branches is limited. Mobile services can be accessed via mobile phones even in areas without electricity or internet access (Kairo, 2019). Mobile technology adoption in the banking industry is also practical because it eliminates the need to physically visit a branch and is equally cost-effective because it has lower transaction costs than traditional banking services. According to Donovan (2012), mobile technology offers the ability to expand the accessibility of financial services for many people when paired with robust security features like encryption and multi-factor authentication to secure users' cash and information. Mobile technology, according to Donovan (2012), has the ability to reach those who are unable to utilize conventional banking services because of a lack of documents since it is widely available (Gabor and Brooks, 2017).

Mugo and Kilonzo (2017) assert that the growth in financial inclusion and the usage of mobile technologies are directly and favorably correlated. Technology developments may lower the price and hassle of acquiring financial services. New technologies have rapidly expanded over the past ten years, including biometric identification technologies, mini apps, mobile payments, mobile banking, and Internet banking. These technological advancements make it possible to significantly lower transaction costs, which promotes greater financial inclusion (Muhandachi, 2020).

1.1.2 Global Financial Inclusion

The provision of easily accessible and competitively priced financial services to the unbanked and underbanked people globally is referred to as global financial inclusion, according to Muhandachi (2020). The term "global financial inclusion" refers to initiatives being taken to make financial services and products available to underbanked and unbanked people while upholding client privacy (Ouma, Odongo & Were, 2017). According to Nthambi (2015), achieving a more diverse and fair global economy is reliant on the development of global financial inclusion, which enables individuals and businesses to manage their finances, grow their enterprises, and improve their lives.

Global financial inclusion has various advantages, according to Andrianaivo and Kpodar (2012). For example, it gives people access to financial services that may help them manage their money more wisely, save money for the future, and invest in their enterprises. It gives companies access to loans and other financial services that may aid in their expansion and employment creation. By allowing people to take part more completely in the economy, governments can encourage financial stability and combat poverty. Attempting to bridge the gap between those who have access to financial services and those who do not, financial inclusion, according to Archibugi and Iammarino (2012), also works to increase financial literacy among individuals and communities.

As per Kumar's (2013) observations, the focus of global financial inclusion has shifted from addressing generic issues to catering to the unique needs of different populations. To achieve this, a strong fintech ecosystem is essential for expanding financial services. Kandpal and Mehrotra (2019) note that the advancement of financial inclusion in society relies on extending financial and digital infrastructure, creating new products and services, promoting financial literacy and education, and implementing purposeful measures by the government and business organizations. Additionally, favorable laws and regulations should be established by the government to promote financial inclusion.

1.1.3 NCBA Bank

NCBA Bank is a commercial bank in Kenya formed through a merger between NIC Bank and Commercial Bank of Africa (CBA) in 2019 (CBK, 2022). The bank provides a wide range of financial services, such as insurance, trade finance, asset finance, business and personal banking. NCBA Bank operates in Kenya, Tanzania, Uganda, Rwanda, and Ivory Coast. The bank has a strong digital presence and has invested in mobile banking and online banking services to enhance its customer experience. NCBA Bank is listed on the Nairobi Securities Exchange and has a market capitalization of approximately KES 51 billion as of March 2023.

Customers may now access a variety of financial services, including account balances, money transfers, bill payments, and loan applications, thanks to NCBA Bank's recent introduction of a mobile banking app. (NCBA, 2022). This has made it easier for customers who may not have access to physical bank branches to access financial services at their convenience. Furthermore, NCBA Bank has also partnered with mobile network operators to enable customers to access banking services through mobile money platforms. This has expanded the reach of the bank's services beyond traditional banking channels, making it possible for customers in remote areas to access financial services. These activities are in line with research findings that highlight the potential for mobile technology to improve financial inclusion, particularly in developing nations where there may be a lack of physical banking infrastructure (Kandpal, & Mehrotra, 2019). Although NCBA Bank's efforts are noteworthy, further research is required to fully grasp the potential of mobile technologies to achieve global financial inclusion.

1.2 Research Problem

Global financial inclusion is indeed essential for promoting sustainable economic development and reducing poverty, as it enables individuals and businesses to access financial services that can help them manage their resources and achieve their financial objectives. A more inclusive and fair global economy can only be achieved by ensuring that everyone has access to the necessary financial tools and services. According to Chinoda and Kwenda (2019), efforts to promote global financial inclusion must continue to be a priority for governments, businesses, and organizations around the world. In this regard, strategies that promote global financial inclusion have drawn the attention of scholars particularly in developing countries. One of the widely proposed strategy, according to Muchandigona and Kalema (2022) is through mobile technology. Mobile technology has the potential to provide access to financial services to those who were previously shut out of conventional banking systems due to the growing accessibility and affordability of smartphones and mobile internet.

The National Commercial Bank of Africa (NCBA) recognizes the importance of financial inclusion and has implemented various mobile banking solutions to promote financial inclusion among its customers (Muchandigona & Kalema, 2022). However, it is unclear whether these mobile banking solutions are effective in promoting global financial inclusion among the customers of the bank. Having a basic understanding of how mobile technology affects global financial inclusion may not provide NCBA a clear point of reference. Studies in this field have also concentrated on advanced mobile technology frameworks created in wealthy nations. Thus, it is crucial to do in-depth research on how mobile technology is increasing financial inclusion globally, particularly in developing countries like Kenya (Kumar, 2013).

Many research have been conducted in connection to global financial inclusion and mobile technologies. Kemal (2019) investigated mobile banking in the government-to-person payment market internationally to advance financial inclusion in Pakistan. Participants from Pakistan were interviewed semi-structuredly to get qualitative data. The results showed that mobile banking made it possible for women to simply and safely obtain the entire amount of awards from agents. Mobile banking, on the other hand, imposed technical, socioeconomic, and human limitations that hampered women's use and access to financial services, hence limiting financial inclusion. Social inclusion underwent a radical change as a result of the political and social empowerment of women. In his research on financial inclusion and its drivers in India, Kumar (2013) found that having access to digital platforms like mobile banking improves financial inclusion.

Abor, Amidu, and Issahaku (2018) conducted a regional study on the use of mobile phones, financial inclusion, and inclusive development, utilizing a large sample of Ghanaian households. The study aimed to examine the impact of mobile telephony's multifunctional nature on household welfare. The research findings revealed that a broad use of mobile phones, financial inclusion, and an increase in per capita consumption of both food and non-food items significantly reduces the likelihood of poverty among families. Moreover, the results indicate that households led by women do not receive any additional benefits from financial inclusion or mobile telephony in terms of overall welfare.

Ouma, Odongo, and Were (2017) carried out a research on mobile financial services and financial inclusion in Kenya. This research aimed to establish this relationship by analyzing if the widespread usage of mobile phone for financial services is beneficial for saving mobilization in certain sub-Saharan African nations. The findings show that families are more likely to save money when they have access to and utilize mobile devices for financial services.

Based on these studies, it is evident that the focus has been drawn to financial inclusion without considering mobile technology as the main determinant. In addition, financial inclusion has been covered only on a country perspective and not on global point of view. Establishing the impact of mobile technology on the globalization of financial inclusion, especially in developing nations like Kenya, is important from an academic perspective. The purpose of the present study was to close this knowledge gap by offering an appropriate inference to the research question, what is the role of mobile technology on globalization of financial inclusion by NCBA bank?

1.3 Research Objective

The objective of this study was to establish the role of mobile technology on globalization of financial inclusion by NCBA bank.

1.4 Value of the study

The study of mobile technology and its role in global financial inclusion has significant value in relation to theory, practice, and policy. This essay will discuss the importance of this study in each of these areas. Firstly, in terms of theory, the study of mobile technology and financial inclusion helps to advance our understanding of the mechanisms through which technology can facilitate economic development. This research adds to the corpus of information on financial inclusion, technology adoption and dissemination, and their interplay.

Second, in terms of application, the design and execution of financial inclusion policies and initiatives will be impacted by research on mobile technology and financial inclusion. It can guide the design of financial education programs that leverage mobile technology to provide accessible and effective financial literacy resources to underserved populations.

Finally, research on mobile technology and financial inclusion has significant policy ramifications. Policymakers can better appreciate the potential advantages of mobile-based financial services for economic growth and poverty reduction according to the study's results. This may then be used to help create policies that promote the expansion of mobile technology and promote its use in the financial industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter discuss the literature in relation to mobile technology and globalization of financial inclusion. In this regard, the literature gives an overview on the relevant theories to the study, empirical studies and research gap on the area. In addition, the chapter also expounds on conceptual framework for the study.

2.2 Theoretical Foundations

In the study of mobile technology and financial deepening or inclusion, there are several theories that attempt to expound the literature in this perspective. These section reviews three major theories that anchors the study: Diffusion of innovation theory, technological dynamism theory and financial development theory.

2.2.1 Diffusion Innovation Theory

Rogers (2010) established the Diffusion of Innovation (DOI) Theory, which describes how an inventive idea gains momentum and spreads over time through social networks. The end result of the expansion of this concept is that businesses are abandoning the conventional practices in favor of a new idea, like mobile technology, which is linked to specific benefits. The ultimate consequence of the adoption process is when an individual performs something differently than they would normally, such as using a new payment method, saving strategy, or loan application process. Moreover, according to Karnowski and Kümpel (2016), for diffusion to occur, a person must believe that the new technology, behavior, or product is novel and will enhance how things are currently done.

Yu (2022) asserts that there are four important components that make up the diffusion process: the time factor, the routes via which the technology idea will be distributed, and the innovation concept itself. The theory goes on to state that different aspects of communication channels, innovations, and social platforms may unavoidably have differing degrees of effect on the diffusion process at various time intervals during the full dissemination or diffusion phase (Wolf, 2022). As a consequence of the variable diffusion process, strategies must be aligned in order to meet and move in accordance with the rhythm of the dominant market position that corresponds to the phase of diffusion process. As a consequence, the theory assumes that the acceptance of an innovation strategy will depend on its capacity to provide consistent, lucid outcomes that other methods of innovation may not be able to (Salazar et al., 2020).

One of the principles that is brought up by assimilation of technology is the usage of mobile technology, which will result from adoption, implementation, and spread of innovative method (Mbugua, 2021). The adoption of innovative measures in the field of research on issues like mobile technology and global financial inclusion may thus be better understood since the theory of diffusion of innovation elaborates the crucial theoretical underpinning. How successfully an invention is implemented depends on a number of factors, including compatibility, relative advantage, and simplicity of the original technology. This in turn has a significant influence on lead times, cost-cutting strategies, and customer satisfaction levels (Otieno, 2021). In order to optimize the contribution of mobile technology to raising global financial inclusion, NCBA should consider synchronization compatibility, relative advantage, and simplicity of use.

2.2.2 Technological Determination Theory

Technological Determinism theory is traced back to the work of Thorstein Veblen (1857-1929). The theory argues that technology drives social change, and that technological development shapes human behavior and culture. According to Hermes and Lensink (2013), technological innovation drives social change, and the adoption of new technologies is a powerful force in shaping human behavior and culture. Chen, Lv and Liu (2019) opines that the provisions of technological determination theory can change the perception of people in that it can enhance the adoption of mobile-based financial services which has created new opportunities for financial access and inclusion, and is transforming the way people interact with financial services. Understanding the role of technology in shaping human behavior and culture is essential for policymakers and practitioners seeking to leverage technology to promote social and economic development (Malarvizhi et al., 2019).

The Technological Determinism theory is applicable in study of mobile technology and global financial inclusion to better comprehend how mobile technology is promoting the growth of financial inclusion internationally. In addition, the idea emphasizes how technology influences societal transformation and human behavior. The use of mobile financial services has altered how people interact with financial services and opened up new opportunities for financial inclusion (Chen, Lv & Liu, 2019). This theory provides a framework for understanding the transformative power of mobile technology, and the potential of this technology to drive economic development and reduce poverty globally.

2.2.3 Financial development Theory

The financial development theory, commonly known as the theory of finance and growth, was first presented by Schumpeter in 1911. According to the idea, financial intermediation via the banking channel considerably boosts economic growth. The two key claims made by Schumpeter were that banking institutions are more capable of provide financial services to companies than securities markets, and that financial development drives economic growth via technical developments. Malarvizhi et al. (2019) extend the prior thesis by pointing out that financial deepening implies not just improved capital productivity but also a higher savings rate and, as a result, a bigger volume of investment. In contrast to Hermes and Lensink (2013), who thought that both growth and financial intermediation were endogenous, the focus of Abor, Amidu, and Issahaku (2018) is on the effects of public policy surrounding financial markets on savings and investment. In particular, Alshubiri, Jamil, and Elheddad (2019) argue that financial repression-causing policies, such as those that cause negative real interest rates, reduce the incentives to save. Lower savings also have an impact on investment and growth. Thus, they draw the conclusion that financial liberalization's increased interest rates cause households to increase their savings.

However, Hermes and Lensink (2013) argued that the application of financial development theory to mobile technology and globalization suggests that there are challenges and risks associated with these trends. For example, the rapid expansion of mobile financial services may create new vulnerabilities to cybercrime and fraud, while the globalization of financial markets may lead to increased volatility and systemic risk. Overall, Chen, Lv and Liu (2019) established that the application of financial development theory to mobile technology and globalization of financial inclusion suggests that these trends have the potential to promote financial inclusion and development, but also pose significant challenges and risks that must be carefully managed.

2.3 Mobile Technology, Globalization and Financial inclusion

According to Ndung'u (2018), mobile technology and globalization have changed how financial services are provided and consumed, opening up new opportunities for financial inclusion and development globally. The rise of mobile technology's availability and accessibility has enabled new financial services, while the globalization of the financial markets has created new opportunities for cross-border financial services including remittances and foreign investment. However, these trends also pose significant challenges and risks that must be carefully managed to ensure that they promote financial inclusion and development (Chinoda & Kwenda, 2019).

According to Abor, Amidu, and Issahaku (2018), the way financial services are delivered has changed as a result of mobile technology, enabling underserved populations, particularly those in remote or rural areas, access to a wider range of financial services. Because to the increasing acceptance of mobile banking and mobile money transfer services in both developed and developing countries, consumers may now access financial services via their mobile devices anywhere in the world (Ouma, Odongo & Were, 2017). By giving formal financial services to those who previously couldn't access the official financial system, these services have the potential to encourage financial inclusion.

Andrianaivo & Kpodar (2012) avert that globalization of financial markets has also created new opportunities for financial inclusion and development. Cross-border financial services, such as remittances and foreign investment, have become increasingly important sources of capital for developing countries, providing a lifeline for many individuals and small businesses. This has the potential to promote economic growth and development in developing countries, by increasing access to capital and promoting financial inclusion. However, Kemal (2019) highlight that these trends also pose significant challenges and risks that must be carefully managed. The rapid expansion of mobile financial services has created new vulnerabilities to cybercrime and fraud, as criminals seek to exploit the new opportunities presented by these services. Regulators and financial institutions must work together to ensure that adequate safeguards are in place to protect consumers from these risks, including robust identity verification procedures and strong data protection policies (Kumar, 2013).

According to Kouladoum, Wirajing and Nchofoung (2022), globalization of financial markets has also created new risks, including increased volatility and systemic risk. Cross-border financial flows can be highly volatile, as investors react to changes in global economic conditions or political events. This can create significant challenges for policymakers, who must balance the benefits of cross-border financial flows with the risks of financial instability. On their part, Kandpal and Mehrotra (2019) mobile technology and globalization have the potential to promote financial inclusion and development around the world, but also pose significant challenges and risks that must be carefully managed. Policymakers, regulators, and financial institutions must work together to ensure that these trends are harnessed in a way that promotes financial inclusion and development, while mitigating the risks and challenges that they pose. Eventually, the capacity of stakeholders to cooperate and work together to overcome these problems and hazards will determine the effectiveness of mobile technology and globalization in fostering financial inclusion and growth (Rauniyar, Rauniyar & Sah, 2021).

2.4 Empirical Review and Knowledge Gaps

Because of the advancement of technology, the modern business and corporate operational environment has undergone significant change. Emerging research has thus tended to focus on technology and economic expansion. Kandpal and Mehrotra (2019) examined the contribution of fintech and digital financial services to gauge the amount of financial inclusion in India. The study found that as the market becomes more globalized and the banking industry develops, more and more people are switching from a cash-based system to one that uses electronic transactions. The cashless system is not only necessary, but it is also necessary for the current order. The last few years have seen a mixed range of outcomes for efforts to promote financial inclusion in India. Due to a strong push in policy and regulation, access to bank transactions has dramatically increased. But access to these accounts and formal financial services outside of savings accounts has remained incredibly challenging.

The importance of FinTech and innovations for enhancing digital financial inclusion was investigated by Rauniyar, Rauniyar, and Sah in 2021. The research discovered that FinTech has evolved into the ideal instrument to provide a solution to the financial industry's obscurity. Modern society is heavily reliant on modern technology and digital banking. Those who are linked to the market and provide financial services automatically benefit from digital technology. These new inventions and technologies will also help to break down boundaries and provide people with better services. Users now consider fintech essential, and it is improving how services are provided to them.

In post-communist EU member states, Bayar, Gavriletea, and Păun (2021) studied how internet and mobile phone use affected financial inclusion. The research discovered that mobile phone subscriptions had a favorable effect on access to financial markets and financial institutions in nations including Latvia, Lithuania, Poland, and Slovenia. Mobile phone subscriptions, however, are negatively correlated with access to financial institutions and financial markets in Poland and the Czech Republic.

Chinoda and Kwenda (2019) did a research to look at the connections between financial inclusion, political stability, mobile technology, and economic development in Africa. A five-variable panel structural vector autoregressive model was used in their study, which encompassed 49 nations between 2004 and 2016. The research discovered that financial inclusion is positively and significantly impacted by economic development, bank stability, bank competitiveness, and mobile phone use. The study did, however, also show that each variable reacts to a shock of one standard deviation in financial inclusion, demonstrating that financial inclusion is necessary for these factors to have a significant influence. As a result, the research argues that financial inclusion is essential for ensuring economies work well.

A research by Ndassi, Kala, and Gueyie (2023) looked at the effect of perceived cost, relative benefit, and perceived ubiquity on the intention to use mobile money for bank deposits as well as the effect of mobile money usage on financial inclusion in Cameroon. 310 Cameroonian respondents made up the study's sample size, which was quantitative, and the PLS-SEM technique was employed to evaluate the data. According to the findings, these variables have a favorable impact on consumers' intentions to use mobile money for bank deposits, and the usage of mobile money greatly enhances financial inclusion. The research may help bank managers create efficient marketing strategies, enhance their client connections, and improve their product and service offerings, especially in luring prospective bank deposits that have not yet been secured.

Muchandigona and Kalema conducted research in 2022 on the use of mobile phone-based money as a strategy for financial inclusion in poor nations. By a thorough analysis of the literature on financial inclusion and technology usage, this paper is primarily concerned with offering mobile money (MM) best practices that may be used to enhance financial inclusion in developing nations. The findings show that using MM to increase financial inclusion is primarily driven by how individuals perceive technology, including its perceived value, usability, trustworthiness, and hazards. Social and organizational variables are also important.

2.5 Research Gap

While the given studies provide insightful information about the connection between mobile technology and financial inclusion, there is still a need for further study on how mobile technology affects financial inclusion in developing nations like Kenya. A majority of studies ignore other developing nations where mobile technology and financial inclusion are still in their infancy in favor of Sub-Saharan Africa and EU nations. In addition, it is important to investigate any possible drawbacks of mobile technology for financial inclusion, such as the exclusion of disadvantaged populations that lack access to or proficiency with mobile devices. As a result, this contributes to clarifying the present research, which looks at how mobile technology promotes global financial inclusion in a variety of situations and demographics.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

The main objective of the study was to determine the role of mobile technology in enhancing global financial inclusion with primary focus on NCBA bank. Methodological procedures are outlined in this chapter. The chapter also expounds on the research design, the study population, the data collection techniques, and the data analysis procedures.

3.2 Research Design

Eriksson and Kovalainen (2015) define research design as a plan that outlines how research questions will be addressed and any challenges that may arise. Bell, Bryman, and Harley (2018) describe research design as a set of guidelines that aims to achieve a balance between procedural efficiency and relevance to the study's objectives for data collection and analysis. Research design, in accordance with Gokhale and Srivastava (2017), facilitates the seamless operation of the many research activities, optimizing knowledge generation with the least amount of effort, time, and money used.

For this examination, a case study design was employed. This is because describing a topic's nature without changing it is a key component of descriptive research. A case study is useful when a researcher wants to gain a deep and comprehensive understanding of a specific phenomenon or event, more so in a situation like this one where individual financial institution approach is unique in enhancing financial inclusion. Therefore, a case study helps to understand context surrounding a particular case and consequently become an invaluable approach to understanding how an organizational context influences the phenomenon in question under the influence of organizational practices. Further, case studies often involve collecting data from various sources, such as interviews, observations and documents. The triangulation of data sources can enhance the validity and reliability of findings.

3.3 Data Collection

This study adopted an interview guide in gathering the necessary primary data to serve the objectives of the study. The interview guide that was adopted comprised of three major sections where the first section focused on general details of the interviewees, the second part focused on establishing some of the mobile technology adopted by the bank under which several dimensions was researched, the third part focused on establishing how mobile technology has impacted on the bank affecting financial inclusion. The targeted interviewees were five, namely the managers in the Business development department, ICT, Mobile Insurance, Mobile banking and Chief financial services departments.

3.4 Data Analysis

This study adopted content analysis to extract analytical results from the interview guide adopted. Content analysis facilitates general perception on the associations among the variables under investigation. Furthermore, it is perceived as proper data analysis techniques in cases where case study research design is adopted since it provided the researcher with the ability to describe, interpret as well as draw criticisms to the research investigation under study.

The researcher coded the data collected, the researcher transcribed the coded data and analyzed it to establish trends and patterns if any. The researcher compared the trends and patterns so identified to the objectives of the study and made conclusions and recommendations.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The research objective was to determine the effect of mobile technology on globalization of financial inclusion by NCBA bank. Primary data was collected through use of an interview guide and the analysis was done based on the content that was captured in the interview guide. This chapter presents the analysis from the interviewees and discussion of the findings.

4.2 Interviewees Bio Data

The interviewee bio-data plays a crucial role in understanding the context, analyzing data, ensuring validity, and addressing ethical considerations in research. Through the same qualities, the interviewees' bio-data contributes to the richness and depth of the findings by providing valuable insights into the participants' backgrounds, experiences, and perspectives. The questions contained in this section covered the interviewee gender, academic and professional qualifications, number of years worked at NCBA, as well as other work experience.

On the question of the interviewees gender, the researcher purposely targeted staff from both genders and also knowledgeable on the research subject matter. Of the five interviewees, two of the interviewees were female (Business development managers, ICT Manager) while the remaining three were of the male gender. The results also suggest that the interviewees were persons of different academic and professional qualifications. Both the ICT manager and the Mobile Insurance manager were about to finalize on their

PHD studies and the rest of the interviewees had Masters Level of qualification as well as different professional qualifications. The interviewees were also found to have widespread experience in the banking industry with cumulative work experience of 38 years in the country and other competitors in Kenya and Uganda.

The Mobile banking and Insurance managers were found to be persons of strong academic and professional qualification having attained post-graduate academic qualifications in their respective field. In regard to their role in the application of mobile technology in enhancing financial inclusion, the interviewees noted that by virtue of some of them heading the departments directly involved in the business, line, they are privy and well versed with what is on-going in the bank product line and its effect on financial inclusion.

4.3 Mobile Banking

This section of the interview guide sought to assess the NCBA bank state of mobile banking with a view to determining how it has been adopted in the financial ecosystem; benefits of using the technology, challenges faced in the system and also determine the bank strategies to improve the mobile banking product.

The researcher sought to establish how NCBA mobile banking system had impacted on the financial system in the East African region. The interviewees were in agreement that the bank mobile banking platform has had a profound impact on the financial landscape in East Africa region since the bank had expanded its operation to Uganda, Tanzania, South Sudan and Rwanda, revolutionizing the way people access and manage their finances.

The manager Business Development noted that the East Africa region has a significant portion of its population without access to traditional banking services. Consequently, he explained that

"Mobile banking has helped to bridge this gap by providing a means for people, even in remote areas, to access basic financial services. In the process, a large number of the populace in these countries had accessed financial service such that in 2020, the bank transfer of funds outside Kenya, through their mobile app stood at Ksh 14.2 Billion but in 2022, the amount transferred increased by 75% to Ksh 24.8 Billion This has contributed to a substantial increase in financial inclusion in the region."

The manager Mobile banking explained that through the bank Mobile banking app, customers have been able to perform various financial transactions, ranging from deposits, withdrawals, transfers of funds through their mobile phones without necessarily vising a physical bank. This has increased customer convenience level, especially for those who would otherwise have to travel long distances to reach a bank. Further, the ICT manager highlighted that the bank mobile banking system had contributed in lowering the bank and customer transaction cost making it more affordable for customers to conduct financial transactions, more so those in the lower side of the pyramid.

The challenges of providing mobile banking services within the EA countries in which the bank operates was sought by the researcher. In relation to this question, the finding suggest that NCBA face infrastructure and connectivity challenges because in some areas of East Africa region, more so, in rural and remote regions, there is a lack of stable telecommunications infrastructure that hinder the effectiveness of mobile banking services. The poor connectivity can lead to transaction failures, and sub-optimal customer experience. The ICT manager observed that;

"The regulatory environment for mobile banking and financial technology is ever evolving because of the need to protect customer, anti-money laundering (AML), and the need for data privacy compliance. Due to a lack of uniform regulatory environment of mobile banking within the EAC, it becomes challenging for NCBA to comply with requirement of each country."

The findings from the manager mobile banking, suggest that the interoperability is another challenge because the mobile banking services provided by NCBA might not always be compatible with services offered by other banks, especially foreign banks and this limits customers' ability to conduct transactions across different platforms and thus negatively impact on growth of a common mobile banking ecosystem. Further, some individuals might have cultural and social bias such in that they might prefer the traditional face –to-face interaction with the bank staff. Convincing these group of customers to transition to digital platforms can require tailored education and communication strategies in the respective countries. Security of the customers' data and money also came out as a major challenge facing NCBA in rolling out its mobile banking services across its EAC customer base. Building trust among customers is important for the success of the financial service. The common concerns raised by NCBA customers were cyber-security, fraud, and the safety of personal and financial information because of a lack of adequate assurance on these might deter potential users from adopting mobile banking services.

4.4 Mobile Money

The second component of mobile technology employed by NCBA is the mobile money. The researcher sought to determine how the Bank's mobile money services had facilitated financial inclusion within the EA countries. On the question of using mobile money to facilitate financial inclusion as compared to the other alternatives, the Mobile Insurance Manager highlighted that Mobile phones are more common than traditional bank branches or ATMs, more so in regions with limited infrastructure. This enables mobile money platforms to reach a larger portion of the population, including those in remote and underserved areas.

The ICT manager noted that mobile money services are readily accessible through basic phones features, which are more affordable and widely owned than smartphones. One does not need to be connected to any internet and therefore eliminates the need for customers to have sophisticated technology, making it easier for a broader range of people to participate. To reinforce the importance of mobile money as an important avenue for realizing financial inclusion, it was noted by the ICT manager that;

"Mobile money platforms are designed with user-friendly interfaces and simple processes, making them accessible to individuals with varying levels of digital literacy. It was further explained that transactions involved in the mobile money transactions are straightforward as sending a text message. Therefore, customers are able to perform transactions anytime and anywhere, reducing the need to travel to physical bank branches. This convenience is particularly valuable for individuals in rural areas who might have to travel long distances to access banking services."

The security features of mobile money are considered to be higher as compared to other payment systems since it is often processed in real-time, allowing for instant transfers and payments. Similarly, the interviewees explained that mobile money incorporates advanced security measures, such as PIN codes and biometric authentication which in combination enhance the safety of these transactions by the NCBA bank. In the case of families whose family members work outside the country, mobile money platforms simplify and lower the costs of remittance transactions, enabling families to receive funds from abroad quickly and affordably. Through the same, persons that would have been disadvantaged are able to access financial services and also be economically secured.

The researcher also sought to understand the initiatives taken by NCBA to increase the mobile money ecosystem in the EA region that it has presence. The finding is that different strategies have been adopted by NCBA to encourage the use of mobile banking by its customers. The interviewees highlighted that the bank conducts awareness campaigns to educate people about the benefits and usage of mobile money services. These campaigns are majorly through workshops, seminars, and information dissemination through various channels, like radio and television. In addition, the other medium of advertising mobile money was highlighted to be through establishment of a robust network of mobile money agents across different remote areas within EAC member states because agents were found to help users with account registration, deposits, withdrawals, and other transactions.

The research endeavored to highlight the various mechanisms that NCBA has adapted to maintain the security and privacy of mobile money transactions. In regard to this question, the ICT manager explained that

"NCBA mobile money system has implement multi-factor authentication (MFA) mechanisms to ensure that users provide multiple forms of identification before accessing their accounts or conducting transactions. The common authentication protocols employed include the use of password and biometric data like fingerprints or facial recognition."

Similarly, the interviewees explained that all data transmitted between the user's device and the bank's servers is encrypted so that unauthorized access and eavesdropping by third parties is avoided. The other mechanism used by the bank to improve security and privacy of money transaction is setting transaction limits for mobile money transfers and provide real-time alerts to users for any transactions above a certain threshold. This is aimed at enabling users to quickly identify and report any unauthorized transactions.

The researcher asked the interviewee on how they measure the impact that its mobile money services has had on financial inclusion, and what metrics are used to evaluate success rate on this goal. The interviewees explained different metrics that NCBA used. The common measure highlighted by the Business Development Manager, Mobile Insurance and ICT manager was the number of new mobile money accounts opened by customers, transaction volumes and the geographic reach of the bank mobile money services. In addition, reduced dependence of cash by customers was another measure of level of financial penetration through mobile money. In addition, the interviewees highlighted the savings culture among those who did not have an account to be a good measure of the mobile money success. Similarly, when the mobile money service has reduced the cost and time associated with sending and receiving remittances, particularly for families with members working in other regions or countries, then it shows that the mobile money service has been a success in increasing financial inclusion.

4.5 Mobile Payment

Mobile payment is an important component of NCBA business both locally and in the region. The researcher asked the interviewees on how the bank mobile payment has affected the financial landscape in the country. All interviewees agreed that indeed mobile payment forms an important avenue through which the bank spreads its products and services in the region. The interviewees explained that mobile payments services have allowed individuals who were previously unbanked or underbanked, through the use of just a mobile phone to access basic financial services, such as money transfers, savings, and payments. Through this bank product, a wider segment of the population that was previously excluded from the formal financial system had accessed the financial services. The other critical role of mobile payments system is that it is convenient and accessible to many individual to conduct financial transactions such as money transfer, pay bills, and make purchases using their mobile phones without the need for a physical bank branch. This accessibility is especially valuable in areas where traditional banking infrastructure is limited. The study findings further show that mobile payments help to reduce the reliance on cash, a move that helps reduce the risks associated with carrying and handling physical money, such as counterfeiting and theft.

The results also show that the bank faces several challenges relating to the offering of mobile payment services in that in some areas, especially rural or remote regions, there is unreliable internet connectivity and mobile network coverage which can hinder widespread adoption and usage of mobile payment services. To counter the same challenge, the bank has entered into partnership with various network operators in the foreign countries with a view to extending their coverage options. Another dominant challenge faced by NCBA in the course of offering the mobile payment services is the fragmentation of the playing field with multiple banks and mobile network operators offering their own solutions. The resultant lack of interoperability can lead to difficulties in transferring funds between different platforms. As a result, there is need for establishment of the interoperability initiatives that enable seamless transfers between different mobile payment platforms. This requires partnership between banks, mobile network operators and regulatory bodies to create a unified system for transferring funds.

The researcher also sought to establish the strategies adopted by NCBA bank to promote the adoption of mobile payments for financial inclusion, and what strategies is being employed to achieve the objective. Different strategies were adopted by the bank. The interviewees explained that through collaboration with mobile network operators and fintech firms in the respective countries, they have been able to create a comprehensive mobile payment ecosystem. The BD manager explained that through such partnerships the bank has been able to innovative products and services that cater to a broader range of users. Similarly, increase the uptake of the mobile money services, the NCBA engages in financial literacy and awareness exercise aimed at encouraging the adoption of mobile payments, especially among individuals who may be unfamiliar with the technology. In addition, the interviewees explained that by the bank being building a network of agents in remote or underserved areas can facilitate access to mobile payment services. Agents can help users with transactions, cash deposits and withdrawals, and provide assistance in regions where access to smartphones or reliable internet is limited. In addition, the other strategy employed by the bank is coming up with tailor made products and services for specific clients like that of microfinance transactions, small business payments, or agricultural transactions. Customization helps address the unique requirements of different user segments.

4.6 Mobile–Based Insurance

The other application of mobile technology in the banking industry is in the mobile-based insurance, often referred to as mobile insurance or m-insurance. This insurance service leverages on mobile technology to provide insurance products and services to customers, especially in regions with limited access to traditional insurance services. Mobile-based insurance can play a significant role in enhancing financial inclusion and providing risk protection to individuals who might otherwise be underserved by traditional insurance models. The researcher sought to establish how NCBA approach to mobile insurance, security and privacy in the M-insurance product and also strategies adopted by the bank to enhance the product reach.

The researcher sought to determine NCBA bank approach to mobile insurance and how it has evolved over time in the quest to realize financial inclusion in EA region. The significant strategy by the bank is through partnership whereby the bank partners with insurance companies, mobile network operators, and technology providers to offer mobile-based insurance services. This partnership leverages each partner's expertise and resources to create comprehensive insurance solutions. The interviewees pointed out that as it is currently, the bank has partnered with 38 financial institutions and fintech firms in order to offer the insurance services. This strategy when combined with the bank digital platforms, customers have been able to access insurance products within their existing mobile banking apps or creating a dedicated insurance app.

Considering the low insurance penetration, the bank has carried out targeted education programs on mobile-based insurance. These education and trainings aimed at explaining to customers about the benefits of insurance, the convenience of mobile-based services, and how to navigate the insurance process through mobile devices. Similarly, the NCBA bank was found to plan and expand its insurance products to health insurance, life insurance and property insurance coverage options. To expand its reach, NCBA has entered into an alliance with emerging insurance tech startups or other fintech companies that specialize in insurance-related technologies. In addition, the BD manager explained that since NCBA bank had not covered all the countries in the EA region, then is considering expanding its mobile-based insurance offerings to other countries within the East African region, capitalizing on its regional presence and expertise.

The findings on the question of how NCBA bank plans to further promote the adoption of mobile-based insurance in the region reveal that the bank plans to expand its range of mobile-based insurance products to cater to different segments of the population. More particularly, the bank has the intention to increase its micro-insurance products that is tailored to low-income individuals and small businesses. The bank recognizes that offering insurance products with affordable premiums can attract individuals who may have been previously excluded from traditional insurance services due to cost barriers. To achieve this goal, the bank has come up with a pricing structure that is suitable for different income levels.

Collaborating with insurance providers, mobile network operators, and technology companies can enhance the reach and capabilities of NCBA's mobile-based insurance offerings. These partnerships can help streamline operations and expand customer access. Integrating insurance services seamlessly within NCBA's mobile banking app or online platform is an ongoing exercise aimed at encouraging existing customers to explore and adopt insurance products.

4.7 Role of Mobile Technology in Global Financial Inclusion

The researcher aimed to establish the role of mobile technology in the global financial inclusion. The interviewees agreed that mobile technology has played a transformative role in advancing global financial inclusion by providing access to financial services for individuals who were previously underserved or excluded from traditional banking systems. The ICT manager explained that mobile technology has enabled individuals in remote or what has been considered to be unreachable areas to access banking services without the need for physical bank branches. In addition, mobile phones act as virtual banks, allowing users to check account balances, make transactions, and even open accounts through mobile apps without necessarily visiting a physical branch outlet.

The research found that in regions where traditional banking infrastructure is lacking, mobile money services have emerged as an important tool for financial inclusion because it has allowed users to store, send, and receive money using their mobile phones, a move that has enabled areas without banking services to be accessed. The fintech firms have also been able to capitalize on the mobile technology to distribute microfinance loans and micro-insurance products to individuals who need access to small amounts of credit or risk protection. Digital platforms streamline application processes and allow for faster disbursal of funds. The manager Mobile banking reiterated that in regions with limited transportation options, mobile technology has enabled financial institutions to offer remote customer support, reducing the need for customers to travel to physical bank branches for assistance. The Insurance manager further explained that mobile technology supports agricultural finance by allowing farmers to access market prices, weather forecasts, and credit information, a strategic move that helps rural communities manage risks and improve their livelihoods.

The cross-border trade is yet another outcome of applying the mobile technology. The ICT manager explained that the mobile technology has made cross-border remittances more accessible and affordable. Similarly, migrants can send money to their families in their home countries quickly and at lower costs using mobile-based remittance services. This has helped to improve economic development of these regions and also reduce the cost of sending and receiving money. In time of emergencies, mobile technology has enabled persons to set aside emergency funds or invest in insurance products that provide financial safety nets in times of crisis.

4.8 Discussion of Findings

The study sought to determine the effect of mobile technology on globalization of financial inclusion by NCBA bank. The constructs that was deemed to affect global financial inclusion were mobile banking, mobile money, mobile payment and mobile – based insurance. In relation to mobile banking, the findings highlight that Mobile banking has helped to bridge the gap of many unbanked people in some of the remote areas accessing financial services ranging from deposits, withdrawals and transfers of funds through their mobile phones without necessarily visiting a physical bank. Amidu, and

Issahaku (2018) support this finding by noting that mobile banking had enabled underserved populations, particularly those in remote or rural areas, access to a wider range of financial services. This is evident in both the developed and developing countries since acceptance of mobile banking and mobile money transfer services has increased business connectivity across borders (Kemal, 2019). Similarly, the findings suggest that bank mobile banking system had contributed in lowering the bank and customer transaction cost making it more affordable for customers to conduct financial transactions, more so those in the lower side of the pyramid. These findings support the findings by Andrianaivo & Kpodar (2012) cross-border financial services, such as remittances and foreign investment, have become increasingly popular in developing.

In relation to the role of mobile money if enhancing financial inclusion, the findings further confirm the position that in developing countries, mobile phones are more common than traditional bank branches or ATMs. Irrespective of whether a customer is in rural or urban areas, mobile money platforms help to reach a larger portion of the population segment, including those in remote and underserved areas, an advantage that makes mobile phone services such as payment and receipt of cash to be accessible to many. Kouladoum, Wirajing and Nchofoung (2022) arrived on the same conclusion by stating that starting that globalization of the financial market through use of mobile phones has brought new challenges relating to security and privacy and it's those institutions with strong backup that will attract more clients. Through the same, customers are able to perform transactions everywhere and anywhere. Further, the study found that based on the advanced security features such as the PIN codes and biometric authentication which in combination enhance the safety of these transactions, mobile money has gained prominence among the low income persons in the economic pyramid. Rauniyar, Rauniyar and Sah (2021) advocate for the creation of different layers of authentication as a mean of enhancing security features. Similarly, data transmitted between the user's device and the bank's servers was found to be encrypted so that unauthorized access and eavesdropping by third parties is avoided.

The result indicate that the bank mobile payment service is convenient and accessible to many individual to conduct financial transactions such as money transfer, pay bills, and make purchases using their mobile phones without the need for a physical bank branch. The ability of the mobile phone to meet different customer needs has facilitated access to financial services to many persons, more so in the under-developed regions (Rauniyar, Rauniyar, and Sah in 2021). Collaboration with mobile network operators and fintech firms in the respective countries was found to be a potent strategy employed by the bank to spread its services to many customers across the region and thus be able to create a comprehensive mobile payment ecosystem across the EAC region. Chinoda and Kwenda (2019) find that increased financial inclusion not only serve the interest of the population but also business entities operating in these regions. The results point out to the fact that insurance service leverages on mobile technology to provide insurance products and services to customers, especially in regions with limited access to traditional insurance services. This further explains the important role that mobile technology has had on the financial inclusion goal by governments and business firms. In conclusion, the findings show that indeed mobile technology adoption by the NCBA bank had a significant effect in increasing financial inclusion in the EA countries that it operates in.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The summaries of key findings, highlighted conclusions drawn from the findings and policy recommendations that are made are presented in this chapter. The conclusions and recommendations drawn emanate from the findings of the research objective. The objective of the study was to determine the influence of digital technology on global financial inclusion.

5.2 Summary of Findings

The study's key findings emphasize the significant impact of mobile banking platforms on the financial landscape in East African countries, specifically Uganda, Tanzania, South Sudan, and Rwanda. These platforms have brought about a transformative shift in how people manage their finances by enabling a wide range of transactions, such as deposits, withdrawals, and fund transfers, through mobile banking apps. This convenience has reduced transaction costs for both banks and customers, making financial services more accessible, especially for individuals in lower socioeconomic groups who previously found visiting physical bank branches expensive. Mobile banking services are accessible through basic phone features, which are both affordable and widely owned, extending financial access to a broader population. Consequently, financial inclusion has increased in areas where these services have been introduced, with a rise in new accounts and transaction volumes.

However, the study also highlights significant challenges, notably infrastructure and connectivity issues, particularly in rural and remote areas. These challenges result in unstable telecommunications infrastructure, leading to transaction failures and suboptimal user experiences. To address these challenges and promote financial inclusion, the bank has collaborated with Mobile Network Operators and Fintech firms in the region to create a comprehensive mobile payment ecosystem. Additionally, the establishment of a network of agents in underserved areas has played a vital role in facilitating access to mobile payment services.

In summary, mobile money services have significantly improved financial inclusion by allowing users to perform essential financial transactions via their mobile phones. Despite challenges related to infrastructure and connectivity, collaborative efforts with industry stakeholders and the deployment of agents in remote areas have expanded access to financial services in East Africa. Furthermore, Fintech firms have harnessed mobile technology to distribute microfinance loans and micro-insurance products, offering credit and risk protection to individuals in need of small financial assistance.

5.3 Conclusion

In conclusion, the research findings clearly indicate that the adoption of mobile money services within the region served by NCBA bank has had a profound impact. This adoption has primarily been driven by the remarkable convenience, accessibility, and user-friendly interfaces offered by these services. As a result, a wide spectrum of individuals, including those residing in remote areas, now have the means to access banking services without the necessity of visiting physical bank branches. Furthermore, the research findings reveal that mobile technology has not only facilitated basic financial transactions but has also provided a secure platform for savings, remittances, and other financial activities, imparting a newfound sense of financial security to users.

From the findings, it can be concluded that mobile banking has proven to have a transformative force within the financial services industry of countries that the NCBA has expanded its operations, playing an important role in promoting financial inclusivity. The study reveals that mobile banking services offered by the bank had registered several positive outcomes in the countries in which the bank operates. This includes mobile banking having the capacity to enhance financial services, especially in regions with limited traditional banking infrastructure, which in turn allowed individuals in underserved and remote areas to access a wide range of financial services, including payments, savings, loans, and insurance, using just a mobile phone. Similarly, mobile banking facilitates cost efficiencies to consumers who then embrace mobile banking over the traditional banking services. Further, it is concluded that mobile banking has increased financial inclusivity in the foreign countries because of its capacity to facilitates access of the services anywhere with minimal effort. Consequently, the continued growth of mobile banking, hold great promise for advancing economic well-being and reducing disparities among individuals and communities globally in regard to financial inclusivity.

However, it is important to acknowledge that certain challenges, such as digital literacy, regulatory hurdles, and connectivity issues, continue to persist. Addressing these challenges is imperative to ensure that the benefits of mobile technology and mobile money services remain accessible to all segments of the population. In summary, the research findings underscore the transformative impact of mobile money services in the region and their role in promoting financial inclusion, economic empowerment, and innovation in the financial sector.

5.4 Recommendations

In order to maximize the positive impact of mobile money services in East Africa, it is crucial to take proactive steps. Firstly, comprehensive digital literacy programs should be initiated to empower individuals, especially those in remote areas, with the necessary skills to utilize these services effectively. Additionally, regulatory frameworks should be adapted to accommodate the evolving landscape while prioritizing consumer protection and security. Collaborative efforts with governments and telecommunications providers are essential to enhance infrastructure and connectivity in underserved regions, ensuring the reliability of mobile banking services.

Furthermore, establishing dedicated customer support channels and conducting ongoing educational campaigns will not only assist users but also keep them informed about the benefits and safety measures associated with mobile money. The expansion of agent networks and continuous innovation in financial services should remain a priority to meet diverse user needs. By fostering partnerships and investing in research and data analytics, stakeholders can ensure that mobile money services remain inclusive, secure, and responsive to the ever-changing financial landscape, ultimately benefiting a wider cross-section of East African society.

5.5 Limitation of the Study

This study had certain limitations. Firstly, the research focused solely on NCBA bank, cautioning against generalizing the results to other financial institutions in the East African region. The scope of mobile technology examined was also narrow, and future studies could explore broader dimensions within the financial sector. Additionally, due to the case study methodology, causality between mobile technology adoption and organizational outcomes could not be firmly established, and future research might employ different methodologies for a more comprehensive analysis. Lastly, the limited number of interviewees, primarily from a single cadre of staff, may have constrained the diversity of perspectives. Despite these limitations, the findings hold practical value for management and policy decisions, not only in the financial sector but also in industries where mobile technology is prevalent, with the awareness of these constraints enriching their interpretation and application.

5.6 Implications for Policy and Practice

The study finding shows that a trust on mobile money technology among users is crucial for the success of any financial service. As a result, there are important implications for both policy and practice within the financial sector and industries where mobile technology is pervasive. Policymakers should consider the need for adaptable regulatory frameworks that balance innovation with consumer protection, especially as mobile technology applications continue to evolve. Institutions should invest in comprehensive digital literacy programs to ensure that users, including those in remote areas, can fully access and utilize mobile money services. Further, organizations should explore opportunities for expanding agent networks and offering a wider range of financial services through mobile platforms. These insights underscore the importance of continuous adaptation and innovation in the context of mobile technology, with the ultimate goal of enhancing financial inclusion, security, and the overall well-being of users across diverse socioeconomic backgrounds.

5.7 Suggestions for Further Study

For future studies, it is advisable to expand the research scope beyond a single financial institution like NCBA, encompassing a broader range of financial institutions in the East African region to gain a more comprehensive understanding of mobile technology's impact. Researchers could explore additional dimensions of mobile technology application within the financial sector, going beyond mobile money, banking, and insurance. To establish causal relationships between mobile technology adoption and organizational outcomes, future studies might consider employing longitudinal or experimental research designs. Additionally, expanding the sample to include diverse stakeholders from various levels and roles within organizations would provide a more holistic perspective on the subject. These suggestions aim to enhance the depth and breadth of future research, yielding more robust insights into the evolving landscape of mobile technology in the financial sector.

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APPENDICES

Appendix I: Interview Guide

1. Background Questions

1. Gender.
2. For how long have you worked at NCBA
3. What is your highest level of education?

2. Mobile Banking

i. How has the adoption of mobile banking impacted the financial landscape in the region?

ii. What are the benefits of using mobile banking for financial inclusion, compared to traditional banking services?

iii. Can you describe any challenges faced by the organization in providing mobile banking services, and how they have been addressed?

iv. What measures does the organization take to ensure the security and privacy of mobile banking transactions?

v. How does the organization plan to improve its mobile banking services in the future, to further promote financial inclusion?

3. Mobile Money

i. In your opinion, what are the main advantages of using mobile money services for financial inclusion?

ii. Can you describe any initiatives taken by the organization to promote the adoption of mobile money services in the region?

iii. What challenges have the organization faced in providing mobile money services, and how were they addressed?

iv. How does the organization ensure the security and privacy of mobile money transactions, especially in areas with low financial literacy?

v. How does the organization measure the impact of its mobile money services on financial inclusion, and what metrics are used to evaluate success?

4. Mobile Payments

i. How has the adoption of mobile payments impacted the financial landscape in the region?

ii. What are the benefits of using mobile payments for financial inclusion, compared to traditional payment methods?

iii. Can you describe any challenges faced by the organization in providing mobile payment services, and how they have been addressed?

iv. How does the organization ensure the security and privacy of mobile payment transactions, especially in areas with low financial literacy?

v. How does the organization plan to further promote the adoption of mobile payments for financial inclusion, and what strategies will be used to achieve this?

5. Mobile-Based Insurance

i. In your opinion, what are the main advantages of using mobile-based insurance for financial inclusion?

ii. Can you describe the organization's approach to mobile-based insurance, and how it has evolved over time?

iii. What challenges have the organization faced in providing mobile-based insurance services, and how were they addressed?

iv. How does the organization ensure the security and privacy of mobile-based insurance transactions, especially in areas with low financial literacy?

v. How does the organization plan to further promote the adoption of mobile-based insurance for financial inclusion, and what strategies will be used to achieve this?

6. The role of mobile technology in global financial inclusion

i. How has the adoption of mobile technology impacted global financial inclusion in your region/country?

ii. What specific mobile-based financial services does your organization offer, and how have they contributed to promoting global financial inclusion?

iii. How does your organization ensure that mobile-based financial services are accessible and affordable to international customers with low income or limited resources?

iv. How does your organization collaborate with other stakeholders (e.g. regulators, telecom operators, NGOs) to promote mobile-based global financial inclusion?

v. How does your organization measure the impact of its mobile-based financial services on global financial inclusion, and what metrics are used to evaluate success?