DIGITIZATION STRATEGIES ON PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN STRATEGIC MANAGEMENT KENYATTA UNIVERSITY

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DECLARATION

I declare that this is my original work and has not been submitted to any other college, institution or university other than the Graduate School of Kenyatta University for academic credit.

Signed: _________________________ **Date: _________________________**

Martin Kipkosgei Maiyo

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

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LIST OF OPERATIONAL DEFINITIONS

Cost of Services: Operating costing establishes costs of financial services rendered to customers that are anticipated to be within strategic dimensions to achieve profitability

Digital Security: Includes strategies adopted by financial institutions to guarantee the secure use of digital solutions by customers

Digitization Strategy: Policies and plans used by commercial banks involved in application of performance improvement to existing business

Organization Performance: Comprises of the results of a commercial banks that are generated from the adopted digitization strategies

Resources: It includes such business facilities ranging from office equipment and software needed in banking tailored to make the financial environment comfortable.

Strategic Map: Identifies key components that will ensure performance such as work environment, market environment, finances, and operations.

Strategic Plan: These are desired intentions resulting from an analysis of both the internal and external influences that will interchange the institution from where it currently is to where it wants to be in the future.

Strategic Planning:	The process of forming the long-term goals of a financial institution and then finding the best approach for realizing those goals.
Strategy Implementation:	Execution of organizational plans and functional policies
Strategy:	This is a design of activity to ensure the planned objectives of a financial institution is achieved.
Structure:	Lines of authority of an organization that determine how jobs are shared out and processes executed.

LIST OF ABBREVIATIONS AND ACRONYMS

ATMs	Automated Teller Machines
BSC	Balance Score Card
CBK	Central Bank of Kenya
FAHP	Fuzzy Analytical Hierarchy Process
ICT	Information Communication and Technology
IoT	Internet of Things
IT	Information Technology
KBA	Kenya Bankers Association
NACOSTI	National Commission for Science, Technology & Innovation
NSE	Nairobi Securities Exchange
ROI	Return on Investments
SACCO	Savings and Credit Corporative Society
SPSS	Statistical Package for Social Science
TAM	Technology Acceptance Model
USSD	Unstructured Supplementary Service Data

ABSTRACT

The study's overarching goal looked at the impact of Kenyan commercial banks' digitization policies on their performance. The financial industry has been undergoing technological advancements which effectively hinders their ability to cope with market forces which threaten their profitability and growth, financial inclusivity, competitiveness and survival. Kenyan commercial banks are in the process of executing various digitization strategies to enable them fight against increased competition and new market demands hence each individual bank has to provide services that meets these needs. The general objective of the study is to establish the effects of digitization strategies on performance of commercial banks in Kenya. The study provides an analysis and evaluation of the influence of education level on performance, influence of cost of services on performance, the influence of users' age and gender on performance and to establish the effect of customers' security concerns on performance of commercial banks in Kenya. The study also focused on the diffusion of innovation and assimilation theoretical framework and further incorporated a descriptive research design, with commercial banks in Kenya as the target population as well as used both primary. Stratified random sampling was adopted in the identification of respondents who then were approached to give information. The target a population of 390 was drawn from commercial banks in Nairobi City County, where a stratified random sample of 117 from the entire population was taken. Respondents provided primary data through standardized questionnaires. A pilot study on the employees of the commercial banks was done using drop and pick method for distributing questionnaires. Questionnaires were issued to the operational staff in the various branches ensuring that the respondents that may be limited by the organic structures were catered for to ensure validity of the research instruments. Additionally, questions in the Likert scale was used to cover a diversified scenario in the subject matter of this research project to ensure reliability of research instruments. The data was examined using descriptive statistics, and the connection between the independent variables of education, age, cost, and security concerns and the dependent variable of success assessed using linear regression analysis. For ease of comprehension, data was presented as frequency tables, bar graphs, and pie charts. According to the findings, cost and security concerns was an important factor with a substantial impact and positive influence on digitization strategies that influence performance of commercial banks in Kenya. Moreover, the findings revealed that education, age and gender of customers did not have a tremendous impact on the performance of Kenyan commercial banks though adoption of digitization. This was evident from the results showing that both male and female customers from all ages are well educated to understand the convenience of digital banking and prefer using digital platforms to transact. The study concluded that through digitization strategies, education, age, gender, cost and security concerns enhanced performance in Kenyan commercial banks. The research revealed that commercial banks, through their leadership, appreciate digitization strategies to boost performance through adoption of cost effective and secure platforms that target banking products targeting age and gender. The commercial banks should ensure that their digital platforms are well secured, cost effective and well marketed to their customers of all ages who clearly understand the importance of these platforms.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Banking institutions in Kenya are the pillar for development and continued advancement of the economy. In this regard, banks are always striving in order to improve their overall performance efficiency and productivity while facing competition from other actors in the financial segment. This perceived performance is fueled by digitization where financial institutions drawn across various regions agree in unison that it greatly leads to higher impact on existing business models. In a 2014 study conducted by Ernst and Young, the international financial transactions data gathered from thirty two thousand retail banking clients in forty three countries indicated that Customers identified five areas in which banks should change, including fee transparency, operating costs charged to customers, delivery of Omni channel customer experience, better financial literacy advisory services, encouraging enhanced use of information and digital platforms to inspire consumers and enhance interactions in order to solve problems (Ernst and Young, 2014).

In the banking world, the strive for performance improvements have led to advances in information technology which has greatly led to creation of more flexible payment means and customer centric banking amenities (Akinci, Aksoy & Atilgan, 2004). The incredible progress made in making cell phones more accessible across the globe have led to a consistent progress in the improvement of performance through continuous improvements from adoption of these modernized technological initiatives.

The Kenyan mobile landscape has been characterized by a rapid acceptance of various banking services, especially mobile-based services. Digital strategies as well as transformations in the digital space has further grown through innovation which has increasingly rendered itself in widespread methods which is spread over many segments of the economy. A suitable environment in the financial sector is considered an anchor as well as a catalyst for sustainable development (Koivu, 2002).

According to Njenga (2008), the developing wave of information driven economy in the Kenyan financial system is working to improve its efficiency by incorporating digitization strategies. The banking patterns have been recurrently expanded and modernized in response to the changing need for convenient ways to access financial services outside the traditional norms. And, given the high demand for financial services, institutions other than traditional commercial banking institutions have entered the discussion in an effort to get a portion of the industry's perceived cake of prospect and growth.

Performance in the banking sector involves the improvements on how data assets are collected, stored, transferred, processed and converted to business opportunities. In today's world, mobile phones and technologies are incredibly strong and effective tools for information management developments. Since the inception of its revolution, digital strategies and transformations have entered the scene in the Kenyan banking sector; but has become noticeable over the previous five years. (Venkatesh, 2013).

The banking sector in the Kenyan economy is well established which includes a number commercial banks categorized as tier one, two and three. The competitiveness within such financial institutions is high which is fanned by the increased demand for banking services. The constant requirement to enhance value delivery towards customer satisfaction ensures that the banks stay competitive in the sector. It is common practice for banks to increase branches in their areas of operation as an incentive to overcome the competition however, the new inclination is to ensure service delivery is improved through harnessing of technology (Jones & Hill, 2009).

Financial institutions are increasingly providing special services which includes value-added services, hence improving convenience, expanding into a wider market, service delivery improvement and reduced cost. In previous occasions, bank clients had to visit the physical branches to access services like loans, account status enquiry, pay bills and funds transfer. This led to an inconvenience in service delivery and turn-around-time in executing processes.

Whenever there is a high demand for such services, including at school opening times, towards end of month, and other peak periods, long lines result in poor service to customers, who, in the current Kenyan market, have the option of going to rivals, leading to a reduction in revenues and thus takes away business opportunities. With any other bank competing on the basis of convenience, speed, and greater efficiency, as well as improved access to up-to-date information, banks must find a way to improve their organizational performance to their customers. (Shu & Strassmann, 2015).

1.1.1 Digitization Strategies

According to Scuotto V. (2019), digitization strategies are adopted by most corporate institutions to modify a business model in adoption of technology to improve returns. This is often used to derive value from the application of modern, emerging technology by leveraging digital network dynamics and the massive digital knowledge flow. Strategies embraced by the banking industry has enabled various banking services to reach various parts of the economy that traditional brick and mortar banking could not have reached by use of agency banking.

The Kenyan banking sector has various available digital strategies that can be adopted to boost performance. Some scholars have undertaken to explore some of these workable and practical digital strategies. Wells (2003) claim that the cell phone would be the only primary condition for access or an impediment to the resulting mobile banking. However, with the extensive convenience of low-cost mobile phones and the spread of network services, this efficiency complication is nearly resolved, laying the groundwork for mobile banking expansion.

Consumers are positive about future opportunities, according to other surveys, because digital strategies and innovations are moving through a grain of market transition. This form of banking provides a number of highly valued advantages, including effective real-time spending and financial management, budgetary control, flexibility, and simplicity in usage. (Viswanathan, 2015). The implementation of various technologies that banks need in order to attract new clients is determined by the population's educational levels.

According to Vishwanathan (2015), the quality of education of a country's population determines how much technology is used. People with advanced education are more open-minded towards technological improvements and are better at identifying technical advances that make it easier to use banks' services. Customers who are uneducated, on the other hand, are less affected by technology and need developments that increase convenience with minimal complexities. According to Musyoka (2015), technology in Kenya is fueled by the need to access banking services cheaply and conveniently.

Over 75 percent of Kenyan population is not banked and majority earns less than 10 dollars per day who avoids spending more in banking fees in relation to convenience. These customers will be attracted to cheaper services that match their expectations. Banks have therefore developed customized solutions driven by digitization to ensure these customers satisfactorily access affordable banking services.

Considering that age variances in technology adoption determine the rate of banking technology as well as readiness to embrace improvements in technology, the implementation of digitization strategies is determined by age of customers. The usage of technology is spread within specific age sets for example youth use technology differently from middle aged adults as well as the elderly. Financial institutions therefore develop digital strategies that maximize the requirements of these individuals as per various age groups. (Were, 2010)

1.1.2 Organizational Performance

A bank is said to be performing when its adopted digitization strategies can be measured using certain metrics. The ability of a bank to collect funds from customers at the lowest possible expense is the lifeblood of its financial services. Digitization strategies in conjunction with financial technologies enable all types of banks to collect funds in greater quantities and at lower costs than they could elsewhere. (Ray, Muhana & Barney 2015). The performance of a bank that adopts digitization strategies is best seen when such a bank has the ability to minimize expenditures and costs.

Fee-based income is another important metric to consider as a benefit of e-banking innovation. That is, if the bank enters an Automated Teller Machine (ATM) network, it will be able to earn money clients of other financial institutions that use its ATMs, as well as third-party contractors who work with it. The bank is compelled to enhance the characteristics of e-banking operations like ticketing and phone recharges as the number of transactions with a third party increases. The ability to join a particular ATM network allows a bank to create client mindfulness of the financial institution, and ultimately inspire the market share.

In their studies, various authors have measured performance of banks in their bid to adopt of digitization strategies. A comparative study by Poon (2014) shows that the periods of customary banking when associated with the present digital banking, the outcomes of it demonstrate that digital banking has the potential to contribute positively to the proliferation of the profits of banks. Another study by Patricio, Fisk and Cunha (2013) shows that institutions is the financial sector are in the course of moving from manual to automated and electronic systems. The same study records that efficiency has risen as the aftermath, leading to reduced costs, reduced labor costs, costs of service provision, more time is saved, accuracy is increased, quality and reliability of services is guaranteed.

From 1989 to 1997, A survey of twelve banks in the United States was conducted by Shu and Strassmann (2015). The authors realized that, since technological advancement is one of the most important dynamics variables that combine all efforts, it often increases a bank's earnings. Between 1992 and 2003, Onay, Ozsoz, and Helvacolu (2014) investigated the influence of cost-effectiveness of the American banking sector as a consequence of information technology evolution. According to the findings of the report, there is a connection between completed digitalization and increased productivity, efficiency and cost savings. The final study by Njuguna, Armando and Lydia (2016) affirms that the adoption of digitalization methods contribute significantly to the output level of the organization.

The degree of the network effect of a bank is key in determining its IT expenditures. This further determines the relationships between the bank’s performance and its IT infrastructure. In the case where the network impact is low, IT infrastructure are destined to decrease payroll costs as well as increase bank’s revenue and market share. From a wider perspective of the Kenyan banking firms, the income generation of the Kenyan banks could be condensed by advancements in information technology and drive for deregulation. Resultantly, the adoption of strategic responses by banks in Kenya is geared at enabling banks to control the reduced income levels. The responses can be realized via the increased mergers and the inner cost-cutting strategies.

Upon successful developing of some digitization strategies, a bank will possess the potential to discover fresh prospects that could be pursued further and, in the end, provide the bank with more revenue. Kenyan banks are currently earning from innovation-led services through annual deductions and commissions. From these various categories, Ram and Sheth (2014) contends that, if more digitization strategies are embraced, the outcome is bound to shoot.

In order to become more efficient, a business or organization aims of being "digital" may be to automate processes. In this context, a digitalization-focused business can seek to improve customer engagement as a means of achieving successful results (Forest & Rose, 2015). Digitalization is fueled by three major factors, according to a 2015 report by Deutsche Bank: customer service, technical advances, and economic benefits. Customers are the ones that are driving this situation, which means they are the ones pushing for newer, quicker solutions.

All of the possibilities in digital networks, which provide billions of consumers with low-cost smartphones and access to connectivity, as well as the massive prospects of cloud computing with some of its massive data processing infrastructure, are driving the technological drive. Digitalization boosts economic growth, generates employment, and assists companies in reducing costs and generating new revenue sources. Digitalizing data processes can save a significant amount on expenses, and modern intelligent applications can aid corporates in statistics collection that can aid in understanding process efficiency. This can ultimately allow leaders to handle issues in a constructive manner.

1.2 Statement of the Problem

Fiscal and economic commerce in Kenya has undergone considerable transformation including globalization, push for deregulation, technological advancements, innovation and changing customer needs (Central Bank of Kenya, 2016). To effectively cope with these market forces that stand to threaten the profitability and growth, financial inclusivity, competitiveness and survival, Kenyan commercial banks are implementing a variety of digital banking strategies such as online banking and mobile banking amongst others (Kyalo, 2014). The increased competition amongst commercial banks and other financial institutions has projected a cut-throat competitiveness existing in the banking industry, thus bespeaking the need for each individual bank to provide services that are above board.

A study done by Acharya and Kagan (2014) revealed that Kenyan banks have not defended and leveraging on the understanding and becoming closer to their clients, including having a deep understanding of consumer desires, attitudes, and tastes across various segments, has given them the benefit of maintaining the majority of the market share. According to Gartner (2018), In Kenya, more than 75 percent of the adult population uses mobile money networks, with CBK (2015) reporting a 38 percent rise in agency banking transactions over the previous year. Banks, SACCOs, and MFBs use digital banking including Commercial Bank of Africa's Mshwari, KCB-MPESA, and Equity Bank's Equitel, amongst many others, to process billions of shillings daily in connection to credit facility and other facilities.

According to Kyalo (2015), research focused on philosophical problems and conducted broad market polls. However, little research on consumer expectations and use of digital banking in Kenya is available in the literature. People now have more technological experience than they did ten years ago. If obstacles are resolved, the future of digital banking appears to be promising. Security of electronic banking, cost of digital banking services, user awareness of digital banking, mobile device availability, and other users' risk perceptions to digital banking are all examples of these barriers.

Based on the above gap analysis, this research to focused on studying the adoption and optimization of digitalization strategies in the Kenyan banking sector. There is need for this research to explore in-depth, and unearth various practical digitalization strategies commercial banks in Kenya can undertake, in the face of problems and possibilities brought by digitalization in the existing digital phase. Since there is little published literature on digitalization this study will be used to draw deductions about the Kenyan financial industry on studies on digital technology and the future of commercial banks conducted by commercial banks and other financial institutions, such as Deutsche Bank. This study therefore examined how digitalization strategies and transformations can be embraced by the Kenyan financial industry to progress performance. Findings of this research are hoped to bring dramatic change in the Kenyan Banking sector, once they are implemented by the relevant personnel.

According to Mwangi (2018), implementation of the digitization concept has significantly increased the performance of the banking industry by triggering the transition from traditional to modern banking. Modernization has enabled banks to be more innovative towards efficiency in their operations hence becoming more competitive in the market and improve their general performance. The use of technology has enabled banks to have more customer centric products and improved service delivery hence enabling commercial banks to improve customer satisfaction and grow their markets. Digitization has further enabled reduction of cost of operations, diversified product and service delivery options as well as bring out standardization (Parasuraman and Grewal, 2000).

Reiner (2016) study on social effects of digitization focused on technological developments challenges and repercussions that spur development and implementation of new solutions. It was identified that digital transformation of financial institutions brings about innovative strategies that leads to improved performance.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to establish the effects of digitization strategies on performance of commercial banks in Kenya.

1.3.2 Specific Objectives

The following basic objectives directed this research:

i. To establish the effects of education level on the performance of Commercial Banks in Kenya.
ii. To assess the effects of customers' security concerns performance of Commercial Banks in Kenya.
iii. To determine the effects of users' age and gender on performance of Commercial Banks in Kenya

iv. To examine the effects of cost of services on the performance of Commercial Banks in Kenya.

1.4 Research Questions

The study was guided by the following questions:

i. What is the effects of education level on the performance of Commercial Banks in Kenya?
ii. What is the effects of customers' security concerns performance of Commercial Banks in Kenya?
iii. What is the effects of users' age on the performance of Commercial Banks in Kenya?
iv. What is the effects of cost of services on the performance of Commercial Banks in Kenya?

1.5 Significance of the Study

The study's conclusions will benefit policy formulators and implementors to adopt the practical and workable digitization strategies in bid to realize change in the Kenyan banking sector. Consequently, all financial institutions will profit from the discoveries of the study subsequently they will be able to improve and expand their services, having adopted the digitization strategies that shall be laid down in the study. The study's conclusions and recommendations is helpful to bank executives and regulators in determining how best to integrate digital banking and filling in the gaps to increase customer loyalty.

The study also showed how crucial consumer loyalty is to the banking industry's viability and expansion face ferocious rivalry. The research may be crucial for developing financial institutions as they face new challenges, as profitability and consumer satisfaction are both critical. The study will improve other researchers and scholars' knowledge who are seeking to gain first-hand information in digital banking.

1.6 Scope of the Study

The primary aim of this study was to scrutinize the impression of Kenyan commercial banks' digitization strategies on their performance. The focus was on the administration of commercial banks doing business in Kenya involved in strategic decisions and implementation. The study also looked into the various measures adopted by the management of Commercial Banks to adopt digitization strategies to ensure performance of the financial institutions. This assisted in identification of these measures and the ways they contributed to the resolution of these challenges. The study focused on 39 commercial banks in Nairobi City County. The sample was 117 respondents who were derived from the management level. The study population was sampled using a stratified random sampling technique hence ensuring reliability of the results. The data was therefore captured using standardized questionnaires, and then analyzed with the Statistical Package for Social Sciences (SPSS) which enabled presentation of the results using tables, charts and graphs.

1.7 Limitations of the Study

The first flaw of the study was that some respondents were unwilling to reveal information, or were suspicious of the information required. Secondly, some participants did not have enough time to complete the survey. Finally, due to the hectic work schedules of banking employees, it became difficult for the researcher to meet with personnel who are key informants.

Respondents were educated on the application of the knowledge requested, and researcher reassured them that the information sought was only for educational resolves. They were also convinced to meet off normal working hours, and feedback facilitated through electronic mail and conversations with managers to inform them of the study's goals.

1.8 Organization of the Study

The research was divided into three parts whereby the first chapter addressed the study's context, briefly focusing on bank acceptance of advanced technological channels despite strong rivalry from several other banks and financial technology organizations, alongside the effect of technological finance on predictable customer retention in various corners of the world, including Africa, the Middle East and Kenya. The study's intent, objectives, research issues, and importance are all described in detail, as well as the study's basic assumptions and limitations, are all listed in the same chapter. The second chapter examines the literature on the topic, including theoretical and conceptual frameworks. The research methodology section of Chapter Three covers the study design, population, sample size, selection strategy, study instrument reliability and validity, and statistics collecting and examination processes are all things to consider. Chapter four covers research findings and discussions and finally chapter five outlines the summary conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter evaluates similar data about the adoption of digitization strategies in Commercial Banks in Kenya. It begins by discussing the major theories on digitization strategies and their relevance and significance to the topic of study focusing on the theory of diffusion innovation and the theory of assimilation. The chapter further discusses the empirical review of literature of previous scholars in the goals of the study. The third part is the conceptual framework where it argues the variables to be utilized in the investigation, both dependent and independent.

2.2 Theoretical Review

The study was affixed on the Diffusion of Innovation and the Assimilation theories.

2.2.1 The Theory of Diffusion Innovation

E.M Rogers proposed the diffusion invention principle in 1962. The theory aims to understand and illustrate how modern technologies, like online banking, automatic tellering machines, point of sale devises, digital wallets are just a few examples, are implemented and succeed. The theory goes on to say that not all inventions are successfully adopted. He further proclaimed that change aversion may be a stumbling block to innovation diffusion, through just slowing it down rather than halt it. Rogers identified five key features that have a big influence on adoption rates. Some of these include relative benefit, interoperability, complexity, and information quality.

According to Rogers, how a company views the relative benefit, complexity, triability, observability, and compatibility will all be factors in determining the winner’s pace at which new technologies are adopted. This theory applies to the topic at hand. If a bank in Kenya, specifically in Nairobi County, sees the advantages of digital banking, they will follow it, assuming other considerations and requirements as the accessibility of required services are fulfilled. These banks would go to great lengths to establish themselves in the industry and fill a gap that technologies fill.

This principle is important because it promotes the implementation of technologies, which would be quicker in organizations with internet connectivity and IT sections than in financial institutions that have none. Diffusion innovation theory, on the other hand, has a pro-innovation bias in that it encourages new ideas. This theory is important because it explains why banks with internet connectivity and IT departments would implement technologies faster than those without.

Additionally, education natures continued innovation towards improved performance of the banking industry because of long-life learning. According to Wilson (2015), learning is a continual activity which activates advanced approaches and strategies established by educational research to work. This theory acknowledges that people encourage how others around them will reply to and accept the innovation based on the level of education they have.

This theory also determines the approach to cost effectiveness of the financial institutions processes towards service delivery. Halton (2019) in his article on industrialization and development indicated that innovations are established to create cost savings to attract widespread adoption. Innovation has brought about more efficient and cheaper ways of meeting the customer needs for example online marketing, structured customer support and online banking services.

The modern Kenyan population have been very keen to technological innovations tailored to improve access to services which has contributed to a decreased reliance to brick and motor banking halls. Innovations has contributed to development of Alternative Banking Channels (ABCs) to enable customers access banking services outside banking hours as well as within their own convenience.

2.2.2 Assimilation Theory

Festinger (1962) suggested the assimilation principle, which states that consumers make a cognitive connection between product perceptions and actual product results. Assimilation theory was used to integrate this understanding of the customer's valuation into the fulfilment literature. Clients, according to Anderson (2009), have a propensity to avoid dissonance by trying to change their opinions of a commodity in order to make it more standardized.

Clients appear to reduce the uncertainty caused by a disparity between product results and expectations by either changing their prospects to match product performance or growing their degree of contentment by lowering the relative importance. The fault in this theory, as anticipated by Payton (2003), is that it establishes a connection but fails to understand how disconfirming an expectation differs from fulfillment causes gratification or displeasure.

This theory applies to the bank's ability to package their products to attract customers based on age and gender. With digitization strategies adopted by the bank, customers are able to cognitively go for the products they require without any support from the bank staff. According to Gitau (2018), targeted customer satisfaction approaches has also been made possible through this theory from the ability to use digitalization to satisfy customers based on age or gender.

Customers are more cognitive to security concerns that comes with digitization therefore posing new challenges to financial institutions to address this matter. Ngai and Wat (2002) outline that customers are now able to understand the importance of security placed by banks on their personal information and data. This is determined by the identity confirmations required to access technological infrastructure to access banking services.

This hypothesis is important to the research because it suggests that customers are inspired enough to change their attitudes or expectations about a product's results. Several studies have shown that accounting for real product results will result in a positive relationship between customer satisfaction and expectation. As a result, disappointment is impossible to achieve except for the evaluative methods designed to commence with negative client prospects.

2.3 Empirical Review

2.3.1 Education Level and Organization Performance

Globally, the banking sector has been impacted by the rapid advancement of digital information. The beginning of digital banking is an example of information technology's effect on the financial system. Digital banking has previously been shown to be useful in facilitating banking transactions between customer and the bank, according to previous research.

A study by (Zagalaz, 2019) states that, allow us to conclude that there is a positive relationship between a higher educational level, gender, level of income, being self-employed, greater use of ATMs, greater frequency in the use of banking operations and the use of Internet banking. According to previous studies, a well-informed society is more likely to embrace emerging digital banking innovations. Rapid shifts in the financial services climate, intensified competition from non-banking players in the sector, globalization, innovations and technical growth have resulted in a market where consumers are fighting for their money. Service providers are becoming more interested in improving their knowledge of customer behavior trends in order to meet the challenges.

Digital banking services, which have recently become available, are an example of innovation in which both imperceptible services and presence of a progressive means of service distribution based on high technology. Traditionally, research on consumer acceptance of innovation has tended to focus on potential adopters' socio-demographic and psychographic characteristics. Despite the fact that these types of consumer personal characteristics while personal characteristics shown to be interpreters of adoption, a growing body of research indicates that perceived characteristics of innovation, rather than personal characteristics, are the most important predictors of application of a verdict. (Berman, 2012).

According to studies, the majority of electronic Payers of banking services have historically had a university degree and supplementary higher-level occupations (Rehfisch, 2018). Venkatesh and Davis (2000) used interviews in their research to discover that individuals who have been using technological advances services such as cell phones and ATMs are more accessible to and willing to use banking services. Locals who may never have used an ATM or a cell phone, on the other hand, were found to be hesitant to conduct financial transactions using their phones. This clearly demonstrates that the rural population's lack of technological readiness would be an obstacle to digital banking adoption. (DeYoung, 2015).

Venkatesh and Davis (2000) looks at a major obstacle to consumers using mobile banking in China where the researchers report a lack of mindfulness of the benefits and concepts. As a result, mobile banking users in China are usually younger and did not higher education. This is compared with Berman's discussion of the situation in Western countries (2012). People in China are used to traveling with cash and have no assurance in outdated financial administration. Chinese customers, in association to other Asian consumers, tend to be more conservative and less influenced by technological advances.

Some customers, according to Berman (2012), rather than using "arms-length technology" like digital banking customers tend to negotiate directly with a bank clerk. The examples indicate that customer education has an effect on their adoption of new technology, with digital payments being one of them. The impact of education on digital banking adoption in Kenya is evident, as evidenced by the high level of digital banking use among Kenya's more than 20 million banking customers (Rehfisch, 2018).

2.3.2 Users' Age and Gender and Organizational Performance

Venkatesh and Davis (2000) analyze the traditional electronic banking whereby they found out that customers are young, wealthy, and highly educated. The researchers indicated that in terms of embracing and using numerous new mobile and technological devices, the countries of Northern Europe are among the most developed. This is further reported by Schmidt, Drews & Schirmer, 2016 that many countries have been fast to introduce technological innovations in banking services which are relevant to improving performance.

Additionally, younger individuals are more likely than older people to own advanced cell phones (Venkatesh & Davis, 2000). The study found out that in reality, only 3-9 percent of people aged 60 and up, as well as retired people, have access to the internet. The researchers reported that age and education were associated with higher scores on the usage of a cell phone for banking services in one study. In another analysis as to why digitization is a major topic for banks, the major differentiators were found to be gender and age (Rehfisch, 2018).

In a study by Berman (2012), it was found that internet banking users are generally middle-aged, relatively affluent, and well-educated. The study established that the age cluster of 25 to 34 years old had the highest percentage of digital banking users. The majority of frequent users (43.6%), as well as the majority of occasional users (36.8%), were between the ages of 25 and 34, while non-users were older than the other two classes. Non-users aged 35 to 49 years old accounted for 31.7 percent of the total, while 50 to 64 years old accounted for 25.9% (Venkatesh and Davis, 2000).

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Venkatesh and Davis (2000) conducted a study in Jordan and discovered that age has an effect. When comparing older and younger customers, it was discovered that young people, especially those under the age of 25, are more involved in using emerging technology such as the Internet or digital banking applications. Because of their experience with the new smartphone and other emerging technology, the age group of 17 to 25 years has the potential to become consumers of conventional banking, according to the findings.

2.3.3 Customers' Security Concerns and Organizational Performance

In a study about customers' security concerns in banking channels, it was determined by Redfish, (2018) that any business transaction, particularly those performed in uncertain environments, necessitates some level of confidence. Customers must trust the online business in order to complete the purchase transaction; otherwise, they will avoid using the service due to the sheer social complexity (Schmidt, Drews & Schirmer, 2016).

It was found out in a research by Berman (2012) that trust may be described as a subjective conviction or the degree of confidence one desires from the other party in an electronic commerce transaction. The study indicated that consumers ultimately conclude that online services are useful, even though they originally trust their e-vendors and have faith in that acceptance of online services will advance job efficiency or lifestyle. In particular, Venkatesh and Davis (2000) discovered that confidence is an antecedent of apparent practicality in an on-line shopping situation. A consumer's performance expectancy to use a service is often influenced by their level of trust.

In a study about the perceived innovation features, Acharya and Kagan (2014) indicated that innovation is expected to provide a basis for how future adopters view it. The researchers further indicated that product characteristics of innovation are evaluated and typically supported to the use of five constructs: relative benefit, compatibility, sophistication, trialability, and observability in evaluating innovation along product characteristics.

It was further reported by Redfish (2018) that the perceived risk related to the financial service itself, as well as the electronic distribution channel, is higher in banking services than in basic consumer products, emphasizing the value of this innovation feature. Before any banking operation involving sensitive information may take place, it is essential to ensure protection and confidentiality. Separately, it was reported that adoption of an invention is positively related to relative benefit, compatibility, trialability, and observability, while the remaining two, difficulty and perceived risk, are inversely significant (Furst, Lang & Nolle, 2012).

In a study by Schmidt, Drews, and Schirmer (2016) it was discovered that risk is a major factor in banking digitalization adoption. Berger (2013) also discovered that when it came to monetary transactions, customers tended to use trusted networks where existing research on the impact of trust on uptake of digitalization of internet banking, has focused primarily on people's trust in the innovation being offered. The complexity of trust is discovered to be twofold in the case of the rural underbanked population: first, people's trust in technological equipment, and people's belief in the financial facility that is being provided.

As a result, one of the main encounters in safeguarding rural underbanked implementation of offered services is building confidence in internet banking.

Rehfisch, (2018) did a study on security concerns of customers and determined that people should be allowed more knowledge of internet banking and how to use it through community meetings and training sessions in a study conducted in a rural environment, in order to build confidence in digital banking. The ability of the agent/merchant network to persuade people of the value of digital banking services by establishing a trustworthy ground level infrastructure for digital banking services would lead to people's confidence. As a result of the study, peer feedback influence thas been shown to have a beneficial influence on people's lives interest in digital banking services by reducing their security concerns. Both of these antecedents have been linked to subjective norms and social power in previous research. (Venkatesh & Davis, 2000).

In a study on utility and usage, users' safety and privacy issues will influence their decision to use mobile banking it was found out by Carrothers (2015) that the foundation for this assertion is the work of security and privacy. The research indicated that the basis for perceived legitimacy is typically impersonal, relying on reputation, data, and economic reasoning. One's evaluation of the privacy and security concerns surrounding digital banking is referred to as perceived credibility. Many banking studies have noted the prominence of security and privacy in the adoption of financial technologies.

In their study on digital banking, Venkatesh and Davis (2000) discovered the capacity to utilize digital banking is strongly influenced by one's apparent credibility in their research. Furthermore, a study on perceived reputation by Kothari (2004) was found to be significantly linked to internet banking technology acceptance indicating people's willingness to embrace digital banking as influenced by their perception of a system that safely completes financial transactions while maintaining the confidentiality of their personal information.

In a study on agreement on the security of electronic banking systems is an important factor in users' adoption of technology (Blumberg et al, 2013) which aimed at examining people who work in high-risk environments do, in reality, assess circumstances. It was found out that users' perceptions of the system's security may be correlated with skepticism because transactions in the electronic banking world are processed virtually and people are unable to see the method.

In a study on perceived protection and confidence in vendors and payment systems are essential Kothari, (2004) which focused on the use of policies of customers' personal information, and essentials of protection considerations for consumers. The study revealed that people are concerned about improper disclosure of personal information, as well as the misuse of that information by the agency that collects it, according to recent research findings. The study further revealed that this type of risk involves the unintentional collection of information such as a customer's shopping habits. As a result, the privacy risk associated with e-payments is especially important.

In a study on digital banking Rehfisch (2018), focusing on effects of security, it was determined that a sophisticated degree of perceived risk reduces confidence in the customer usage of digital banking channels hence affecting performance of financial institutions. Furthermore, Carrothers (2015) in his study on mobile banking asserted that it is unclear whether confidence comes before or after perceived danger. The studies confirmed that whatever the case may be, it is clear that security is a major concern for potential customers when it comes to digital banking.

2.3.4 Cost of Services and Organizational Performance

King (2016) conducted a study on customer behavior where the focus was financial institutions that have struggled to provide profitable services to poor clients across conventional channels see digital banking facilities as a type of branchless banking. He aimed at examining how reducing the costs of servicing customers affect customer behavior. He determined the service providers have been able to expand their offerings and give consumers greater flexibility as a result of technological advancements at lower costs.

A further study by Berman (2012) on how banks have introduced a slew of new service distribution networks, including ATMs, the internet, and cell phones was done with a focus on how low-cost banking has the potential to attract a large number of customers who could previously only be served at exorbitant rates. The study revealed that in several areas of the global business environment, there have been bottlenecks in the pace of adoption of digital banking avenues majorly because of expensive technological infrastructure leading to expensive services.

According to a study by Luarn and Lin (2011), which sought to determine how organizations are transformed by cost effective services, they determined that expensive digital solutions is one of the most significant barriers to digital banking adoption. Furthermore, according to a study by Rehfisch (2018), customers would not change their banking habits unless they are offered a significant achievement benefit. The cost of financial services may have the reverse impact in terms of acceptance of mobile banking, causing customers to favor conventional banking services.

2.4 Summary of Research Gaps

Table 2.1: Summary of the Studies and Knowledge Gaps

Author & Year	Key Focus	Research Findings	Knowledge Gap
Shahin *et al.*, (2011)	In the software industry, the connection between quality of service and contentment of customers is being investigated.	The findings of this research, there is no substantial connection between loyalty and satisfaction. The relationship between motivation and happiness, confidence, and emotional aspects, on the other hand, appears to be linear.	The analysis engrossed on the affiliation between quality of service and customer retention rather than the quality of service delivery.
Njambi, P. (2013)	Assessment of internal customer fulfilment on	The research discovered a direct correlation between	The analysis focused on service delivery rather than efficiency

	service distribution in resolution insurance.	the two concepts: low internal satisfaction leads to lower service provision.	of service delivery. It also failed to take into account all aspects of consumer faithfulness.
Anderson, R. (2013)	Customer satisfaction and service quality: A study in Banking Sector	According to the study's results, quality of service has an important impact on customer satisfaction. To push this phenomenon, more staff oriented strategies should be implemented.	This study's background is incompatible with the current proposal. Similarly, the researcher did not consider consumer perceptions of delivery, which is something that the new plan addresses.
Shu, W., & Strassmann, P. A. (2015).	The Life Insurance Industry's Customer Satisfaction with Service Delivery	A substantial and positive interface between service provision and customer fulfillment is inhibited by assurance, empathy, and thematic resonance, according to the report.	When opposed to service delivery efficiency, service delivery is a quality restricted term. Quality was not taken into account in this analysis. It also applies only to insurance policies in the insurance industry as a whole.
Abofaied, A. (2017)	Service Excellence and Customer	The findings show that definitions are	The research was conducted in the

	Experience in Nigerian Mobile Technology Telephony	autonomous but related and with inevitability, implying that development in one would trigger a change in the other.	telecommunications sector, which is a departure from the existing insurance industry.

Source: Researcher (2022)

2.5 Conceptual Framework

The conceptual framework, which contains the most important factors as well as their most likely arrangements of impact on one another, and how they impact the performance of Kenyan commercial banks as a whole. As conversed in the literature review besides illustrated in Figure 2.1 below, the conceptual structure outlines the variables. It aids in the comprehension of the relationship between the study's variables.

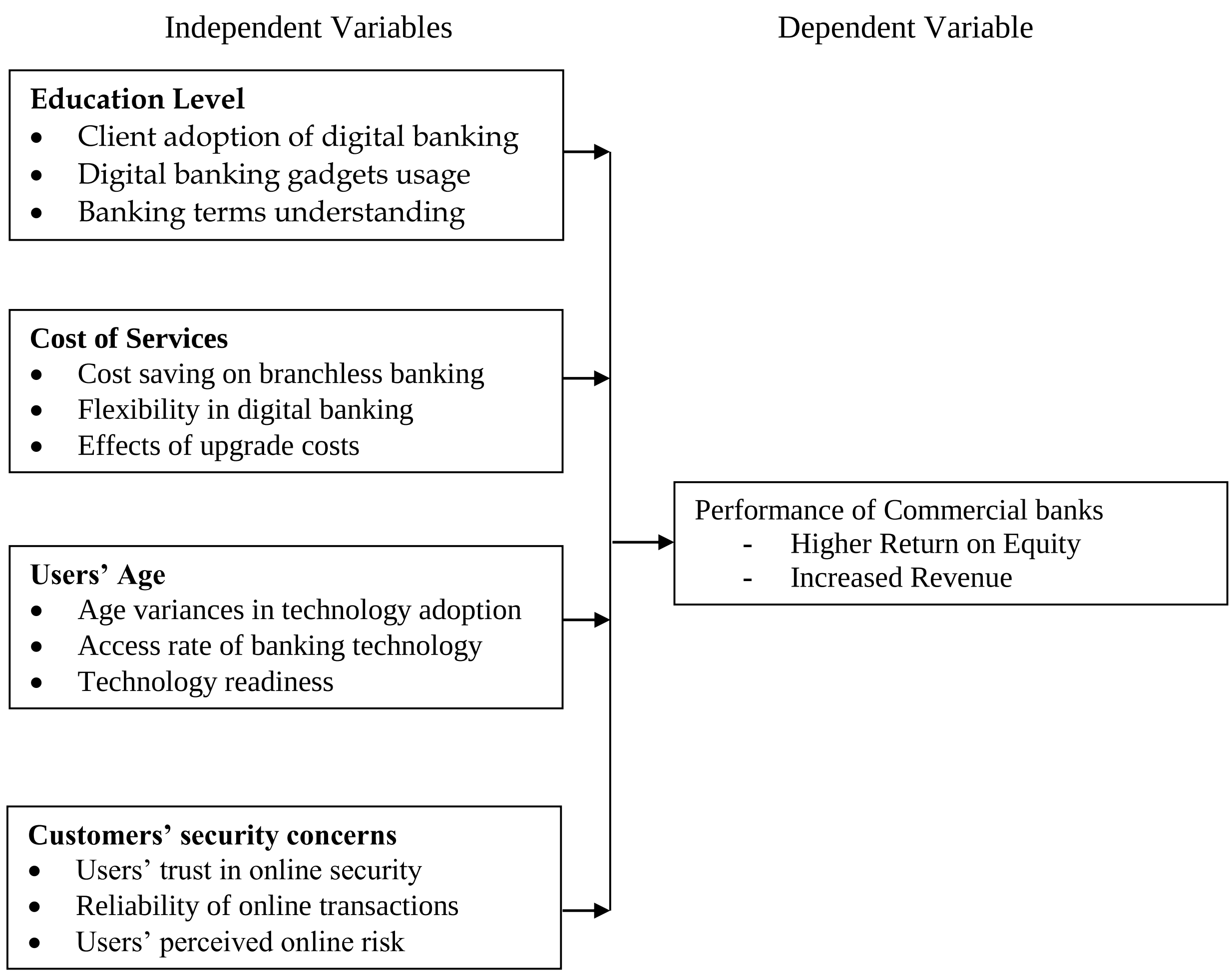

Figure 2.1: Conceptual Framework for the Factors Affecting Digitalization of Banking

Source: Researcher (2022)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

The chapter discusses the research design which determines the overall strategy to be used to assimilate the different workings of the study. It also defines the target population, the techniques to be incorporated in sampling the data as well as how the investigation will be done.

3.2 Research Design

Taylor (2007) defines research design as the guide that contains instructions on the requirements for the research so as to put up the research into an upright and achievable manner. Descriptive research design was considered appropriate for the study at hand based on its ability to incorporate and provide a detailed description of the study variables. According to Kumar (2010), analyses the descriptive survey design as those studies which are concerned with describing the characteristics of a particular individual, or to a group. Mugenda (2008) describe a descriptive survey design as a research method used to obtain information that describes existing phenomena by asking individuals about their perceptions, behaviour, attitudes or values. Descriptive research design aims at finding out 'what is,' so observational and survey methods are frequently used to collect descriptive data. It is conducted when a researcher wants to gain a deeper understanding of a topic and allows the researcher to obtain precise and concise information about the target organization (Kothari, 2007).

3.3 Target Population

In a data collection exercise, the target demographic was the same population from which data is sought, and thus enable easier establishment of the findings of the study (Kothari, 2004). Ngechu (2004) defines a community as a well-defined category of individuals, resources, elements, activities, categories of items, or dwellings that are being studied in order to simplify the process outcomes. Managerial personnel was included in the study's target group from Kenya's commercial banks. Employees in management made up the research population. This is because the management are solely responsible for making of day-to-day management decisions and strategies. The target population for this paper were senior managers or employees of 39 Commercial Banks. The study population was composed of 10 members of senior staff at management level from each commercial bank. This gave a total number of employees as 390. Employees in management positions were chosen because they have relevant knowledge of the impact of response strategies on their respective commercial bank's results.

3.4 Sampling Design

A sampling frame, according to Mugenda (2008), is an inclusive list of all sampling components from which a sample can be chosen. The collection of 390 management team members currently employed at the Commercial Banks' headquartered in Nairobi City County served as the sampling frame. In order to pick a fair representation, Kothari (2010), emphasizes the importance of using a sample frame. To create a survey, the appropriate number of participants, respondents, objects, or firms were chosen from the sample selection. The stratified random sampling strategy was then used to pick the sample, as shown below:

Table 3.1: Target Population Sampling

Target Population	Number of banks	Number of senior Managers	Total Number of senior Managers	Sample Distribution (30% x n)
Commercial banks in Kenya	39	10	390	117

Source: Central Bank of Kenya (2021)

Stratified random sampling, according to Kothari (2010), produces more accurate estimates of overall population variables and guarantees that an illustrative sample is collected from a mixed population. Stratified random sampling was used because of the senior managers being in various sub partitions being the respective departments. By allowing for any variation regulation, stratification was used to reduce standard error. The research chose a sample size of three respondents using plain representative sample from each bank, totaling 117 people, or 30 percent of the overall population.

An illustrative sample, as determined by Mugenda and Mugenda (2013), is one that constitutes at least ten percent to thirty percent of the required population. Random sampling is widely used to reduce population sampling error. As a result, the accuracy of any measurement methods used improves. (Cooper & Schindler, 2003).

3.5 Data Collection Instruments

Primary data is information that has been obtained for the first time and is therefore special (Kothari, 2010). Primary data, according to Louis et al. (2007), is information that is unique to the issue at hand. To collect primary data, the analysis used questionnaires as the primary data collection instrument. A questionnaire was custom made to address the study's finer specific objectives, as described by Mugenda and Mugenda (2008). Closed-ended questions was included in the questionnaire (structured). The nominal and Likert-type scale formats made up the quantitative portion of the questionnaire.

Since this format yields equal-interval results, the Likert-scale of 1-5 formats will be chosen. Researchers would be able to use more powerful statistics to test the study variables with equal-interval results (Kiess & Bloomquist, 2009). Questionnaires were used because, according to Kothari (2006), the data gathered by questionnaires is free of prejudice and cannot be influenced by the researcher. As a result, correct and reliable data was collected. With the assistance of research assistants, the questionnaire will be self-administered.

Self-administered questionnaires, as per Cooper and Schindler (2003), were beneficial because they were less expensive than interviews conducted and empower the investigator to encounter contributors who would be unavailable. Primary data was collected from the respondents by use of the questionnaires in which the questionnaires was conveyed to the respondents' area of work and collected after the respondent had answered all the questions based on mutual agreement on when to collect the questionnaires.

3.6 Pilot Study

Bhattacherjee (2012) defines pilot study as the testing study that is conducted prior to the actual study so as to determine the accurateness of the research instruments. In this regard, a pilot study is a study done to test the reliability of the research instruments and thus avoid any mistakes that might have been done in the actual study. According to Mugenda and Mugenda (2008), a sample of 10 to 30 respondents is adequate to carry out a pilot study in a normal research work. For this study, 10 respondents were used for the pilot study and they were obtained from tier two commercial banks since they were not part of this study. The respondents were randomly selected.

3.7 Validity and Reliability of Research Instruments

The word "validity" denotes to how well a test processes what it states to assess. Additionally, it applies to how just the outcomes reflect the phenomena under examination (Sila & Gichinga, 2016). Reliability denotes to the level which a test tool yields consistent outcomes following numerous trials.

3.7.1 Validity of Research Instruments

This is described as the threshold whereby the discoveries can be widespread outside the sample size in the investigated subject was described by Burns and Grove (1999) as the ability to generalize the findings beyond the sample size used in the study analysis. This is dependent on how well the sample characterizes the all-inclusive population. The study's external validity could be jeopardized by the study population's non-random, convenient sample of on-team working, low formalization, or decentralization. There is no guarantee that the organic and mechanistic structures can distress the outcome of the outcomes of the study as this sample was not drawn randomly, implying that not every respondent in the various bank’s branches had a corresponding chance being encompassed in the research sample. Therefore, the questionnaires that was issued to the operational staff in the various branches aided in covering for the respondents that may be limited by the organic structures.

3.7.2 Reliability of Research Instruments

The precision which a tool detects the attribute it is meant to test is denoted as reliability (Mbambo, 2006). If a study and its findings are accurate, it suggests that if the study were redone using the same method, the same results will be obtained. A pretest utilizing respondents, excluded in this study, with comparable features to the sample will be done to determine the simplicity of items and consistency of reactions. It was expected that the interviewees would only respond to the questions up to their levels of understanding of digitization strategies adopted by the bank; therefore, in order to supplement the dependability of the tool, research questions in the Likert scale was used to cover a diversified scenario in the subject matter of this research project.

3.8 Data Analysis and Presentation

The collected information was evaluated with descriptive statistics, which include measurements of central inclination and variations. The feedback form was revised for accuracy, clarity, and inclusiveness after the data has been collected. However, before the final report, the data was cleaned to remove inconsistencies, then classified according to similarity, and finally tabulated. To allow statistical analysis, the responses were coded into numerical form.

Based on the questionnaires, data was examined using Microsoft Excel Spreadsheet through data analysis module. To review the feedback and display the extent of likenesses and disparities, mean ratings, Frequency distribution, mean and standard deviation, and percentages was incorporated.

The results were described in tables and charts so that data could be quickly understood and interpreted. The presentation of an objective explanation and analysis of data using descriptive statistical methods was made possible by the visual presentation of data in tables and charts in numbers and percentages. In order to provide a summary of the specific grouping of data, each presentation of data was added numerical scores and percentages according to similar categories.

3.9 Ethical Consideration

The researcher adhered to ethical standard of research work. First, a research authorization was obtained from graduate school of Kenyatta university, which was to be used to obtain a research permit from NACOSTI. The quality and integrity of the research was ensured through honesty, transparency, open communication and respect to all participants and subjects of research. The research further sought informed consent by giving research respondents adequate opportunity to consider all options before responding to questions. The researcher ensured that all respondents would contribute voluntarily as well a no harm befalls them while participating in the research.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Overview

This section concentrates on descriptive and inferential statistics for data analysis, presentation, and interpretation.

4.2 Rate of Response

The purpose was to assess the sampled respondents' involvement rate which aided in determining if the research had a sufficient number of participants to draw findings and offer suggestions.

Table 4.1: Rate of Response

Class	Frequency	%
Population Sample	117	100%
Feedback	109	93%
No Feedback	8	7%

A sample of 117 people were interviewed utilizing a standardized questionnaire for this study. The data was used for analysis once a response rate of 93 percent (109 respondents) was attained. As a result, the study is appropriate for drawing conclusions and making suggestions. A rate of response of 30 to 60 percent in a study, according to Creswell (2005) and Kingslay (2012), is sufficient for drawing findings and providing suggestions. Table 4.1 displays the response rate.

4.3 Demographic Information

According to Hathcoat (2013), it is important in modern research to incorporate demographic data since it elucidates the relationship amongst the interviewer and the interviewee, leading to the interviewee’s willingness to provide the evidence needed. Young (2013) remarks that the respondent's knowledge establishes a relationship amongst the interviewer and the interviewee, allowing the interviewer to predict what the interviewee is expected to say in response to the study's major enquiries, allowing the researcher to become more educated.

Similarly, the goal of this study was to learn more about the respondents' demographic information in order to obtain a better knowledge of them and win their trust in providing the information needed for the study. The demographic data findings are reported in this document.

4.3.1 Distribution of the Respondents Length of Time in the Bank

The study sought to determine how much time the respondents spent working at the bank. Respondents were requested to specify the length of period they have worked in the bank as provided in the questionnaire.

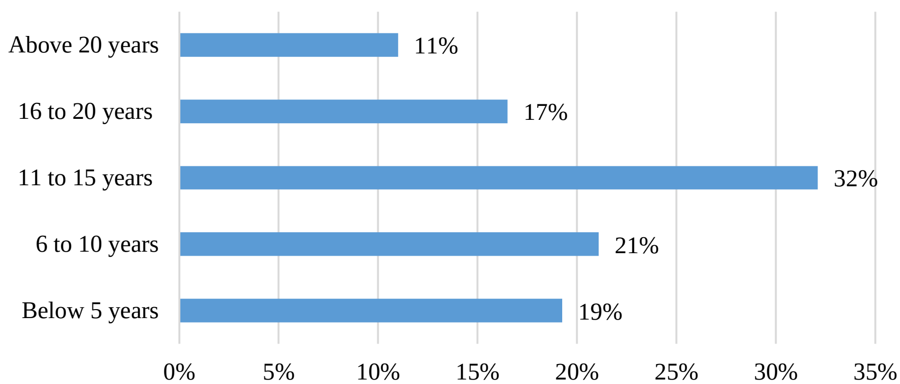

Figure 4.1: Respondents Length of Time in the Bank
Source: Field Data (2022)

The research revealed in Figure 4.1 showed that of the total respondents, 19% have been working under employment for less than 5 years, 21% employed from 6 to 10 years, 32% of the respondents employed between 11 to 15 years, 17% employed for between 16 to 20 years and 11% of the bank employees have been working for over 20 years. The data demonstrates that the number of responders were in their forties, and the banks examined did not hire many young people, implying that they may be relying on experience. Thus a research with participants ages spread throughout multiple age groups should elicit more diverse replies based on age-related perspectives of issues (Merlyn, 2011).

4.3.2 Respondent Distribution

The purpose was to launch the respondents' quality of schooling. The findings of the investigation are summarized in Figure 4.2.

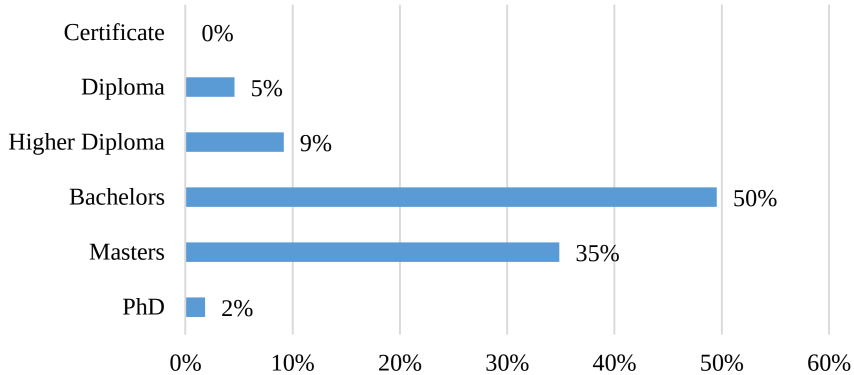

Figure 4.2: Distribution on Education Level
Source: Field Data (2022)

Shown in Figure 4.2 is 0 percent of respondents had certificate as their greatest level of schooling, 5 percent had diploma, 9 percentages had higher a diploma, 50 percentages had bachelors, 35 percent had masters and 2 percent had Doctor of Philosophy (PhD). These results demonstrate that the respondents possess a significantly good education, making it simple to grasp and react towards the study's primary enquiries. The data further suggest that in the commercial banks examined, education is highly valued. It also demonstrates that this value is connected to human capital as a strategic management driver, meaning that educational credentials are required for increasing human resources.

4.3.3 Employment Experience

It was the purpose of the research project to determine the employment experience of the respondents. For as long as someone works for a company, they learn about the problems it faces (Megnie, 2011).

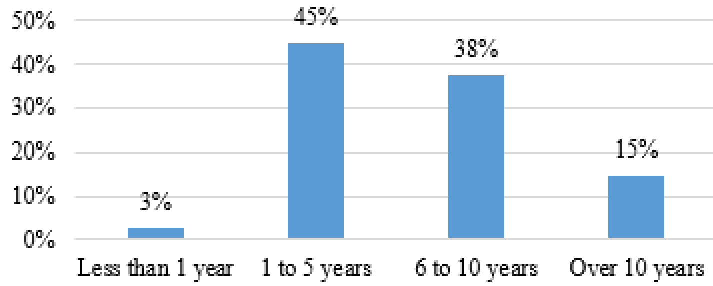

Figure 4.3: Employment Experience
Source: Field Data (2022)

Figure 4.3 reveals that 3 percent of employees having worked at for up to one year, 45 percent had operated for 1 to 5 years, 38 percent had worked for 6 to 10 years, and 15 percent having spent more than ten years working in their respective banks. According to the data, the bulk of the respondents had spent more than a year with their respective banks. This indicates that the respondents had extensive knowledge of their banks' operations and hence had a greater probability of answering the study questions. Furthermore, the data suggest that staff retention at the examined commercial banks would be harmed (Budhwar & Mellahi, 2017).

4.3.4 Managerial Positions Held

The purpose of the research project was to determine the respondents' managerial positions held. The findings of the investigation are summarized in Figure 4.4.

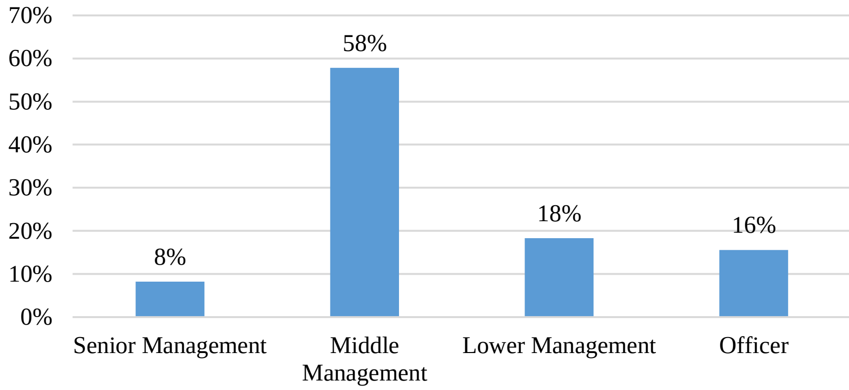

Figure 4.4: Respondents' Managerial Positions Held
Source: Field Data (2022)

Indicated on Figure 4.4, the findings where 8 percent of the employees were in senior management, 58 percent were middle managers, 18 percent were in lower management while 16 percent of the respondents were bank officers not in management. The findings suggest that diversity in banks' officers was accomplished, implying that respondents were able to add to the research enquiries built on their expertise of the distinct strategic administration drives used their different financial institutions.

4.3.5 Bank Category

The intention of the research project was to determine the respondents' bank category. The findings of the investigation are summarized in Figure 4.5.

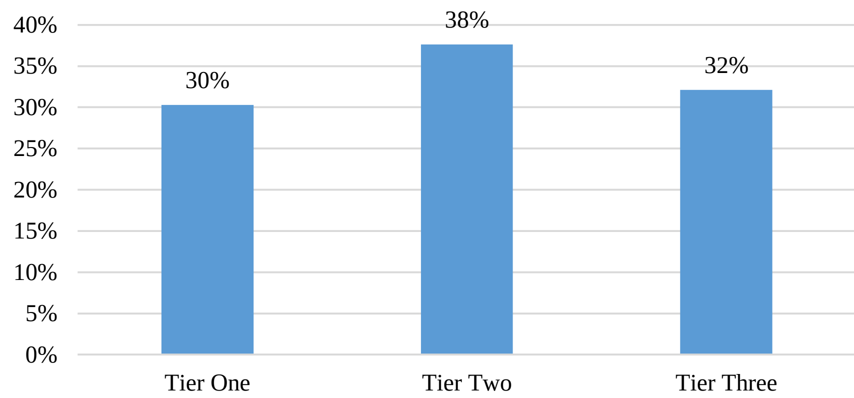

Figure 4.5: Respondents' Bank Category
Source: Field Data (2022)

The results showed that 30 percent were employed by tier one commercial banks, 38 percent in tier two and 32 percent in tier three. These findings suggested that the respondents were well distributed across the three bank categories and were able to respond well to the research questions providing an unbiased insight about their performance.

4.3.6 Distribution of Users' Age on Utilization of Digital Solutions

The third objective of the study was to establish the influence of users' age and gender on performance of commercial banks in Kenya. The respondents' opinions were sought on the which age brackets their customers that use the digital platforms belong to. The respondents were examined to express their degree of agreement/disagreement with certain declarations using a five-point Likert scale based on influence of customers' security concerns and how they enhance performance of the commercial banks. The findings are as shown in Figure 4.6. The findings' descriptive research design is presented below presented in form of a graph.

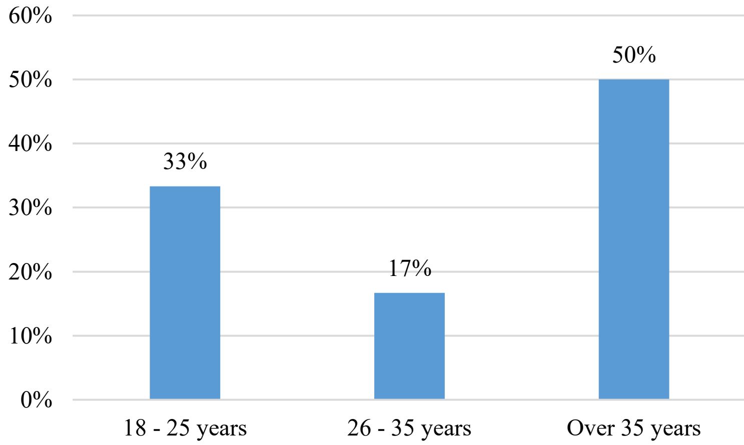

Figure 4.6: Effects of the customers' age and gender in the bank's performance digital utilization
Source: Field Data (2022)

The results confirm that the banks' customers that have taken up digital solutions of the age of between 18 to 25 years being 33%, 26 – 35 years being 17% and over 35 years where 50% of the customers.

This is in line with the findings from Schmidt, Drews & Schirmer (2016) whereby mature customers that heavily transact in digital platforms. These are individuals that need convenience in accessing their finances considering they are generally the employed and operating businesses. Further, according to Venkatesh and Davis (2000), traditional electronic banking customers are young, wealthy, and highly educated which is indicated by the second highest utilization of 33%. The findings further nourish the findings by Berman (2012) where it was reported that Internet banking users are generally middle-aged, relatively affluent, and well-educated where it was established that the age cluster of 25 to 34 years old had the highest percentage of digital banking users.

This finding further elaborates the middle age being above 35 years of age where customers between the ages of 25 to 35 are unemployed and if employed are in earlier stages of their careers therefore does not heavily utilize the digital platforms.

4.3.7 Performance of Commercial Banks in Kenya

Performance was described as its capacity to meet its internal and external demands while also fulfilling its purpose/goals and increasing stakeholder satisfaction. As previously described in prior chapters, digitization is key to the performance of commercial banks in Kenya. As a result, the purpose of this study was to determine the financial performance of these institutions measured on financial aspects being the return on equity ratio as indicated on figure 4.7 below;

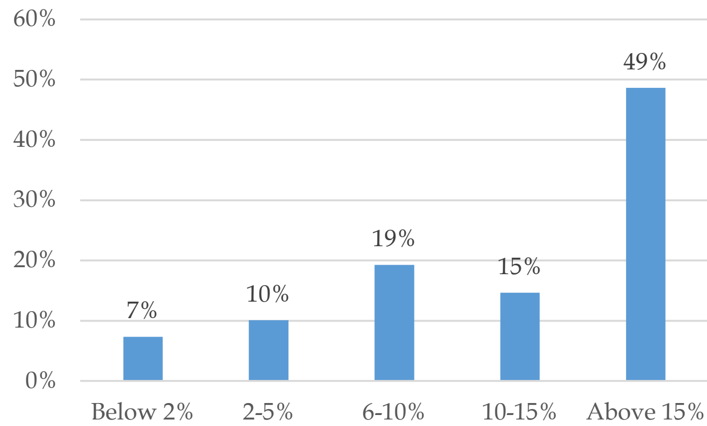

Figure 4.7: Performance of Commercial Banks in Kenya
Source: Field Data (2022)

The findings indicate that 7 percent of the commercial banks report a return on equity of below 2 percent and 10 percent of the of the commercial banks report a return on equity of between 2 to 5 percent. Further, the study revealed that 19 percent, 15 percent and 49 percent of the commercial banks return on equity ranges between 6 to 10 percent, 10 to 15 percent and above 15 percent respectively.

This indicated that most of the commercial banks report a return on equity of above 15 percent hence an indicator on a good performance in the commercial banks sector.

4.4 Study Variables Descriptive Analysis

The understanding of how digitalization initiatives impact the performance of Kenyan commercial banks was the study intention. These digitization strategies are used by commercial banks to improve their overall performance efficiency and productivity while facing rivalry from additional players in the industry. The study intended to demonstrate how specific strategic drivers (education level, cost of services, age and gender and security concerns) encourage the performance of commercial banks in Kenya. The findings' descriptive research design is indicated below, depending on the particular objectives. A lower standard deviation and a higher mean indicate that the majority of respondents gave the specified measurement features of the variables a good rating.

4.4.1 Influence of Education Level on Performance

First, the goal of the study was to establish the influence of education level of customers and staff. Sentiments were pursued on the role education level in promoting digital usage. This variable was actioned through usage of digital tools that improve performance of commercial banks. The interviewees were examined to express their degree of agreement/disagreement with certain declarations using a five-point Likert scale. This based on the influence of education levels of customers and staff on digitization strategies of their employers being commercial banks. The discoveries are as revealed in Table 4.2. The findings' descriptive research design is revealed below, grounded on the study's primary objectives and construed in means and standard deviation. A lower standard deviation and a higher mean indicate that the majority of respondents gave the specified measurement features of the variables a good rating.

Table 4.2: Education Level on Performance

Statements	Mean	SD
In our bank training is required for customers and staff on digital solutions.	2.90	0.84
In our bank customers have the ability to use internet and mobile banking to handle their own everyday financial needs.	4.47	0.50
In our bank customers have the knowledge to use internet banking to allow them to pay their bills, manage their accounts, and manage their assets without having to visit the bank.	4.07	0.82
Customers education levels enable more usage of digital solutions.	3.53	1.13
Trained customers better use digital services in buying financial products or services online.	3.86	0.90
Training customers on digitization has helped our bank to reach other financial markets without physically being present in those markets.	4.49	0.50
Though education, our bank improves customer's ability to conduct financial transactions, minimizing the requirement for interaction between bank workers and consumers.	4.12	0.77
Our bank uses customer education level as a strategic tool to promote digital services.	3.03	0.82
Education has brought about technologies creating possibility of internet meetings with banks customers.	2.00	0.87
Customer education levels has made it easier for bank personnel to approach consumers easier to market digital products.	3.54	0.50
Aggregate	**3.60**	**7.65**

Source: Field Data (2022)

From the results, the respondents fairly agreed that training is required for customers and staff on their banks' digital solutions as revealed by a mean of 2.90 and a standard deviation of 0.84. According to the discoveries, most customers have the ability to use online banking and mobile banking to execute their own daily finance matters by themselves indicated by an average of 4.47 and 0.5 being standard deviation. The respondents also established that bank clients have the knowledge to use internet banking to pay payments, manage accounts, and manage assets without having to visit the bank halls from of 4.07 mean and 0.82 standard deviation. Further, they fairly agreed that customers' education levels enable more usage of digital solutions from a mean of 3.53 and standard deviation of 1.13. Respondents also agreed that trained customers better use digital services in buying financial products or services online as portrayed by 3.86 mean and 0.90 standard deviation. More so, the interviewees acknowledged that training customers on digitization has helped their bank to reach other financial markets without physically being present in those markets as revealed by a mean of 4.49 and standard deviation of 0.50.

It was strongly accepted that though education, their bank improves customer’s ability to conduct financial transactions, minimizing the requirement for interaction between bank workers and consumers as indicated from a 4.12 mean and 0.77 standard deviation. Further, individual banks use customer education level as a strategic tool to promote digital services indicated from a mean of 3.03 and standard deviation of 0.82. However, respondents disagreed that education has brought about technologies creating possibility of internet meetings with banks customers which was indicated by a 2.00 mean and 0.87 standard deviation. Customer education levels allow employees to approach customers more easily and it has become easier to market digital products as demonstrated by 3.54 mean and 0.50 standard deviation.

The study determined that education is critical in the adoption of digital channels offered by commercial banks in Kenya, where clients are taught on the benefits, capabilities, and efficiencies offered by digitization over traditional over-the-counter banking.

The results are consistent with those of Al Khattab, A. (2011), who found that digitalization serves as a key strategic driver by streamlining business operations and assisting in the integration of various roles within an organization, thereby improving accuracy, effectiveness and reliability. According to Njambi, P. (2013), incorporating information technology in a contemporary business comprises providing the necessary training and encouraging automation of procedures, which reduces the firm's operational expenses. The findings support Halton's (2019) Theory on Diffusion of Innovation, which suggests that change aversion might be a stumbling barrier to innovation diffusion by just slowing it down rather than stopping it.

4.4.2 Influence of Customers’ Security Concerns in Performance

The second goal was to determine the impact of security concerns on performance of commercial banks in Kenya. Opinions were pursued on the incorporation of security in ensuring that customers concern on security of the digital platforms are addressed and hence the performance of their respective commercial banks. The respondents were examined to express their degree of agreement/disagreement with certain declarations using a five-point Likert scale to ascertain the influence of customers' security concerns and how they enhance performance of the commercial banks. The findings are as shown in Table 4.3. The findings' descriptive research design is offered below, built on the study's primary objectives and construed in means and standard deviation. A lower standard deviation and a higher mean indicate that the majority of respondents gave the specified measurement features of the variables a good rating.

Table 4.2: Influence of Customers' Security Concerns Performance

Statements	Mean	SD
In this bank users of mobile banking are faced with the challenge of insecurity	2.02	0.83
With the rise of digitization, there has been a surge in account hacking and other sorts of internet-based crime	3.34	1.09
Because of cybercrime and insecurity, banks and customers are hesitant to implement digital business tactics	1.97	0.78
Our bank lacks necessary resources to design and implement their digital business strategies	1.40	0.49
Except if there is a direct financial impact, our bank does not manage data in real time	1.52	0.50
Through digitalization our banks face deteriorating connection with their consumers	1.49	0.50
Our bank is grappling with client intimacy concerns as a result of digitization	1.53	0.50
Our clients find it difficult to access information in an easy and comfortable manner as a result of digitalization	3.01	1.48
Our bank lacks the infrastructure to carry out the digital business plan	1.47	0.50
Our bank's aesthetic appeal of a webpage is also a key motivator of usage and adoption	1.54	0.50
Our bank's aesthetics is an important aspect of service quality and a motivator of happiness	1.99	0.82
Our bank is faced with the challenge of limited capacity of human resource	2.54	0.50
Our bank lacks the necessary levels of technology to establish and implement digital business strategy.	1.90	0.79
Our bank lacks the funds to engage in human resource training	1.50	0.50
Aggregate	**1.93**	**7.17**

Source: Field Data (2022)

From the findings, respondents fairly disagreed that their banks' users of mobile banking are faced with the challenge of insecurity as showed by 2.02 and 0.83 mean and standard deviation respectively. It was further agreed that with the rise of digitization, there has been a surge in account hacking and other sorts of internet-based crime as indicated from 3.34

and 1.09 mean and standard deviation respectively. Respondents however disagreed that because of cybercrime and insecurity, banks and customers are hesitant to implement digital business tactics. form an average of 1.97 and a standard deviation of 0.78. It was disagreed that banks lack necessary resources to design and implement their digital business strategies which was demonstrated by a 1.40 mean and a 0.49 standard deviation. Usage of real-time data was indicated by respondents disagreeing that their banks manage data in real time except where it has a direct financial consequence from a mean of 1.52 and standard deviation of 0.52.

However, it was disagreed that through digitalization banks face deteriorating affiliation with their consumers because of security indicated from a 1.49 mean and 0.50 standard deviation. Additionally, it was not agreed that through digitalization banks are struggling with customer intimacy issues while they also agreed that through digitalization customers find it complex to find information in simple and convenient manner as indicated from a 1.53 and 3.01 mean and 0.50 and 1.48 standard deviation respectively. Most of the respondents disagreed that bank lacks the infrastructure to carry out the digital business plan as demonstrated from a 1.47 mean and 0.50 standard deviation. Furthermore, it was mildly established that the banks' aesthetic appeal of a webpage is also a key motivator of usage and adoption demonstrated by a mean of 1.54 and standard deviation of 0.50.

Interviewees moderately agreed that they faced with a challenge of limited capacity of human resource which was indicated by a 2.54 mean and a 0.50 standard deviation. It was also also fairly disagreed that banks do not have the relevant levels of technology required for the designing and implementation of digital business strategies as indicated by a 1.9 mean and 0.79 standard deviation. Further, feedback indicated that it was strongly disagreed that their banks lack the capital to invest on training of the human resource demonstrated by a 1.50 mean and 0.50 standard deviation.

The findings correlate with those by Shahin *et al.*, (2011) who argued that users of technology need to be guaranteed of their security of personal information before fully utilizing digital banking services. These demographic resources shape how a bank functions and serves its clients through the assurance of security of the platforms to ensure funds and personal information are safe hence improving the bank's performance.

4.4.3 Influence of Users' Age and Gender on Performance

In addition to the third objective of the study, it was to further establish the influence of Users' Age and Gender on performance of commercial banks in Kenya. The respondents' opinions were sought on what influences the users of digital platforms in terms of age and gender to ensure performance commercial banks. Respondents were examined to express their degree of agreement/disagreement with various statements using a five-point Likert scale based on influence of users' and banks approach to cost and how they enhance performance of the commercial banks. The findings are as shown in Table 4.4. The findings' descriptive research design is obtainable below, grounded on the study's specific objectives and construed in means and standard deviation. A lower standard deviation and a higher mean indicate that the majority of respondents gave the specified measurement features of the variables a good rating.

Table 4.3: Effects of Influence of Users' Age and Gender on Performance

Statements	Mean	SD
Digital banking utilization is dependent on gender of customers	1.55	0.50
Gender determines the developments of the bank's products and services	2.00	0.77
Adaptation of technologies is based on the age of customers	3.40	1.09
The bank delivers digital financial solutions based on the gender of customers	2.48	1.15
The banks performance can be attributed to the digital adoption based on age and gender	1.48	0.50
Aggregate	**2.18**	**4.01**

Source: Field Data (2022)

As the discoveries portray, digital banking utilization is dependent on gender of customers as indicated from a mean of 1.55 and standard deviation of 0.5. The respondents further indicate that there is little effect of gender in determining the development of their banks' products and services as shown in the mean of 2.00 and standard deviation of 0.77.

Respondents were however agreeable that there if a moderate effect on the adaptation of technologies based on the age of customers.

According to the findings, the banks moderately deliver digital digital financial solutions based on the gender of customers evidenced by 2.48 and 1.15 mean and standard deviation respectively. The respondents indicated that there is little effect of the attribution of digital adoption based on gender towards performance of banks which is also evinced by 1.48 mean and 0.50 standard deviation. According to the findings, age and gender does not have significant effect on the adoption of digital solutions in improving performance of commercial banks in Kenya.

4.4.4 Influence of Cost of Services on the Performance of Commercial Banks in Kenya

The study's fourth goal was to determine the impact of cost of services on the on performance of commercial banks in Kenya. The respondents' opinions were sought on the the cost of development and usage of digital solutions influence their individual commercial banks' efficiency. This variable was made operational on how cost of services improve performance of commercial banks. Respondents were examined to express their degree of agreement/disagreement with various statements using a five-point Likert scale based on influence Cost of Services on the Performance. The discoveries are as shown in Table 4.5. The findings' descriptive research design is indicated below, grounded on the study's specific objectives and deduced in means and standard deviation. A lower standard deviation and a higher mean indicate that the majority of respondents gave the specified measurement features of the variables a good rating.

Table 4.4: Influence of Cost of Services on the Performance of Commercial Banks in Kenya

Statements	Mean	SD
Cost of accessing banking services is important to usage of the channels	3.96	0.83
My bank is able to absorb costs related to development of digital solutions	3.44	1.18
Our customers require cost effective services to use digital solutions	2.97	0.79
The bank is able to recoup its costs of doing business from the revenues generated	4.19	0.67
The increased utilization of digital solutions will ensure the bank improves its performance	4.47	0.50
Aggregate	**3.81**	**3.97**

Source: Field Data (2022)

From the study findings, the cost of accessing banking services if important in the usage of the digital solutions which is showed by a 3.96 mean and 0.83 standard deviation. Most of the commercial banks are able to absorb costs relating the development of digital solutions which is elaborated by a 3.44 mean and 1.18 standard deviation. The respondents moderately agreed that customers require cost effective services to enable usage of digital solutions given by a 2.97 mean and 0.79 standard deviation.

The commercial banks studied strongly confirmed that they were able to recoup their costs of development of digital solutions through the revenues generated which was attributed by a 4.19 mean and 0.67 standard deviation. It was further confirmed that commercial banks deem the increase in utilization of digital solutions ensures the banks improves their performance as shown by a 4.47 mean and a 0.50 standard deviation.

The findings are consistent with the study by Venkatesh & Davis (2000) who found out that low-cost banking has the potential to attract a large number of customers who could previously only be served at exorbitant rates. Furthermore, according to Rehfisch (2018), customers would not change their banking habits unless they are offered a significant achievement benefit which is confirmed by an indication that customers do not necessarily look at cost of accessing banking services but rather convenience that the channels provide.

4.4.5 Performance of Banks

Performance of any organization can be defined as the ability of the firm to cater for its internal and external needs while at the same time serving its purpose/goals and promoting satisfaction among the stakeholders. The commercial banks have continually faced performance challenges as portrayed in previous chapters.

4.5 Digitization and Performance

The study's samples are derived through the use of inferential statistics, a technique that also aids in population generalization. The association between the variables examined in this study was determined using regression analysis. The following formula was used to estimate the predictive potential of digitalization methods on the performance of Kenyan commercial banks;

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

4.5.1 Regression Analysis

In the investigation, a regression model was used in an effort to institute a statistical link between the independent and dependent variables where variable relationships and their significance were shown by the statistical process.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.735[a]	0.541	0.5177	0.6973

a Predictors: (Constant), Education Level, Security Concerns, Age and Gender, Cost

Source: Field Data (2022)

The results in table 4.6 designates the model summary where, the R-Squared (R^2) which is the coefficient of determination that indicates the dissimilarity of the performance of commercial banks in Kenya being the dependent variable is enlightened by the independent variables being Education Level, Security Concerns, Age & Gender and Cost. As from the findings, the assessment of R-Squared is 0.541 which suggests a 54 percent variation of the commercial banks in Kenya performance as a result of Education Level, Security Concerns, Age and Gender, Cost.

Table 4.6: ANOVA

	df	Sum of Squares	Mean Square	F	Significance F
Regression	4	147.58	36.79	148.75	0.000
Residual	104	257.21	2.47		
Total	**108**	**404.79**			

a Dependent Variable: Performance of Commercial Banks in Kenya
b Predictors: (Constant), Education Level, Security Concerns, Age and Gender, Cost
Source: Field Data (2022)

An Analysis of variance test was utilized to confirm the relationship between digitization techniques and commercial bank performance in Kenya, with the findings described in Table 4.7 above. The table indicates that the P-Value was 0.000 and the computed F was 148.75, indicating that the significance of the model in explaining the effect on the dependent variable when the P-Value was less than 0.05 at the 95 percent level of confidence.

Table 4.7: Regression Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.187	0.982		0.222	0.002
	Education Level	0.397	0.194	0.043	2.046	0.001
	Security	0.098	0.254	0.700	0.386	-0.000
	Age and Gender	-0.161	0.134	0.235	-1.194	-0.000
	Cost	0.9	0.127	0.942	0.072	0.000

Source: Field Data (2022)

The regression coefficients are provided in Table 4.8 above, where the established regression equation was;

$$\mathbf{Y = 2.187 + 0.397X_1 + 0.098X_2 + -0.161X_3 + 0.009X_4 + \varepsilon}$$

From the regression model, it was recognized that a unit upsurge in education level lead to influence of commercial banks performance by 39.7 percent, a unit increase in security level will lead to commercial banks influence of performance by 10 percent, a unit increase of age and gender lead to a decline in commercial banks performance by 16 percent and a unit increase in cost lead to increased commercial banks performance by 90 percent.

These denote that the education level and cost have contribution to the improved impact on Kenyan commercial bank performance while age and gender have a negative influence in performance of commercial banks. Security concerns however has minimal optimistic sway on performance of commercial banks in Kenya.

CHAPTER FIVE

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section summarizes the evidence on the impact of digitalization techniques on the performance of Kenyan commercial banks. The section also analyzes the study's findings, recommendations, and research areas for the future. More so, the summary, findings, and suggestions are provided in a methodical manner depending on the primary objectives which was to establish the influence of education level, assess the consequence of customers' security concerns, determine the influence of users' age and gender and to examine the influence of cost of services on performance.

5.2 Summary of the Findings

It was the primary goal to determine the impact of education level on commercial bank performance. It was established that education is key in the utilization of digital channels presented by commercial banks in Kenya where clients are educated in the usage, capability and efficiencies presented by digitization over traditional over the counter banking.

The respondents agreed that trained customers better use the digital services and also agreed that it has helped the bank better grow their products to diverse markets. The respondents further agreed that customers' aptitudes to perform reducing the necessity for interface between employees and consumers which in turn improves performance as now customers are able to transact outside normal banking hours and consider utilization of available channels.

Commercial banks in Kenya are tapping into a new, high-demand digitization strategies called digitization that involves converting physical products or services into digital versions, which could make them more accessible to a wider audience.

The second objective was to assess the consequences of customers' security concerns over the digitization of banking services in performance. The respondents settled that customers have minimal concerns over the security of digital solutions. This indicates that the commercial banks have managed to create confidence in the digital strategies that customers now fully embrace the solutions availed.

This has little impact on performance of commercial banks because the costs associated with ensuring that security of digital solutions is guaranteed to customers. These strategies include ensuring the websites are well secured, support personnel well trained, infrastructure well updated and ensure sufficient capitalization to continuously monitor and improve these digital strategies. It was further revealed that customers expect that their security concerns are well addressed by the commercial banks in line with the best practice hence use the channels available with this trust in mind.

The third objective was to understand the influence of users' age and gender in the digitization strategies on performance of commercial banks in Kenya. This indicated that age plays a critical role in the adoption of digitization strategies whereby, the target market being the middle aged between the ages of 25 to 34 years do not utilize the digital solutions.

This led to a negative influence of performance of the commercial banks because the actual consumers of the digital strategies are aged above 35 years. This further indicated that the intended target market is not presenting the commercial banks with the performance planned. The reasons that the target market are not utilizing the digital channels and strategies is that most of the customers within the age are in the early stages of their careers or still in school hence have minimal needs for the digital strategies adopted by the banks.

The study further discovered that banks do not necessarily present their products in terms of gender, therefore, gender has no influence on performance. Utilization of digital channels is also not determined by the gender of customers as well as performance not attributed to both gender.

The fourth goal was to understand the stimulus of cost of services on the Kenyan commercial banks performance. The study revealed that most commercial banks have invested heavily in digital strategies to improve performance and with the returns realized they are able to recoup the costs associated. The respondents also appreciated that the increased costs in digitization strategies improves their performance. Consumers do not change their banking habits until they are promised a big achievement advantage, which is supported by evidence indicating customers do not consider the cost of using financial services, but rather the convenience that the channels provide.

The respondents also strongly emphasized that the cost of accessing banking services is key to channel utilization, implying that commercial banks must offer these digital services to clients competitively in order for them to be used competitively. Customers recognize the appropriateness of charges; thus expenses must be kept within market norms to retain competitiveness.

5.3 Conclusion of the Study

As a goal, the research was to determine the impact of digitalization techniques on the performance of Kenyan commercial banks. Grounded on the findings, it is clear that education level and cost of services were significant strategic determinants that affected the performance of Kenyan commercial banks.

Digitization strategies facilitated performance of commercial banks through ensuring customers are well educated of these strategies to enable using them to handle their own daily banking transactions and issues. This will enable the customers access these services at their own convenience and also ensure that they are served even outside the normal operating hours of most commercial banks. The knowledge will also enable customers use these digitization strategies can cover their costs, manage their finances, and administer their assets without having to go to the bank or other institutions to pay for their own utilities like power, pay television, mobile phone airtimes among others.

Performance of commercial banks was also ascertained through training customers on digitization which has facilitated the banks to reach other financial markets without physically being present in those markets. The has greatly abled rise in agency banking where the commercial banks' agents are able to fully transact in supporting the commercial banks through account opening, deposits and withdrawals among many other services that are available at the main commercial bank.

With these digital strategies, the commercial banks are also able to grow their customer base and increase number of transactions leading to growth in revenues associated hence improved performance. The advent of Covid-19 has greatly improved usage of the digital strategies which has enabled improvement of customer's ability to conduct financial transactions, minimizing the prerequisite for collaboration between bank workers and consumers.

Commercial banks further have a responsibility to availing the digital solutions to their customers within a secure and cost effective framework. The cost of accessing these services will ensure increase in utilization of these digital solutions which present great convenience to the customers. From the revenues realized, the banks are able to absorb costs related to development of digital solutions hence giving an opportunity to continuously improve on it.

The study further concluded that it is very clear that the increased utilization of digital solutions will ensure the bank improves its performance in the future. Inside of our banks hacking into accounts as well as other forms that belongs to internet-based crime has increased with digitalization which has led to innovations in how to mitigate this risks though investing on top of the line firewalls and security protocols.

5.4 Policy Implications and Recommendations

Management of the banks should capitalize more in digitization to ensure to reach the unbanked populations of Kenya. According to the findings there is great potential of increasing the utilization of banking services though entrenching digitization strategies. Majority of the customers now have access to mobile phones which will mean that the banking services can be made available to these customers either through mobile applications for customers with smart phones and through Unstructured Supplementary Service Data (USSD) for customers without smart phones.

It was further endorsed that banks should ensure that the channels are well secured and the customers' information is well protected. This was indicated from the faith that which customers have placed these services and expect that the banks have done all within their abilities to ensure this is achieved. Customers use these channels with the full knowledge of the risks associated and expect the same from the financial institutions. International best practice has made great strides in consumer protection which can be assumed by the financial establishments in Kenya.

The management of banks should increase focus on customers above the ages of 35 years in their marketing as the analysis of the study indicate that the initial focus of the middle age of 25 to 34 years are not heavy users the digital banking services. This may also indicate a great instance of an age group that is underbanked though provision of banking services that are not customized for their needs. It was further recommended that commercial banks engage mechanisms to understand this age groups, develop and market products customized to address their needs as these are usually in school, looking for jobs or just beginning their careers.

The leaders of the commercial banks should come together to present cheap services that can seamlessly serve the customers and further improve the penetration of banking services among the Kenyan population. Respective banks should participate more in development of digital strategies that will increase to revenues from fees charged for services hence through increased transaction count, leads to increased commercial banks performance in the industry.

5.5 Areas for Further Study

The important issues concerning the impact of digitalization strategies on the performance of Kenyan commercial banks were explored. However, the study left several gaps that should be completed by forthcoming researchers. Since the study concentrated on Kenyan commercial banks, these banks' issues may differ from those experienced by other Kenyan financial organizations such as microfinance banks, Savings and Credit Corporative Societies (SACCOs), and credit-only financial institutions. As a result, an investigation ought to be done to scrutinize the impact of digitalization initiatives on the performance of these other financial institutions.

The research focused on four important digitalization strategy drivers (education, security concerns, age and gender and cost of services). There should be research done to evaluate alternative digitization techniques and how they affect performance. The current study focuses on organizational performance as one facet of corporate success. As a result, it is recommended that a research be shepherded to comprehend how digitization strategy drivers impact other areas of corporate performance such as competition, innovation, and growth.

5.6 Contribution of the Study to Knowledge

This study has sought to understand how digitization strategies facilitated performance of commercial banks through ensuring customers are well educated of these strategies to enable using them to handle their own daily banking transactions and issues. This will enable the customers access these services at their own convenience and also ensure that they are served even outside the normal operating hours of most commercial banks. The knowledge will also enable customers use these digitization strategies can cover their costs, manage their finances, and administer their assets without having to go to the bank or other institutions to pay for their own utilities like power, pay television, mobile phone airtimes among others.

Performance of commercial banks was also ascertained through training customers on digitization which has facilitated the banks to reach other financial markets without physically being present in those markets. The has greatly abled rise in agency banking where the commercial banks' agents

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APPENDICES

APPENDIX I: LIST OF COMMERCIAL BANKS' BRANCHES, NAIROBI CITY COUNTY

1	ABC Bank (Kenya)	ABC House, Westlands P.O Box 38610-00800, Nairobi
2	Absa Bank Kenya	Absa Bank, Westlands P. O. Box 30120 – 00100, Nairobi
3	Access Bank Kenya	Transnational Plaza, City Hall Way P. O. Box 34353 - 00100 Nairobi
4	Bank of Africa	BOA House, Waiyaki Way P. O. Box 69562-00400 Nairobi
5	Bank of Baroda	Baroda House, P. O Box 30033 – 00100 Nairobi
6	Bank of India	Bank of India Building P. O. Box 30246 - 00100 Nairobi
7	Citibank	Citibank House P. O. Box 30711 - 00100 Nairobi
8	Consolidated Bank of Kenya	Consolidated Bank House P. O. Box 51133 - 00200, Nairobi
9	Cooperative Bank of Kenya	Co-operative House P. O. Box 48231 - 00100 Nairobi
10	Credit Bank	Mercantile House Postal Address: P. O. Box 61064-00200 Nairobi
11	Development Bank of Kenya	Finance House P. O. Box 30483 - 00100, Nairobi
12	Diamond Trust Bank	DTB Centre P. O. Box 61711 – 00200, Nairobi
13	Dubai Islamic Bank	Upper Hill Building P.O Box 6450-00200, Nairobi
14	Ecobank Kenya	Fortis Office Park – Off Waiyaki Way P. O Box 49584- 00100 Nairobi
15	Equity Bank Kenya	Equity Centre P. O. Box 75104-00200, Nairobi

16	Family Bank	Physical Address: Family Bank Towers, 6th Floor, Muindi Mbingu Street, Nairobi. Postal Address: P. O. Box 74145-00200 Nairobi
17	First Community Bank	Physical Address: Prudential Assurance Building, 1st Floor, Wabera Street, Nairobi. Postal Address: P. O. Box 26219-00100., Nairobi
18	Guaranty Trust Bank Kenya	Physical Address: Sky Park Plaza, Woodvale Close, Westlands, Nairobi. Postal Address: P. O. Box 20613 – 00200, Nairobi
19	Guardian Bank	Physical Address: Guardian Centre, Biashara Street, Nairobi. Postal Address: P. O. Box 67681 – 00200, Nairobi
20	Gulf African Bank	Physical Address: Geminia Insurance Plaza, Kilimanjaro Avenue, Upper Hill, Nairobi. Postal Address: P. O. Box 43683 – 00100, Nairobi
21	Habib Bank AG Zurich	Physical Address: Habib House, Koinange Street, Nairobi. Postal Address: P. O. Box 30584 – 00100, Nairobi
22	Housing Finance Company of Kenya	Physical Address: Jamii Bora House, Koinange Street, Nairobi. Postal Address: P. O. Box 22741 – 00400, Nairobi
23	I&M Bank	Physical Address: I & M Bank House, 2nd Ngong Avenue, Off Ngong Road, Nairobi. Postal Address: P.O. Box 30238 – 00100, Nairobi
24	Kingdom Bank Limited	Physical Address: Jamii Bora House, Koinange Street, Nairobi Postal Address: P. O. Box 22741 – 00400, Nairobi
25	Kenya Commercial Bank	Physical Address: Kencom House, 8th Floor, Moi Avenue, Nairobi Postal Address: P. O. Box 48400 – 00100, Nairobi
26	Mayfair Bank	Physical Address: KAM House, Mezzanine Floor, Opposite Westgate Mall, Mwanzi Road, Westlands Postal Address: P.O Box 2051-00606,Sarit Centre, Nairobi, Kenya
27	Middle East Bank Kenya	Physical Address: Mebank Tower, Milimani Road, Milimani, Nairobi. Postal Address: P. O. Box 47387 - 0100 Nairobi
28	M Oriental Bank	Physical Address: Finance House, 7 Koinange Street, Nairobi Postal Address: P.O BOX 44080-00100, Nairobi
29	National Bank of Kenya	Physical Address: National Bank Building, 2nd Floor, Harambee Avenue, Nairobi. Postal Address: P. O. Box 72866 - 00200 Nairobi

30	NCBA Bank Kenya	Physical Address: NIC House, Masaba Road, Upper Hill, Nairobi Postal Address: P. O. Box 44599 - 00100 Nairobi
31	Paramount Universal Bank	Physical Address: Sound Plaza Building, 4th Floor, Woodvale Grove, Nairobi Postal Address: P. O. Box 14001 -00800 Nairobi
32	Prime Bank (Kenya)	Physical Address: Prime Bank Building, Chiromo Lane/Riverside Drive.-Junction, Westlands, Nairobi. Postal Address: P. O. Box 43825 – 00100, Nairobi
33	SBM Bank Kenya	Physical Address: IPS Building. 7th Floor, Kimathi Street, Nairobi. Postal Address: P. O. Box 34886-00100 Nairobi
34	Sidian Bank	Physical Address: 7th Floor K-Rep Centre, Wood Avenue, Kilimani, Nairobi. Postal Address: P. O. Box 25363 – 00603, Nairobi
35	Spire Bank	Physical Address: Mwalimu Towers, Hill Lane, Upper Hill, Nairobi. Postal Address: P. O. Box 52467-00200, Nairobi
36	Stanbic Holdings Plc	Physical Address: Stanbic Bank Centre, Westlands Road, Chiromo Postal Address: P. O. Box – 30550 - 00100 Nairobi
37	Standard Chartered Kenya	Physical Address: Standard Chartered Building-Westlands RoadChiromo Lane, Westlands, Nairobi. Postal Address: P. O. Box 30003 – 00100, Nairobi
38	United Bank for Africa	Physical Address: Apollo Centre, 1st Floor, Ring Road / Vale Close, Westlands, Nairobi. Postal Address: P. O. Box 34154 - 00100 Nairobi
39	Victoria Commercial Bank	Physical Address: Victoria Towers, Mezzanine Floor, Kilimanjaro Avenue, Upper Hill, Nairobi. Postal Address: P. O. Box 41114 - 00100 Nairobi

APPENDIX II: QUESTIONNAIRE

I am a Kenyatta University student working on an academic research project for the partial fulfillment of the Master of Business Administration in Strategic Management degree. I respectfully request that you complete the information asked as instructed. The information you provide will be treated with confidentiality and used only for this purpose of academic reasons.

Section A: Demographic Data

1. For how long have you been a part of this company?

   Less than 5 years ( )   between 6 to 10 years ( )
   Between 11 to 15 years ( )   between 16 to 20 years ( )
   Above 20 years ( )

2. What is your highest level of education?

   PhD ( )   Masters ( )
   Bachelors ( )   Higher Diploma ( )
   Diploma ( )   Certificate ( )
   Other, please specify: _________________

3. How long have you been working in this position?

   Less than 1 year ( )
   1 to 5 years ( )
   6 to 10 years ( )
   Over 10 years ( )

4. What is your current position?

   Senior manager ( )
   Middle manager ( )
   Other, please specify:__________________

5. Which category does your bank belong to?

   Tier One ( )   Tier Two ( )   Tier Three ( )

Section B: Effects of Education Level on Performance

6. Please rate how well each of the following statements depicts the main platforms used in digitalization in the bank.

		Strongly disagree (1)	Disagree (2)	Moderate (3)	Agree (4)	Strongly Agree (5)
1.	In our bank training is required for customers and staff on digital solutions					
2.	In our bank customers have the ability to use internet and mobile banking to handle their own everyday financial needs.					
3.	In our bank customers have the knowledge to use internet banking allows them to pay their bills, manage their accounts, and manage their assets without having to visit the bank.					
4.	Customers education levels enable more usage of digital solutions					
5.	Trained customers better use digital services in buying financial					

	products or services online.					
6.	Training customers on digitization has helped our bank to reach other financial markets without physically being present in those markets.					
7.	Though education, our bank improves customer’s ability to conduct financial transactions, minimizing the requirement for interaction between bank workers and consumers.					
8.	Our bank uses customer education level as a strategic tool to promote digital services.					
9.	Education has brought about technologies creating possibility of internet meetings with banks customers.					
10.	Customer education levels has made it easier for bank					

	personnel to approach consumers easier to market digital products.					

Section C: Effect of Customers' Security Concerns on Performance

7. The following statements reflect challenges of digitalization in Commercial Banks. Please rate how well each of the following statements depicts the challenges of digitalization?

		Strongly disagree (1)	Disagree (2)	Moderate (3)	Agree (4)	Strongly Agree (5)
1.	In this bank users of mobile banking are faced with the challenge of insecurity					
2.	With the rise of digitization, there has been a surge in account hacking and other sorts of internet-based crime					
3.	Because of cybercrime and insecurity, banks and customers are hesitant to implement digital business tactics					
4.	Our bank lacks necessary resources to design and implement their digital business strategies					

5.	Except if there is a direct financial impact, our bank does not manage data in real time					
6.	Through digitalization our banks face deteriorating connection with their consumers					
7.	Our bank is grappling with client intimacy concerns as a result of digitization					
8.	Our clients find it difficult to access information in an easy and comfortable manner as a result of digitalization					
9.	Our bank lacks the infrastructure to carry out the digital business plan					
10.	Our bank's aesthetic appeal of a webpage is also a key motivator of usage and adoption					
11.	Our bank's aesthetics is an important aspect of service quality and a motivator of happiness					

12.	Our bank is faced with the challenge of limited capacity of human resource					
13.	Our bank lacks the necessary levels of technology to establish and implement digital business strategy					
14.	Our bank lacks the funds to engage in human resource training					

Section D: Effects of Influence of Users' Age and Gender on Performance

8. Effects of the customers' age and gender in the bank's performance

Rank your bank's digital utilization based on the below age categories. Rank from 1 to 3 with 1 being the least utilization and 3 being the most utilization

Age Category	**Rank**
18 - 25	
26 - 35	
Over 35	

9. The following statements on the effects of age and gender on how digitization affect the performance of commercial banks in Kenya. Please rate how well each of the following statements depicts the challenges of digitalization?

		Not at all (1)	Less extent (2)	Moderate (3)	Great extent (4)	Very great extent (5)
1.	Digital banking utilization is dependent on gender of customers					
2.	Gender determines the					

	developments of the bank's products and services					
3.	Adaptation of technologies is based on the age of customers					
4.	The bank delivers digital financial solutions based on the gender of customers					
5.	The banks performance can be attributed to the digital adoption based on age and gender					

Section E: Effects of Cost of Services on the Performance of Commercial Banks in Kenya

10. The following statements on the effect of customers' security concerns in performance of commercial banks in Kenya. Please rate how well each of the following statements depicts challenges of digitalization?

		Not at all (1)	Less extent (2)	Moderate (3)	Great extent (4)	Very great extent (5)
1.	Cost of accessing banking services is important to usage of the channels					
2.	My bank is able to absorb costs related to development of digital solutions					
3.	Our customers require cost effective services					

	to use digital solutions					
4.	The bank is able to recoup its costs of doing business from the revenues generated					
5.	The increased utilization of digital solutions will ensure the bank improves its performance					

Section F: Performance of Commercial Banks in Kenya

1. What was your return on equity for your last reporting period? Please tick where appropriate.

Below 2%	
2-5%	
6-10%	
10-15%	
Above 15%	

Thank you for taking part in this academic initiative!