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# EFFECTS OF E-BANKING ON THE FINANCIAL PERFORMANCE OF KENYAN BANKS

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Tämän opinnäytetyön tarkoituksena on tutkia ja esitellä sähköisen pankkitoiminnan asemaa Keniassa ja kaiken kaikkiaan sähköisen pankkitoiminnan vaikutusta taloudelliseen suoritukseen kenialaisissa pankeissa jotka tarjoavat sähköisiä pankkitoimintoja. Keniassa eri ihmisten välillä on suuri tietoaukko siitä kuinka paljon he tietävät sähköisen pankkitoiminnan vaikutuksesta pankkien taloudelliseen suoritukseen. Suurimmalla osalla ihmisistä on pankkitili, mutta he eivät tiedä, että sama pankki tarjoaa käteviä e-pankki ratkaisuja. Tämän opinnäytetyön päämääränä ei ole pelkästään tutkia vuosien varrella tapahtunutta kehitystä ja historiaa, vaan myös selvittää ja täyttää suuret tietoaukot kenialaisen pankkitilin omistajien sekä tutkijoiden kesken. Pankkien määrä Keniassa on liian suuri, ja siksi tämä tutkimus on rajattu vain muutamaan pankkiin jotka ovat saavuttaneet asiakkaiden lojaalisuuden, mikä näkyy asiakasmäärissä ja pankkien suosiossa. Tutkimuksen keskeisimmät löydökset sekä tulokset on julkaistu ja päätelmät on tehty. Huomattiin, että pankkien voitot ovat nousseet suunnattomasti sen jälkeen kun sähköiset pankkitoiminnot otettiin käyttöön pankeissa jotka olivat osallisina tässä tutkimuksessa.

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Avainsanat e-pankki, taloudellinen suorituskyky, kenian pankit, kenia

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## **ABSTRACT**

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This thesis aimed to study and present the status of electronic banking in Kenya and in overall the impact on the financial performance of the Kenyan banks offering electronic banking.

There is a huge gap in knowledge on the impacts of electronic banking on banks' financial performance in Kenya across different people. Most people are account holders of banks but are not aware that the same banks offer convenience through e-banking. This thesis aimed to not only study and explore the history and progress made over the years but also to report and fill the massive knowledge gaps among Kenyan bank account holders, scholars and researchers.

The number of banks in Kenya is too high, thus this study was limited to only a few top banks that enjoy customer loyalty as shown by customer numbers and their (banks) popularity.

The central findings of the study as well as the main results and conclusions of the study were published, and conclusions were made. It was found out that bank profits have gone up tremendously after the introduction of electronic banking in the banks involved in this study.

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Keywords                      E-banking, Financial Performance, Kenyan Banks, Kenya

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## **CHAPTER ONE**

### **1. INTRODUCTION**

#### **1.1 Background of the study**

Electronic banking can be defined as the automated, smooth and efficient delivery of modern and traditional banking services through electronic and communicative channels. It includes the systems that customers use to access accounts, transact businesses and obtain information through networks, including the internet. These networks could be private or public. Electronic banking is, therefore, a general term describing the whole process of performing such transactions without the need to physically visit the financial institution. All of the following terms refer to different forms of electronic banking; personal computer (PC) banking, online banking, home banking, mobile banking and virtual banking (Shan, 2000).

Virtual banking is the situation where banks do all their transactions online by the use of mobile, emails and Automated Teller Machines without having a physical location while online banking involves the bank having a physical location but offering services online.

In Kenya, various banks have launched electronic banking. The banks include; National Bank of Kenya, Barclays Bank, Standard Chartered Bank, NIC Bank, CFC Stanbic Bank, and Equity

Bank just to mention a few among the market leaders. The concept of electronic banking was first conceived in the mid-70s. However, with the high cost of internet that resulted to lack of internet users, growth of electronic banking was stunted. During the internet boom of the mid to late 90s, people started to ease up about making transactions over the internet. Electronic banking grew alongside the internet. Despite that growth that was inevitable, customers were still reluctant and hesitant to carry out monetary transactions over the internet. It took widespread adoption of e-commerce which was based on innovative companies such as AOL, Amazon and eBay to make the idea of online purchasing common. Up until 2000, over 80% of American banks offered online banking services and growth was slow. For example, at Bank of America, it took 10 years to attain 2 million customers of e-banking. However, an important cultural change happened after the Y2K scare (year 2000) where humans thought that computers were only able to store 2-digit figures and that it will come to an end. According to Egland et al., (2008), the main attraction to electronic banking is the elimination of the tiresome bureaucratic red tape in registering personal details as well as other services have translated into a literal boom in the banking industry over the last five years.

Large national banks, regional and even smaller banks and credit unions offer e-banking known as PC banking, home banking, online banking or internet banking. Those that do are sometimes referred to as brick to click banks and can be distinguished from brick and mortar banks since they have yet to offer electronic banking from virtual or online banks that have no physical branches or tellers anywhere (Ombati et al., 2011). Many new virtual banks have entered the banking industry, and this has enabled customers to have access to financial services over the internet. The cost savings have helped Internet-based banks offer lower or no service fees and higher interest rates on interest-bearing accounts than traditional banks (Shan, 2006).

Electronic banking has both advantages and disadvantages. It has simplified life for some people to whom it's a better way to bank while to others it might appear to be a complex and intimidating process. Advantages of electronic banking include; convenience due to 24-hour reliability (compared to traditional banks that run on daytime 5.5 days a week), transactions speed and effectiveness: Many banks that use electronic banking now offer sophisticated tools, including account aggregation, stock quotes, rate alerts and portfolio managing programs to help you manage all your assets more effectively (Vila et al., 2012).

Disadvantages of electronic banking include security; Majority of customers shy away from E-Banking services due to security concerns, human face: According to some analysts, customers still value personalized and responsive services from their bankers, ignorance: "on average 30% of bank customers do not know whether their banks provide online services" (Villa et al., 2013). According to Digital Literacy Fact Sheet (2015), computer illiteracy among majority of the population is still significantly high especially in Africa due to poor and/or lack of technological infrastructure and reliable power supply, lack of proper legislation governing e-transactions, Preference to paper money, as opposed to "virtual" cash in transactions.

## **1.2 Statement of Problem**

In the recent past, there has been a radical increase in the use of electronic banking being practiced in Kenyan banks, examples of these banks are: Equity Bank, NIC Bank, Barclays Bank, CFC Stanbic Bank and Transnational Bank. However, this new venture is costly to launch and manage. There was need therefore to investigate whether electronic banking has had any impact on the financial performance of banks by evaluating whether the increase in costs and the possibility of eventually having less personnel has had any positive impact on the performance of these banks.

Several studies have been conducted in Kenya to highlight these problems faced by the commercial banks and the relationship between electronic banking and financial performance but have not been able to show clearly how costs have contributed to the performance of these banks (Mwangi, 2009). This study therefore sought to show an overview on how electronic banking has impacted on the financial performance of the banks by highlighting the key factors to indicate whether the bank is making profits or losses and if its customers are being satisfied by the services being rendered. It also aimed at finding the relation between electronic banking and the financial performance of banks where past studies have failed.

### **1.3 Objective of the study**

The study was guided by the following objectives:

#### **1.3.1 General objectives**

The general objective of the study was to investigate the effects of electronic banking on the financial performance of banks.

#### **1.3.2 Specific objectives**

The specific objectives of the study include:

- To establish the impact of electronic banking on profitability
- To investigate impact of electronic banking on costs
- To establish impact of electronic banking on extent of banking services offered electronically.

### **1.4 Research Questions**

This research seeks to answer the following questions:

- What is the impact of electronic banking on profitability?

- What is the impact of electronic banking on costs?
- Do the banking services offered electronically have any significant impact on the bank's financial performance?

### **1.5 Justification of the study**

This study seeks to present the present status of electronic banking in Kenya and how they impact on the financial performance of Kenyan banks for example the Barclays bank, Standard chartered bank, Equity bank, cooperative bank and Kenya commercial bank of Kenya. There is a research gap where little is known about the impact of electronic banking on the financial performance of Kenyan banks. This study therefore seeks to investigate whether electronic banking has had an impact on the financial performance of banks that is by evaluating whether the use of electronic banking has led to increase or decrease in profitability and if its customers are being satisfied by the services being rendered electronically. Moreover, this study will contribute to the body of knowledge on an understanding of how electronic banking will impact on the overall performance of banks. This can be used in future as a reference article to banks planning to invest in electronic banking.

### **1.6 Importance of the study**

The main aim of the study was to help fill significant gaps in knowledge about the Electronic banking landscape in Kenya. In addition to this, the study findings are expected to be of great use to: -

#### **a. Scholars**

The study will help scholars understand the various forms of electronic banking and its effects on the financial performance of Kenyan banks. They will be able to know the evolution of electronic banking in Kenya and what has been the change experienced due to introduction of

electronic banking in Kenya. The channels used by various banks to carry out electronic banking will also be highlighted in the study.

**b. Governments**

The study will provide the necessary data to the government to help them in policy formulation and also enable them to be able to control its finances efficiently hence be efficient regulators.

**c. Banks**

Banks will be able to provide quality services to its customers and even encourage more people to invest in it, and other financial institutions. The banking organizations in Kenya will also have a benchmark for measuring their electronic banking services and their financial performance.

**d. Consumers**

The consumers will be able to know where the banks lag in terms of adoption of electronic banking and in providing different products and services. The study will also prove to be important since it will provide a benchmark for consumers to evaluate the convenience of electronic banking.

**e. Customers**

Bank customers will be able to carry out their transactions from the comfort of their homes or workplace hence saving on time and resources; they will also gain a better understanding of how to carry out bank services using electronic banking.

**f. Researchers**

Researchers will be able to add to their research work about electronic banking and gain a better understanding on this field. The findings can also be used in future as reference material.

## **1.7 Limitations of the study**

### **a. Time constraint**

This is a major constraint and hindrance to the researcher. The time allocated to carrying out the research is too small thus there is need to reduce the geographical scope of the study and also come up with a time plan which will indicate the time that will be spent when executing each task since failure to do that the researcher won't be able to complete the research on time.

### **b. Population**

The population of Kenyan banks is too large; thus, it cannot be covered in the prescribed time. Therefore, the research will need to use a sample to overcome this constraint.

### **c. Financial constraint**

This is a key challenge requires budgetary skills so as to carry out research within the available budget. There is also need for the researcher to reduce the scope of the study which will help to reduce or cut down on the costs.

### **d. Hostility of the respondents**

This can lead to withholding of information or providing data which will mislead the researcher. To overcome this constraint the researcher needs to clearly outline the purpose of the research and the benefits that can be derived if the research is carried out to completion. The researcher needs also to reassure the respondents of confidentiality.

## **1.8 Scope of the study**

The study will be carried out in Kenya and it will include a survey of Kenyan banks such as Barclays bank, Standard chartered bank, Equity bank, cooperative bank and Kenya commercial bank of Kenya between the months of January and April year 2017. The target groups of the

study are bank managers and the various Kenyan Banks that offer services using electronic banking.

### **1.9 Definition of terms**

**Brick and Click bank** – this are banks that offer some form of online banking for example Internet banking, PC banking as well as home banking.

**Brick and mortar** – it is a traditional “street-side” business that deals with its customers face to face in an office or store that the business owns or rents. This is banks that have yet to offer online banking.

**Click and mortar** – it’s a business model that includes both online and offline operations, which typically includes a website and a physical store.

**Direct deposit** – it’s a banking term used to refer to a banking option that allows for the transfer of funds without the hassle associated with paper checks.

**E-banking** (Electronic banking) - Electronic banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The following terms all refer to one form or another of electronic banking: personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking and mobile banking.

**Virtual Bank** – these are banks that do not have physical branches or tellers whatsoever.

## **CHAPTER TWO**

### **2. LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter discusses the literature review of the study, the literature review provides the reader with the explanation of the theoretical rationale of the problem being studied, types of electronic banking as well as what research has already been done and how the findings relate to the problem at hand. The purpose of the literature review is to avoid unnecessary intentional or accidental duplication of material already covered. This literature review was reviewed from previous past major activities that had been undertaken to address the issues in electronic banking. The information was obtained from past reference material such as magazines, newspapers, journals and the internet. Critical analysis was discussed and the research gaps established.

#### **2.2 Theories in electronic banking**

##### **2.2.1 Definition of electronic banking**

Electronic banking or e-banking refers to an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution (Ombati et al, 2011). E-banking is also the use of electronic means to deliver banking services, mainly through the Internet. The term is also used to refer to ATMs, telephone banking, use of plastic money, mobile phone banking and electronic funds transfers.

##### **2.2.2 Types of electronic banking**

The common types of e-banking include the following:

**a. Mobile/SMS Banking**

Mobile Banking refers to provision and availing of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information. According to Meute (2010), mobile Banking consists of three inter-related concepts: mobile accounting, mobile brokerage and mobile financial information services. With mobile technology banks can offer a variety of services to their customers such as doing funds transfer while traveling, receiving online updates of stock price or even performing stock trading while being stuck in traffic. Smart phones and 3G connectivity provide some capabilities that older text message-only phones do not (Shan, 2006).

**b. Telephone Banking**

Telephone banking is a service provided by a financial institution, which allows its customers to perform transactions over the telephone (Vila et al., 2013). Most telephone banking services use an automated phone answering system with phone keypad response or voice recognition capability. To guarantee security, the customer must first authenticate through a numeric or verbal password or through security questions asked by a live representative.

With the obvious exception of cash withdrawals and deposits, it offers virtually all the features of an automated teller machine: account balance information and list of latest transactions, electronic bill payments, funds transfers between a customer's accounts, etc. Usually, customers can also speak to a live representative located in a call center or a branch, although this feature is not always guaranteed to be offered 24/7. In addition, telephone banking representatives are usually trained to do what was traditionally available only at the branch: loan applications,

investment purchases and redemptions, checkbook orders, debit card replacements, change of address, etc.

**c. Electronic funds transfers**

Electronic funds transfer or EFT is the electronic exchange or transfer of money from one account to another, either within a single financial institution or across multiple institutions, through computer-based systems (Bahia, 2007). Electronic Funds Transfer (EFT) is also a system of transferring money from one bank account directly to another without any paper money changing hands. One of the most widely-used EFT programs is Direct Deposit, in which payroll is deposited straight into an employee's bank account, although EFT refers to any transfer of funds initiated through an electronic terminal, including credit card, ATM, and point-of-sale (POS) transactions. It is used for both credit transfers, such as payroll payments, and for debit transfers, such as mortgage payments.

According to Bahia (2007), transactions are processed by the bank through the Automated Clearing House (ACH) network. The growing popularity of EFT for online bill payment is paving the way for a paperless universe where checks, stamps, envelopes, and paper bills are obsolete. The benefits of EFT include reduced administrative costs, increased efficiency, simplified bookkeeping, and greater security. However, the number of companies who send and receive bills through the Internet is still relatively small.

**d. Self Service (PC) Banking**

Self-service banking for consumers and small business owners, enabling users to perform many routine functions at home by telephone, or cable modem connection. Home banking, also called on-line banking or PC banking, gives consumers an array of convenient services: they can move

money between accounts, pay bills, check balances, and buy and sell mutual funds and securities. They can also look up loan rates and see if they qualify for a credit card or mortgage.

**e. POS Banking (Credit and Debit cards)**

It is a system that uses a computer terminal located at the point of sales transaction so that the data can be captured immediately by the computer system. It is also a retail payment system that substitutes an electronic transfer of funds for cash, cheques or drafts in the purchase of retail goods and services (Gerlach, 2000). In a POS system, sales and payment information are collected electronically, including the amount of the sale, the date and place of the transaction, and the consumer's account number. If the transaction is done on a bank credit or debit card, the payment information is passed on to the financial institution or payment processor, and the sales data is forwarded to the retailer's management information system for updating of sales records. According to Gerlach (2000), much of the actual processing volume is for credit card sales.

**f. Internet banking**

Internet banking, sometimes called online banking, is an outgrowth of PC banking (Egland et al., 2008). Internet banking uses the Internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages, and purchasing financial instruments and certificates of deposit. An Internet banking customer accesses his or her accounts from browser software that runs Internet banking programs resident on the bank's World Wide Web server, not on the user's PC. Egland et al., (2008), define a "true Internet bank" as one that provides account balances and some transactional capabilities to retail customers over the World Wide Web. Internet banks are also known as virtual, cyber, net, interactive, or web banks.

**g. ATMs**

An automated teller machine (ATM), also known as a automated banking machine (ABM) or Cash Machine is a computerized telecommunications device that provides the clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date. According to Thompson (1997), Authentication is provided by the customer entering a personal identification number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit.

**h. Interactive TV Banking**

TV-Banking is about exploiting the television's existing reach into households as a viable banking service delivery channel. The commercial applications that can be further built on top of this platform could enable users to perform T-Commerce activities such as paying for teleshopping and making bill payments (Vila et al., 2013).

**i. Branchless Banking**

Branchless banking is a distribution channel strategy used for delivering financial services without relying on bank branches. While the strategy may complement an existing bank branch network for giving customers a broader range of channels through which they can access financial services, branchless banking can also be used as a separate channel strategy that entirely forgoes bank branches (Thompson, 1999). Examples of branchless banking technologies

are the Internet, automated teller machines (ATMs), POS devices and mobile phones. Each of these technologies serve to deliver a set of banking services and are part of distribution channels that may be used either separately or in conjunction to form the overall distribution channel strategy.

For example, Co-operative Bank of Kenya uses the Internet, ATMs, POS devices, EFTPOS devices, and mobile phones as technologies to deliver its banking services through a combination of distribution channels including stationary bank branches, mobile bank branches, ATMs, bank agents, Online banking, and mobile banking. All these are distribution channels, yet only the last four are branchless distribution channels and form part of Equity Bank's branchless banking strategy (Equity Bank refers to its branchless banking channels as alternate delivery channels)

### **2.2.3 Risks of electronic banking**

Electronic banking is faced by a number of risks for example:

**Operational risk** - The reliance on new technology to provide services makes security and system availability the central operational risk of electronic banking. Security threats can come from inside or outside the system, so banking regulators and supervisors must ensure that banks have appropriate practices in place to guarantee the confidentiality of data, as well as the integrity of the system and the data (International Monetary Fund, 2002).

**Reputational risk** - Breaches of security and disruptions to the system's availability can damage a bank's reputation. The more a bank relies on electronic delivery channels, the greater the potential for reputational risks. If one electronic bank encounters problems that cause customers to lose confidence in electronic delivery channels as a whole or to view bank failures as system wide supervisory deficiencies, these problems can potentially affect other providers of electronic banking services.

In order to manage such risks measures should be put in place to oblige the Directors and senior management to document and explain the strategic decisions of how the bank will develop their e-banking services. Management supervision should include approval and review of the bank's security control infrastructure; safeguard the e-banking systems and data from internal and external threats (Carlson and Lang, 2001). The security challenges of e-banking services are greater than those of conventional banking services. These challenges can be addressed through establishment of relevant authorization privileges and authentication measures, clear audit trail for e-banking transactions and put up measures to preserve confidentiality of e-banking information. (Ombati et al 2011).

### **2.3 The Contextual Environment**

Many banks in Kenya have in the recent past adopted electronic banking as a way of offering banking services to its customers for example the standard chartered bank and the Barclays bank of Kenya offers mobile banking to its customer which allows customers access to the bank 24 hours a day, 7 days a week anywhere they may be. For instance, the co-operative bank of Kenya has also adopted electronic banking, as a fully internet banking service as a way of increasing efficiency and effectiveness in their service delivery.

### **2.4 Empirical literature review**

Bahia (2007), defines E-banking as the provision of financial services and markets using electronic communication and computation and today retail banks are switching to multi-channel distribution of financial services in hybrid platforms where the traditional services of banks are provided through both "bricks and mortar" branches and Internet. However, the research on the adoption of electronic banking by the consumers has been vast, while there has been very limited research on the effects of electronic banking on the bank performance. Electronic banking

technologies have proliferated in recent years, and the availability of a wide range of products has led to increasing adoption among consumers. These technologies include direct deposit, computer banking, stored value cards, and debit cards. Banks and other financial institutions have worked hard to develop and deploy these technologies because of their potential to increase efficiency, cut costs, and attract new customers. Consumers are attracted to these technologies because of convenience, increasing ease of use, and, in some instances, cost savings (England et al. 2008).

Electronic banking, in particular, has grown at impressive rates. Between 1995 and 2003, e-banking increased eightfold. There is some evidence that computer banking is associated with better household financial management. However, financial literacy, the digital divide, and other issues that separate disadvantaged groups from the financial mainstream make it difficult for low- and moderate-income (LMI) individuals to reap the potential benefits associated with computer banking.

Meuter (2010), classified Internet banking adoption into two categories which includes access technology and infrastructure related factors and sector specific retail banking factors. The first class include internet penetration rates, skill of consumers in using internet and related technologies, attitude towards technology, security and privacy concerns. The second class involves trust in banking institution, banking culture, e-banking culture and Internet banking push.

Analyzing the Acceding and Candidate countries' (ACCs) adoption of Internet banking, Meuter (2010), shows that lack of PC and internet penetration is still an entry barrier for internet banking development both in EU15 and ACCs. The cost of access services is a main issue for the PC and Internet penetration especially in Central and Eastern Europe countries. On the other hand, there

has been a lack of confidence in the banking sector in ACCs due to past turbulent periods. These concerns are further aggravated with privacy concerns. Degree of banking service usage and e-banking culture are also weaker in ACCs compared to EU-15.

The study by Iacono and Orlikowski (2004) has found that trust significantly affects attitude towards e-banking acceptance. To encourage e-banking adoption, banks need to develop strategies that improve the customer's trust in the underlying technology. The other factors include quick response, assurance, follow-up and empathy. Security, correct transaction, customer control on transaction (personalization), order tracking facilities and privacy are other important factors in the online service that affect the customer satisfaction. Akerlof and Girardone (2011), show that E-banking results in cost and efficiency gains for banks yet very few banks are using it.

Bahia (2007) and Vila et al (2013) also provide evidence respectively for cost reduction and productivity gains as a result of technological change for European Union banks. Carlson and Lang (2001) showed that E-banking lowers operational costs while increasing customer satisfaction and retention in the Turkish retail banking sector. Meuter (2010) suggests that e-banking is driven largely by the prospects of operating costs minimization and operating revenues maximization. According to Ombati et al (2011), Technology (IT) offers banks the potential to dramatically reduce operating costs and improves the quality of management information hence making banking more profitable.

## **2.5 Research problem**

Technological changes are inevitable in many sectors which include the financial sector. Internet banking has totally evolved and competition has intensified among banks after the introduction of ATMs, online banking and mobile banking which are the main pillars of e-banking. The

penetration of the internet into new areas has presented banks with new markets and distribution channels. Allen, McAndrews and Strahan (2002) describes e-banking as “the provision of financial services through electronic computing and communication”. In today’s markets, banks are changing to multi-channel distribution of services by the means of hybrid platforms where the traditional forms of banking are offered through branches as well as the internet. In the 1990s the banking sector in Kenya went through a tough time and it experienced the collapse of several banks. So as to cut on operational costs, banks in Kenya have adopted E- banking which includes mobile banking(m-banking), ATMs and internet banking where customers are able to use their PC’s to access financial services. To enable banks to cut the operational cost further, the Central Bank of Kenya (CBK) in the year 2010 allowed regulated banks to use third party agents following the licensing of agents. In the year 2012, the CBK allowed deposit taking microfinance to operate agencies. Mobile network operators in Kenya as well as financial institutions have been able to expand this power and agents are across the country. By 2016, mobile phone provider Safaricom had more than 100,000 agents across the country (Safaricom Annual Report, 2016). Since the year 2011, ten banks have been able to connect about 10,000 bank agents. Nevertheless, Equity bank and KCB have been the ones particularly quick to introduce agents across the country. This can be supported by the vast numbers of their respective agents across the country. All these measures are aimed at cutting down on operational cost for these banks. Several scholars have done the research on E-banking. Kigen (2010) carried out a research on the effects of mobile banking on the transaction costs of *banks and he established that, mobile banking has been able to reduce transaction costs in a considerable way* but not yet to be felt by the banks by then since customers were not aware of the agents in 2010, but today the difference can be felt significantly. Today more banks have adopted electronic banking. Munaye (2009)

carried out a study to establish the application of mobile banking as a strategic response by equity bank limited to the challenge in the external environment. He was able to review this concept as form of a strategic response where its impact on financial performance was not taken into consideration. In 2011, Mulee carried out a research on the impact of e-banking of microfinance institutions based in Nairobi. This research did not touch on mainstream banks in Kenya.

From what has been discussed Above, it is very clear that not much research has been done on the financial impact of electronic banking on the performance of commercial banks in Kenya. To achieve this, this paper will seek to answer the question: What is the effect of electronic banking on the financial performance of commercial banks in Kenya?

Past researchers undertook these research activities on different areas and this left out various challenges of E-banking practices unaddressed. The difference between the previous studies left some major gaps unfilled; this research study will therefore concentrate its findings into these gaps. Various studies in Kenya have been done to highlight these problems faced by the commercial banks and the relation between electronic banking and financial performance but have not been able to show clearly how costs have contributed to the performance of these banks.

This study therefore seeks to show how electronic banking has impacted on the financial performance of banks. The study also aims at finding out whether the bank is making profits or losses and if its customers are being satisfied by the services being rendered.

## **CHAPTER 3**

### **3. RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Chapter 3 focuses on the methodology and approaches utilized to collect data for this research. The chapter is made up of research designs, samples and sampling techniques, data and its collection techniques, data analysis techniques, research questions and data finding presentation methods.

#### **3.2 Research Design**

A research design can be defined as a plan used for data collection and utilization in order to obtain desired information with accuracy or for a researcher to test their hypothesis sufficiently. This particular research used several methods to make sure that the information was accurate and comprehensive. One of the methods employed was descriptive design so as to define facts in the field accurately. Descriptive design aims at describing data and characteristics of the phenomenon or population being studied (Wetherbe, 2012). In our case, questionnaires and interviews were employed so as to capture all the information accurately. Quantitative and analytical survey methodologies were employed to utilize to examine and report the manner in which things were so as to assist in generalization. This was intended to determine the impact electronic banking has had on the financial performance of banks in Kenya.

### 3.3 Sample or Sample techniques

A sample can be described as an element chosen to represent the target population while a sampling technique can be defined as a framework in which the researcher utilizes to assist in the choice of a sample. The study selected 60 respondents so as to give a fair reflection of the total population that has access to electronic banking. The sample study was carried out using probability sampling which entailed simple but random and stratified sampling. The simplicity and randomness was to ensure that anybody in the population could be included in the study. Stratified sampling was used because it offers more precision than a simple random study in the same sized population.

<b>Population Stratum</b>	<b>Population</b>	<b>Sample (60%)</b>
Cooperative Bank	20	10
Equity Bank	25	15
National Bank	15	10
Kenya Commercial Bank	25	15
Standard Chartered Bank	15	10
<b>Total</b>	<b>100</b>	<b>60</b>

**Table 1:** Population Stratum

### 3.4 Data and Data Collection Techniques

Data and its collection techniques are a means to collect data from the correspondents. The research utilized both primary and secondary techniques. Primary data that was used included personal interviews with the respondents as well as the application of both open-ended and closed questionnaires. Secondary data that was utilized included the internet and journal

publications. These were the main sources of all the data was analyzed to come up with the conclusion of this study.

### **3.5 Validity and Reliability**

The legitimacy and validity of data used was cross checked before the results were processed. This has assisted in establishing a reliable tool for collecting data. This was carried out using a questionnaire that is formulated using a sample of 5 respondents and interviews were carried out on the same 5 respondents. This process was helped by correction of mistakes and errors which could have occurred in the process of collecting data so as to produce significant results from the field.

### **3.6 Data Analysis Methods**

The questionnaires were first checked for complete responses and edited wherever necessary. Coding and analysis of the collected data was done using the Statistical Package for Social Sciences (SPSS) computer software, as well as, Microsoft Excel. The data was initially analyzed in line with descriptive statistics which includes, but not limited to, measures of central tendencies, percentages and frequencies.

### **3.7 Findings and Presentation**

Analyzed data will be presented on data and pictorial illustrations that will include tables for data and graphs or charts for data representations.

## CHAPTER 4

### 4. DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

Chapter four covers a comprehensive analysis of the findings from the research and shows the results from the analyzed data and will be represented on tables, pie charts and bar graphs. This research aimed at finding out the effect of e-banking on the financial performance of banks in Kenya. The analysis was done after the collection of data from the banks that offer electronic banking in Kenya. The objectives utilized in analyzing the data were the impact of electronic banking on profitability, costs and its effects on intensity and extent of electronic banking services.

#### 4.2 General Information

As shown on the working plan on Appendix 2, the questionnaires were distributed to respondents in the month of April 2017. The questionnaire as is on Appendix 1 was designed for the community members, heads including Heads of IT, Heads of Finance and Heads of Alternate Channels.; it included both 24 open and closed ended set of questions that to be answered. The questionnaire was written in a simple and clear language for the respondent to feel free while answering.

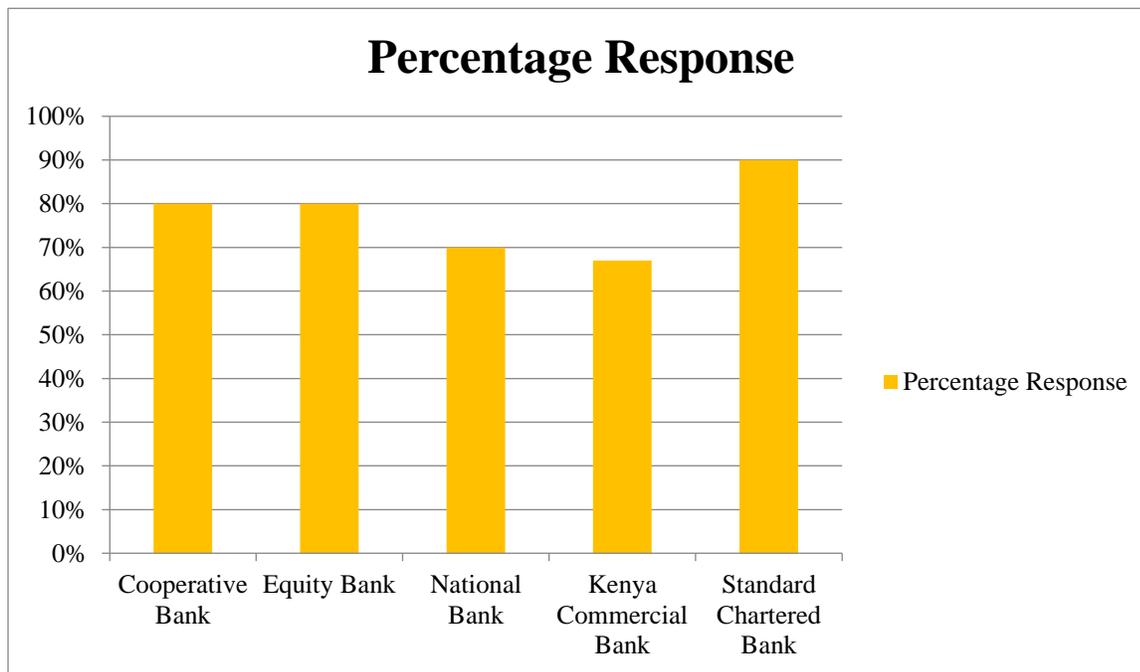
##### 4.2.1 Response Rate

60 questionnaires were distributed equally to the sampled banks and only 46 were filled and returned. The table below illustrates the distribution.

**Table 1:** Response Rate

Distribution of Respondents	Questionnaires Issued	Questionnaires Returned	Percentage Response
Cooperative Bank	10	8	80%
Equity Bank	15	12	80%
National Bank	10	7	70%
Kenya Commercial Bank	15	10	67%
Standard Chartered Bank	10	9	90%
<b>Total</b>	60	46	<b>77%</b>

**Figure 1:** Bar Graph Showing the Percent 1



The chart indicates that 80% of the respondents at Cooperative and Equity bank filled and returned their questionnaires. 67% of the forms distributed to Kenya Commercial Bank were returned marking the lowest figure. The response rate at Standard Chartered Bank was highest with 90 % of the questionnaires which were duly filled returned. The National Bank of Kenya

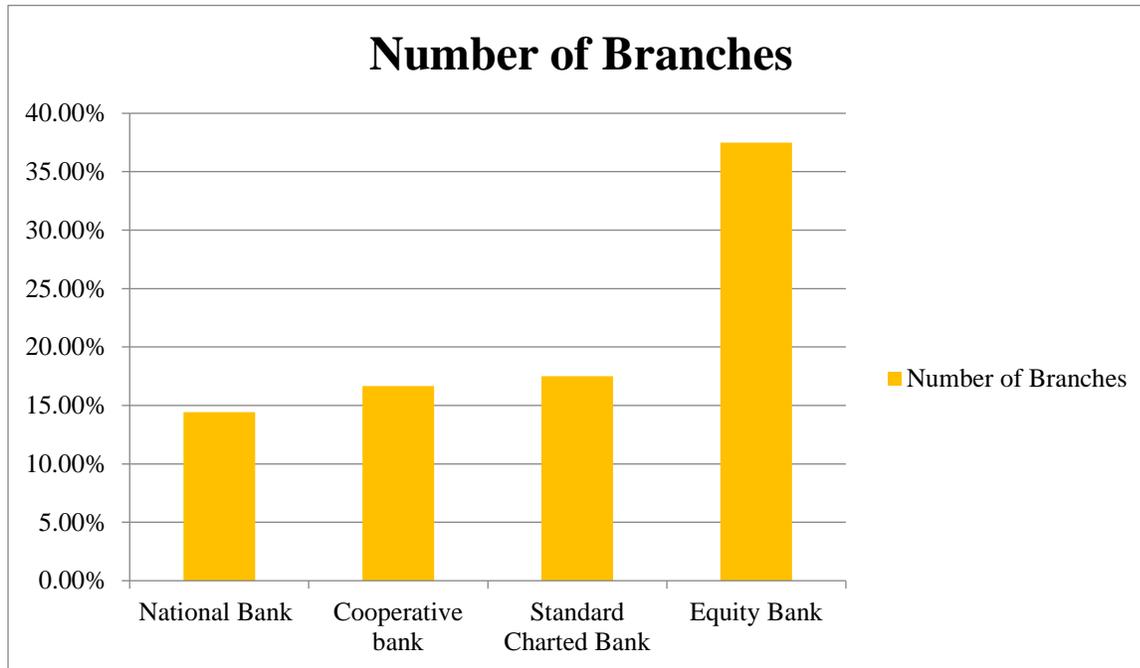
returned 70% of the questionnaires which were distributed to them. From the above table, it is evident that the analysis was done on 46 respondents out of the intended 60. This figure matches 77% of responses achieved. Some of the respondents who did not fill the forms sighted lack of time while others were not able to comprehend the questions fully.

#### **4.2.2 Number of Branches Covered**

The Number of branches for each participant were found in their respective websites and recorded in the table below:

**Table 2:** Number of Branches

<b>Banks</b>	<b>Branches</b>	<b>Percentage</b>
National Bank	52	14.44%
Cooperative bank	60	16.67%
Standard Chartered Bank	63	17.5%
Equity Bank	135	37.5%
Kenya Commercial Bank	50	13.89%
Total	360	100%

**Figure 2: Number of Branches**

As per table and figure 2 it is clear that all the banks involved in the research have branches all over the country with Equity bank having the majority of branches at 35.5%. National Bank of Kenya has 54 branches across the country which is 14.44%. Standard chartered has a total of 63 branches in Kenya which stands for about 17.5%. Cooperative bank has 63 branches standing for 16.63% while KCB has 50 branches which is 13.89%. This data indicates that among the banks involved in this study, Equity bank has the majority of customers using electronic banking to aid in its service delivery. Equity Bank, having the majority number of customers due to being widespread across the country means that customers will naturally be inclined to register for online services with the bank in which they have an account. Most of the other banks have branches in big cities and large towns but Equity Bank has managed to penetrate remote areas and small shopping centers.

### 4.2.3 Time of Operation.

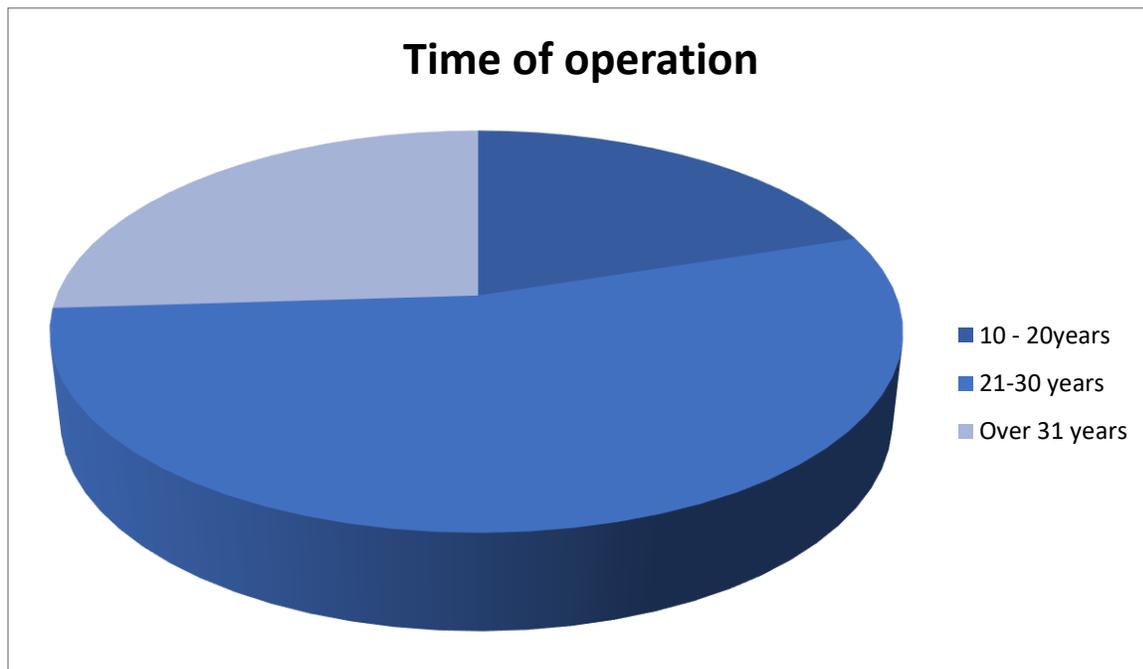
The table below indicates how long the involved banks have been in operation as per their websites.

**Table 3:** Time of Operation

Time of operation	Frequency	Percentage
10 - 20years	9	20%
21-30 years	25	54%
Over 31 years	12	26%
Total	46	100%

The table has been summarized in the pie Chart below.

**Figure 3:** Time of Operation



As per figure three, the findings indicate that 20% of the banks involved in the research have been operating in Kenya in the last 10 to 20 years while 54 percent of the banks have been operational for 21-30 years. 31% percent of the banks have operated in Kenya for more than 31 years. From

the above information, it is clear that most banks that offer electronic banking in Kenya have been operational in the last 21-30 years.

#### 4.2.4: Range of services offered electronically by the bank

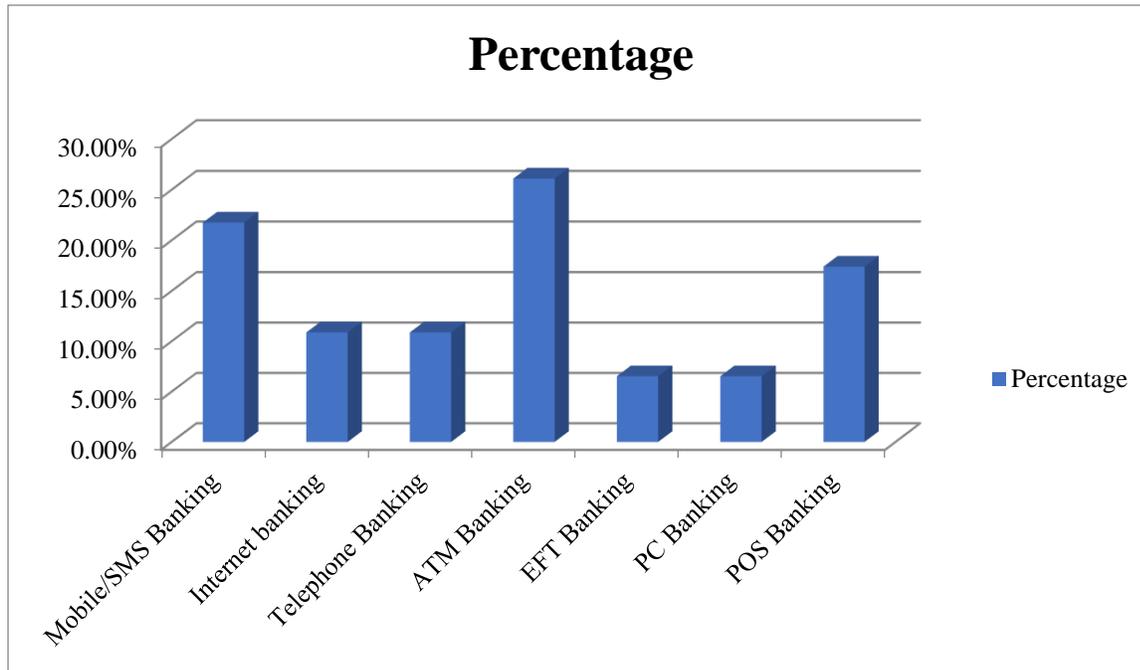
The respondents were asked to indicate the different services offered by the banks they represent.

Their responses were as in the table below:

**Table 4:** Range of services offered electronically by the Bank

<b>Range of Service</b>	<b>Frequency</b>	<b>Percentage</b>
Mobile/SMS Banking	10	21.74%
Internet banking	5	10.87%
Telephone Banking	5	10.87%
ATM Banking	12	26.09%
EFT Banking	3	6.52%
PC Banking	3	6.52%
POS Banking	8	17.39%
<b>Total</b>	<b>46</b>	<b>100%</b>

The findings are as shown in figure 4 below.

**Figure 4:** Range of services offered electronically by the Bank

According to the table above, mobile banking accounts for 21.74% of the market space, ATM banking is 26.09%, Internet banking captures 10.87% of customers, telephone banking is not as common as it only has 6.52% while POS banking captures 17.39% of the market space. It is therefore clear from the data above that mobile banking is the most common electronic service amongst the banks in the study.

#### 4.2.5: Level of service delivery

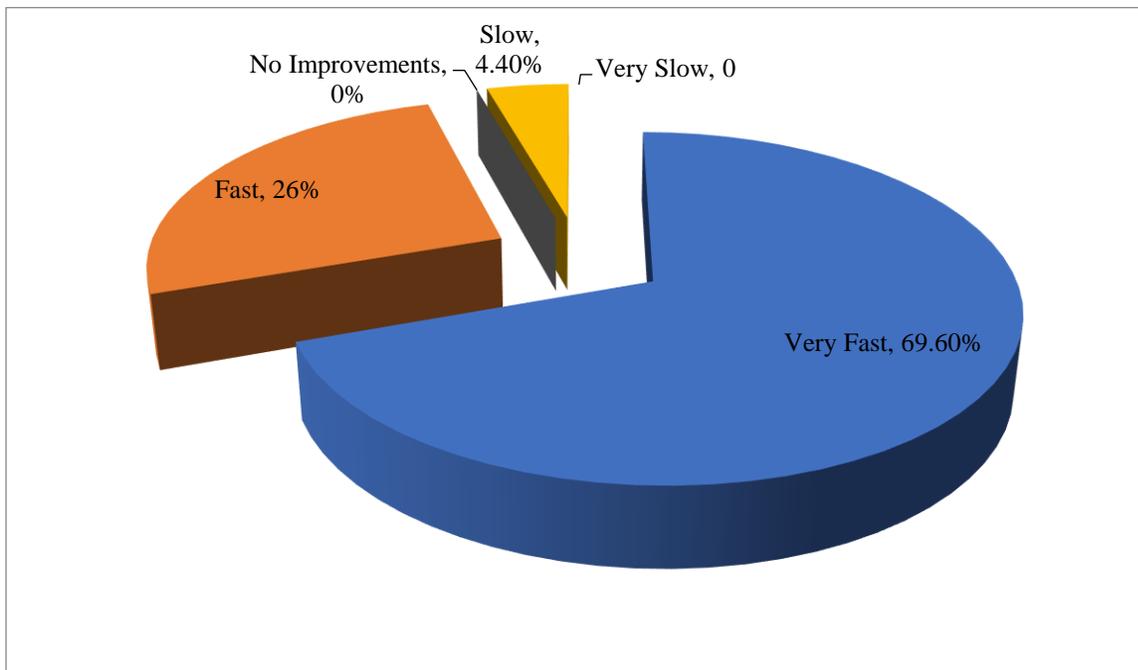
The respondents were asked to rate the level of service delivery since they were introduced to electronic banking. The response was as in the table below:

**Table 5:** Level of Service Delivery

Level of service delivery	Frequency	Percentage
Very Fast	32	69.6%

Fast	12	26%
No Improvements	0	0%
Slow	2	4.4%
Very Slow	0	0
<b>Total</b>	<b>46</b>	<b>100%</b>

**Figure 5:** Level of Service Delivery



The findings as in the above diagram and table indicate that 69.6 % of service delivery is very fast owing to the use of electronic banking while 26% of banks applying electronic banking to deliver their banks are fast and 4.4% of banks applying e-banking are slow. 0% shows that service delivery is very slow and the same percentage for no improvements. The information shows that majority of the respondents think that electronic banking has improved and increased the rate of service delivery.

## 4.3 Profitability

### 4.3.1 Range of Profits over the Previous Years

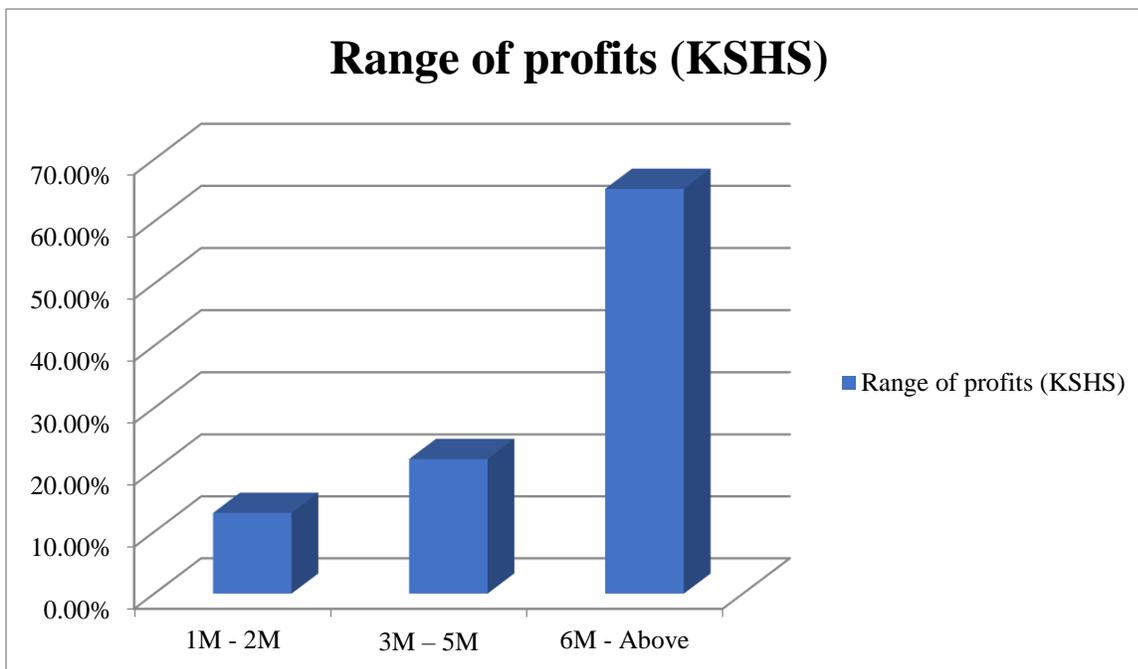
The respondents were asked their range of profits in the previous years. The responses are as indicated in table 6:

**Table 6:** Range of Profits over the Previous Years

Range of profits (KSHS)	Frequency	Percentage
1M - 2M	6	13.04%
3M – 5M	10	21.74%
6M - Above	30	65.23%
<b>Total</b>	<b>46</b>	<b>100%</b>

The findings are illustrated in the figure below:

**Figure 6:** Range of Profits over the Previous Years



The above data indicates that 13.04% of the respondents have their profits ranging between 10-20 million shillings while 21.74% have their profits between 20-40 million shillings and 65.23% indicated profit margins of above 60M.

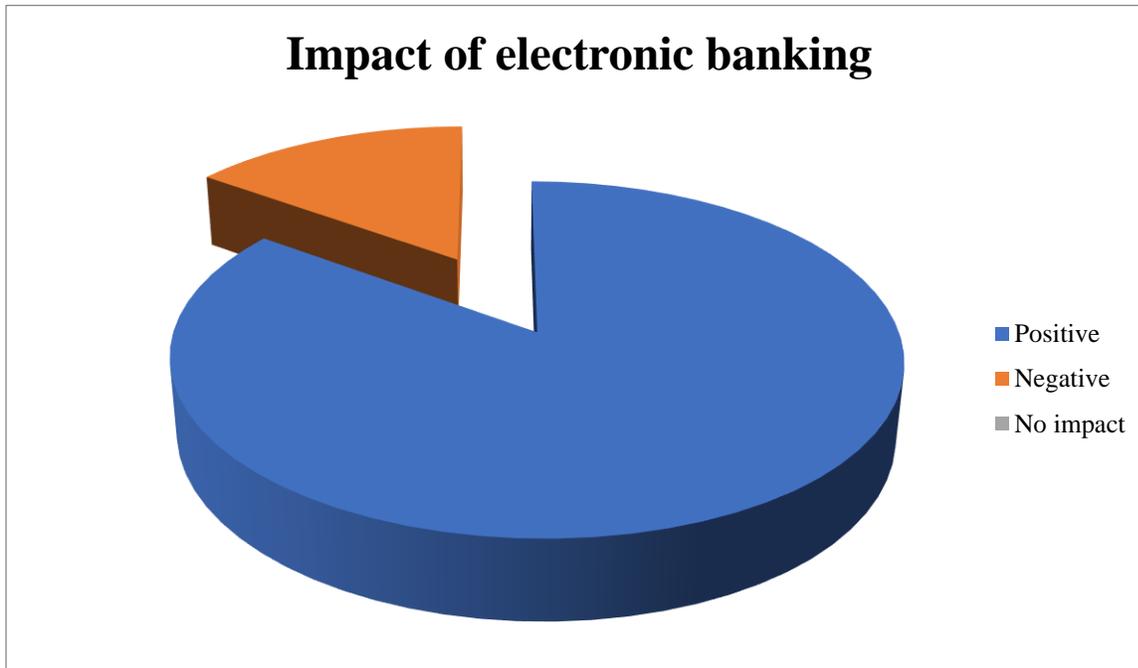
#### **4.3.3: Impact on financial performance**

The respondents were asked whether electronic banking has had a positive, negative or no impact on the financial performance of the bank. Their responses were as in the table below:

**Table 7:** Impact on financial performance

<b>Impact of electronic banking</b>	<b>Responses</b>	<b>Percentage</b>
Positive	39	85%
Negative	7	15%
No impact	0	0%
<b>Total</b>	<b>46</b>	<b>100%</b>

**Figure 7:** Impact on financial performance



The figure and table above show that 85% of the respondents were in agreement that electronic banking has a positive impact on the financial performance of the respective banks while 15% of the respondents thought it had a negative impact on the financial performance of banks their reason being security of electronic banking. 0% of the respondents indicated that electronic banking had no impact. From the above findings it is clear that we can conclude that electronic banking has had a positive impact on the financial performance of Kenyan banks.

## 4.4 Cost

### 4.4.1: How costly is electronic banking

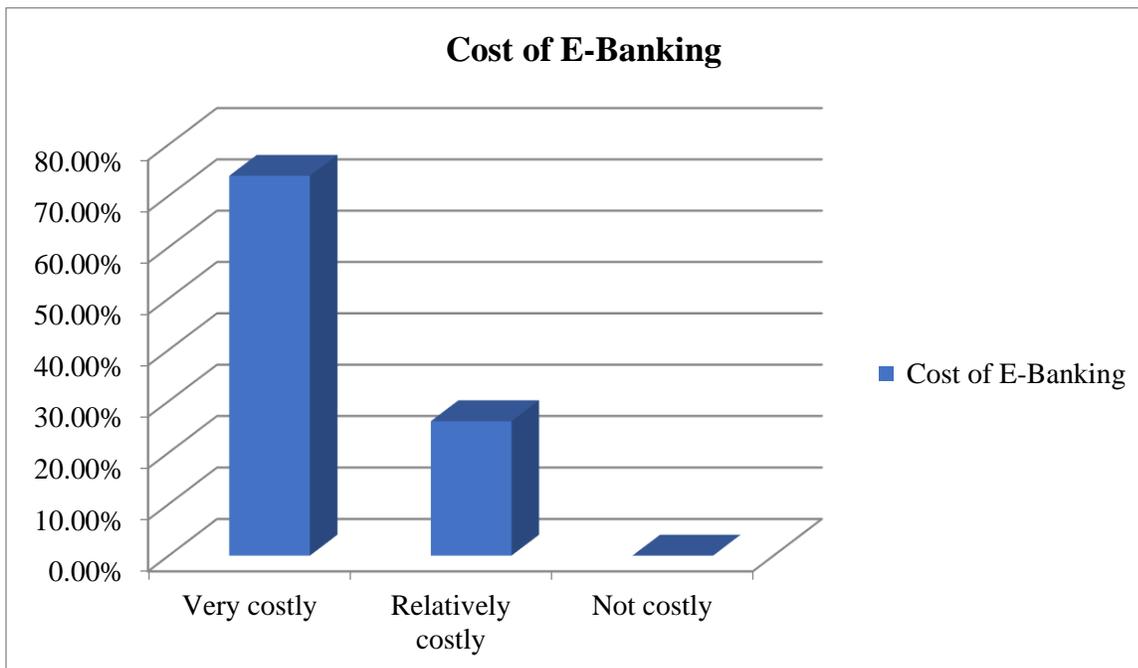
The respondents were asked if they think electronic banking was costly to implement as part of their services offered to customers when compared to traditional banking system infrastructures and reward. Their response was recorded in the table 9 below:

**Table 8:** How Costly is E-banking

Response	Frequency	Percentages
Very costly	34	73.91%
Relatively costly	12	26.09%
Not costly	0	0%
<b>Total</b>	<b>46</b>	<b>100%</b>

The research findings are illustrated in the figure below:

**Figure 8:** How Costly is E - banking



The findings illustrated in the figure above indicate that 73.91% consider electronic banking to be costly while 26.09% take it to be relatively costly and 0% of the respondents consider it not costly at all. It can be concluded that to come up with electronic banking is costly.

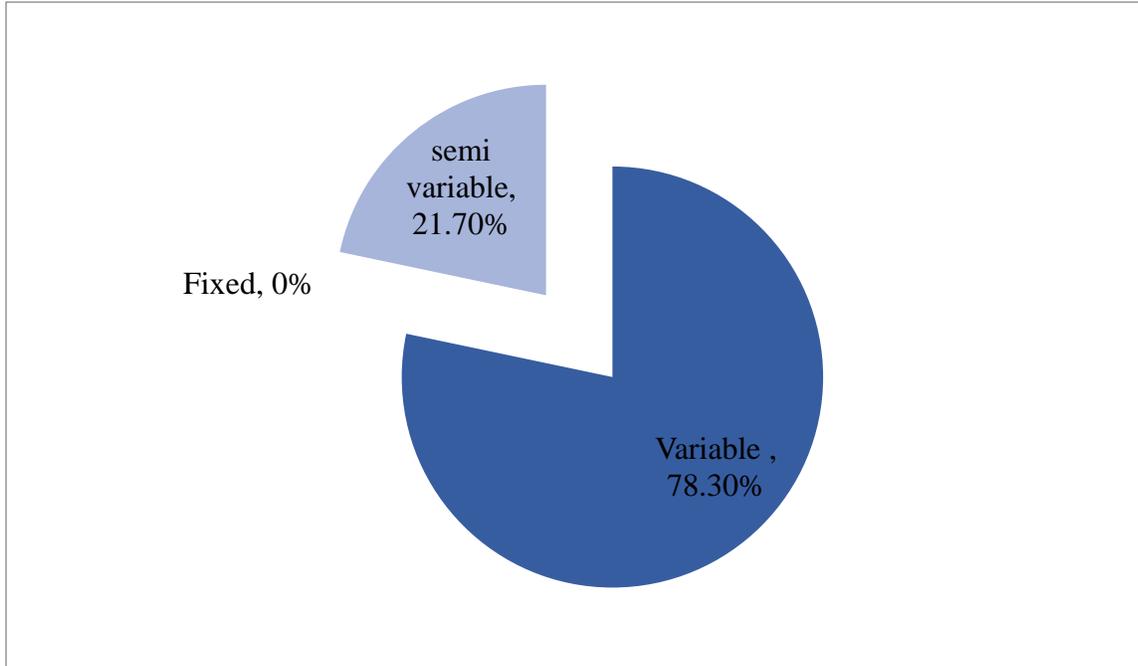
#### 4.4.2 Type of Costs Incurred

The respondents were asked to indicate different types of costs incurred in the bank. Their responses are as recorded in the table below:

**Table 9:** Type of Costs

<b>Type of costs</b>	<b>Frequency</b>	<b>Percentage</b>
Variable	36	78.3%
Fixed	0	0%
semi variable	10	21.7%
<b>Total</b>	<b>46</b>	<b>100%</b>

Research findings are illustrated in the figure below:

**Figure 9:** Type of Costs

The research findings show that 21.7% percent dealt with semi variable costs as indicated in the figure above. 78.3% of the correspondents dealt with variable costs owing to its variance with output. Consequently, the implementation of electronic banking has affected the banks financially due to costs associated with launching it. Operational costs have also rose over gradually since this platform was launched by the different respondents. Nevertheless, it is safe to conclude that banks have benefited from this platform by reducing the turnaround time and queuing in its halls.

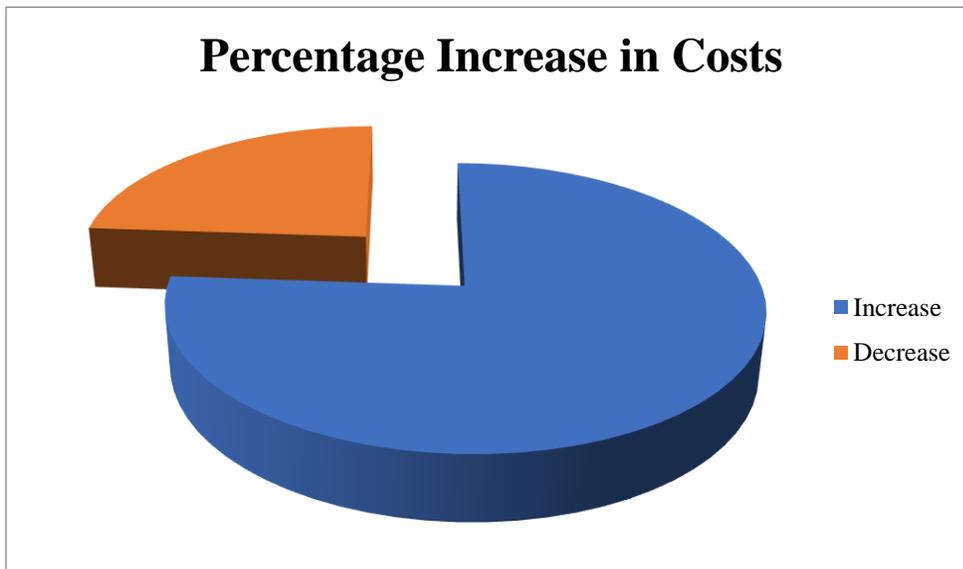
#### **4.4.3 Increase in Costs**

The respondents were asked whether the increase in costs has had any impact on the financial performance of the banks. The table below presents the responses:

**Table 10:** Percentage Increase in costs

Costs	Frequency	Percentage
Increase	35	76.1%
Decrease	11	23.9%
<b>Total</b>	<b>46</b>	<b>100%</b>

The research findings are shown in the figure below:

**Figure 10:** Percentage Increase in costs

The table and figure above show that 76.1% of the respondents were in agreement that the increase in costs has had a positive impact on the financial performance whereas 23.9% showed that there 23.9% decrease in cost. From this analysis, it is very clear that electronic banking is a very costly endeavor. Banks have the advantage as they utilize the internet to “shift cost” to the customer. This happens when an individual pays less for one service and the extra cost is transferred to another person or group and therefore shifting the right cost from one customer to

the other. This has been enabled by the huge expansion of the banking online infrastructure. The high cost of acquiring and implementation is transferred to the customer.

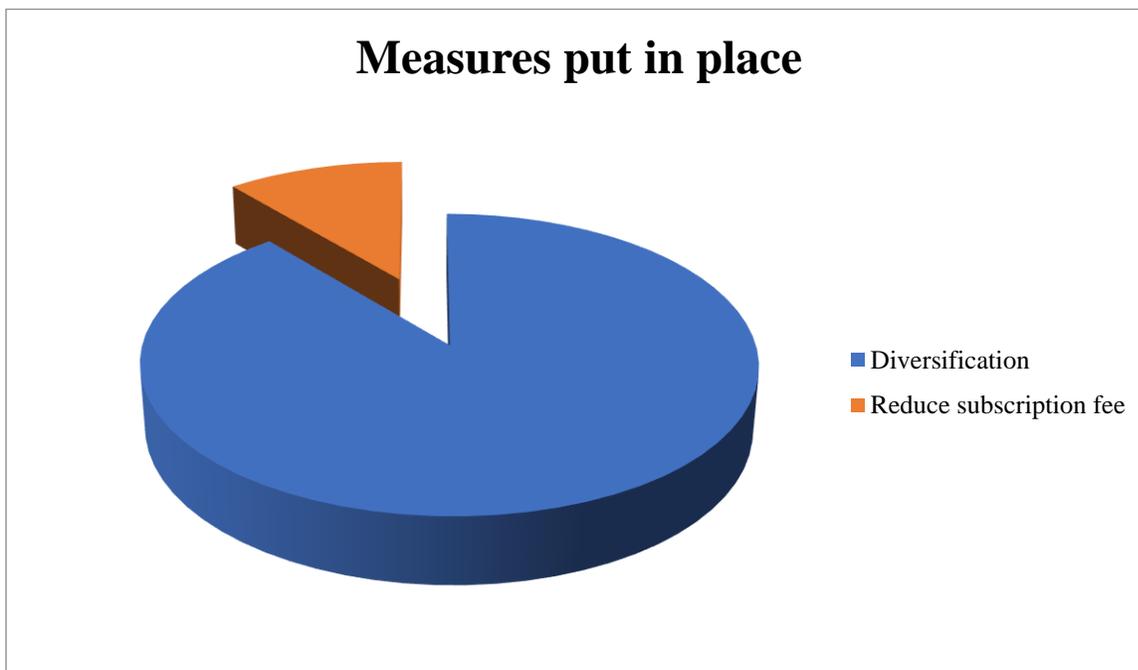
#### 4.4.4 Measures Put in Place

The respondents were asked what measures are in place to bring down the costs. Their responses were recorded in the table below:

**Table 11:** Measures Put in Place

Measures	frequency	Percentage
Diversification	41	89%
Reduce subscription fee	5	11%
<b>Total</b>	<b>46</b>	<b>100%</b>

**Figure 11:** Measures put in place



The findings from the research as in table 11 show that 89% considered diversifying their resources to the bank branches while 11% of the respondents considered internet bringing down the Internet subscription fees. The research findings from table 11 indicate that 89% considered diversifying their resources to the branches while 11% considered reducing the internet subscription fee.

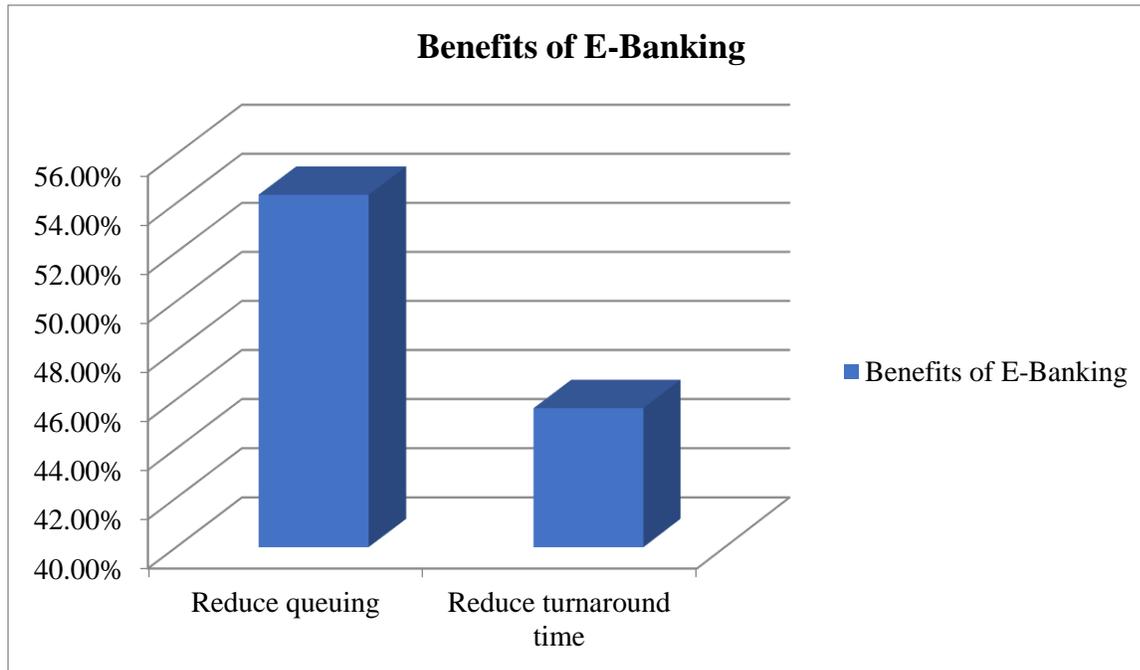
#### 4.4.5 Benefits

The respondents were asked how the bank has benefited from investing in electronic banking and they responded as in the table below:

**Table 12:** Benefits

<b>Benefits</b>	<b>frequency</b>	<b>Percentage</b>
Reduce queuing	25	54.35%
Reduce turnaround time	21	45.65%
<b>Total</b>	<b>46</b>	<b>100%</b>

The findings are shown in the figure below;

**Figure 12: Benefits**

The findings as indicated in the table and figure 13 shows that 54.34% reduced the number of queues in banking halls whereas 46.5% the turnaround time.

## 4.5 Services

### 4.5.1: Services offered

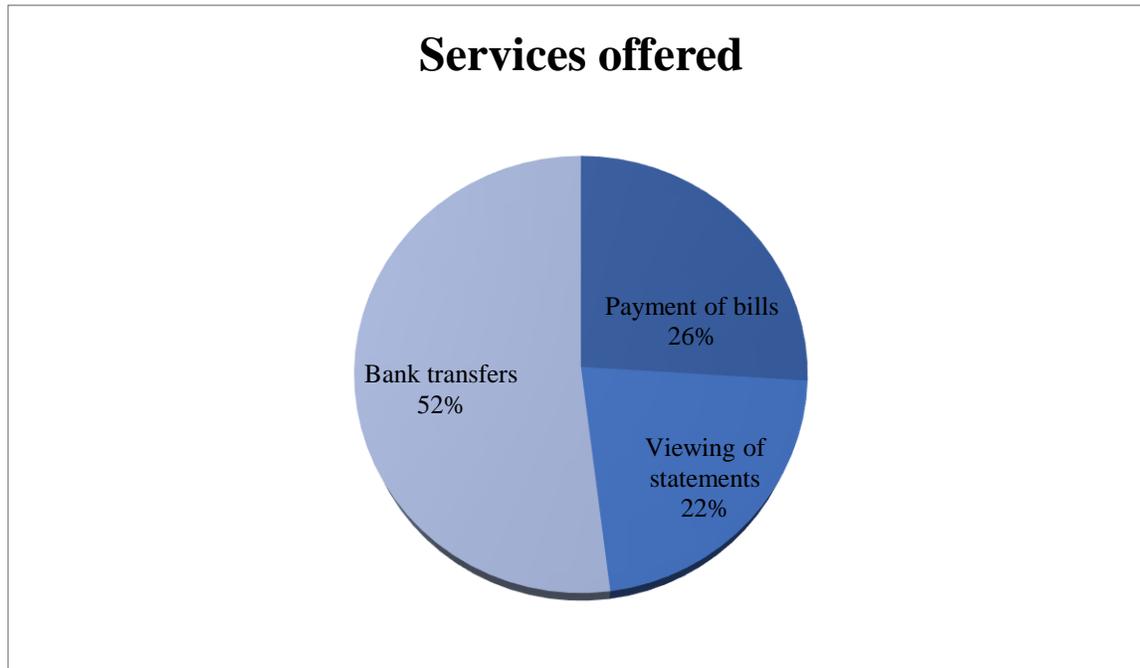
The respondents were asked what type of services the banks offered to their customers. The table below shows the responses:

**Table 13: Services Offered**

Services offered	Frequency	Percentage
Payment of bills	12	26%
Viewing of statements	10	22%
Bank transfers	24	52%
<b>Total</b>	<b>46</b>	<b>100%</b>

The research findings are illustrated in the figure below;

**Figure 13:** Services Offered



The results as of table 14 indicate that 26% of the respondents pay their utility bills by the means of electronic banking whereas 22% look up for their statements electronically. 52% offer bank transfers electronically. This data shows that a number of different services are offered by the means that a number of services are provided using e-banking by each the banks in this study.

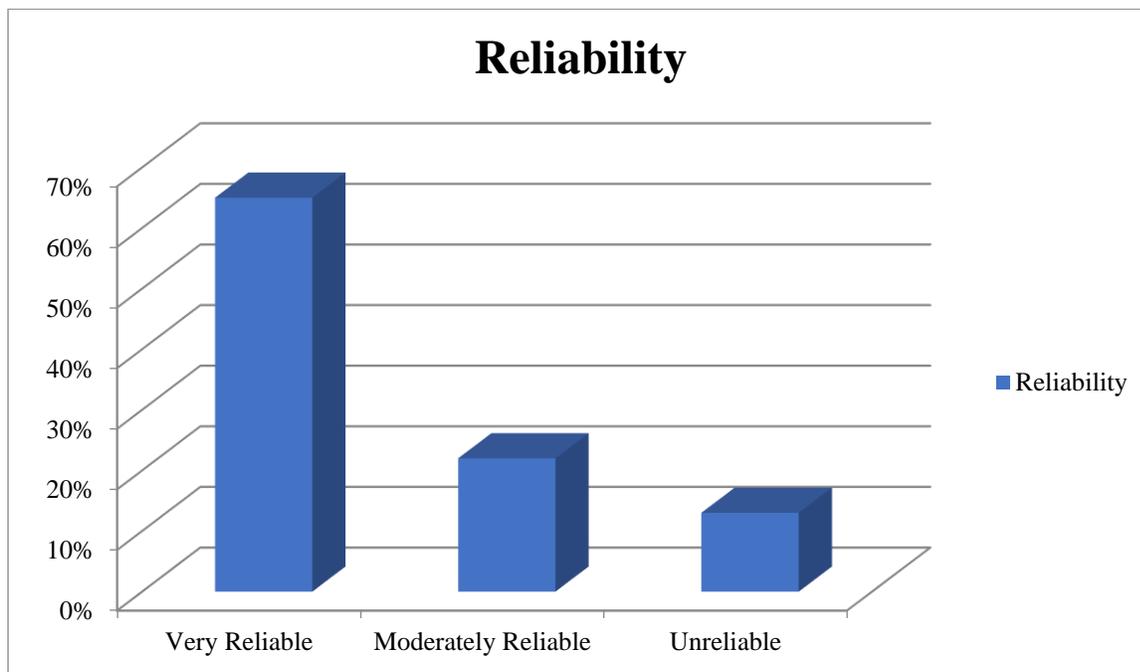
#### **4.5.2: Reliability**

The respondents were asked how reliable electronic banking is to its customers in service delivery.

The responses are indicated in the table below:

**Table 14:** Reliability

<b>Reliability</b>	<b>Frequency</b>	<b>Percentage</b>
Very Reliable	30	65%
Moderately Reliable	10	22%
Unreliable	6	13%
<b>Total</b>	<b>46</b>	<b>100%</b>

**Figure 15:** Reliability

According to table 14 and figure 15, 65% of the respondents agree that electronic banking is very reliable to use while 22% think that it is moderately reliable. 13% of the respondents think that electronic banking is unreliable. The findings prove that electronic banking is a very reliable mode of delivering services.

### 4.5.3: Service Improvement

The respondents were asked if customer service has been improved by the launch of e-banking.

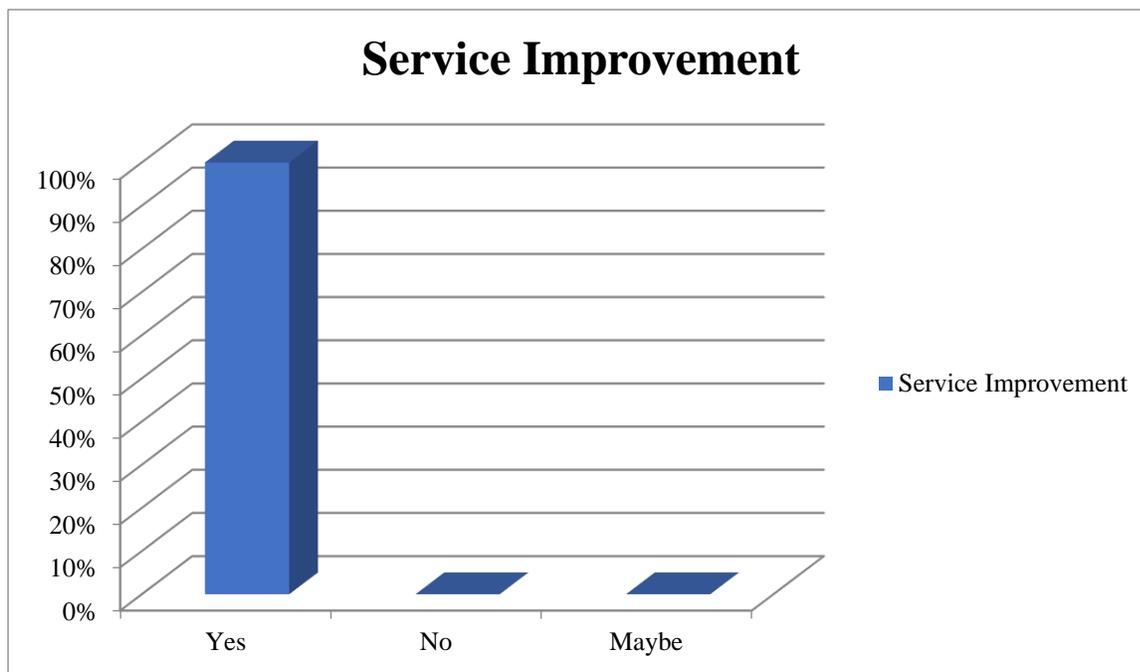
The responses are tabulated below:

**Table 15:** Service Improvement

Customer service	Frequency	Percentage
Yes	46	100%
No	0	0%
Maybe	0	0%
<b>Total</b>	<b>46</b>	<b>100%</b>

The findings are shown in the figure below:

**Figure 15:** Service Improvement



As per the data above, it is clear that customer service has improved in all the banks involved in the study.

#### 4.5.4 Impact on Financial Performance

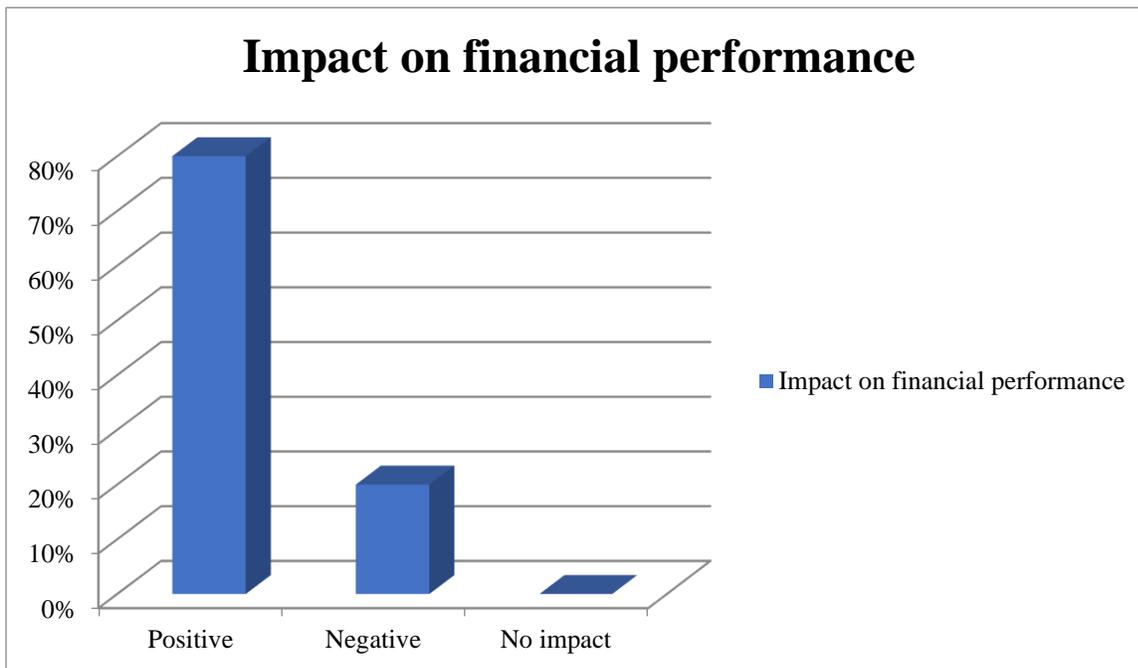
The responses were asked if electronic banking has impacted on the financial performance of the banks. The responses are shown in the table below:

**Table 16:** Impact on Financial Performance

Impact	Frequency	Percentage
Positive	37	80%
Negative	9	20%
No impact	0	0%
<b>Total</b>	<b>46</b>	<b>100%</b>

The findings are illustrated in the figure below:

**Figure 16:** Impact on financial performance



As per table and figure 17, 80% of the respondents show a positive impact while 20% show there is negative impact. No respondent indicated that there was no impact.

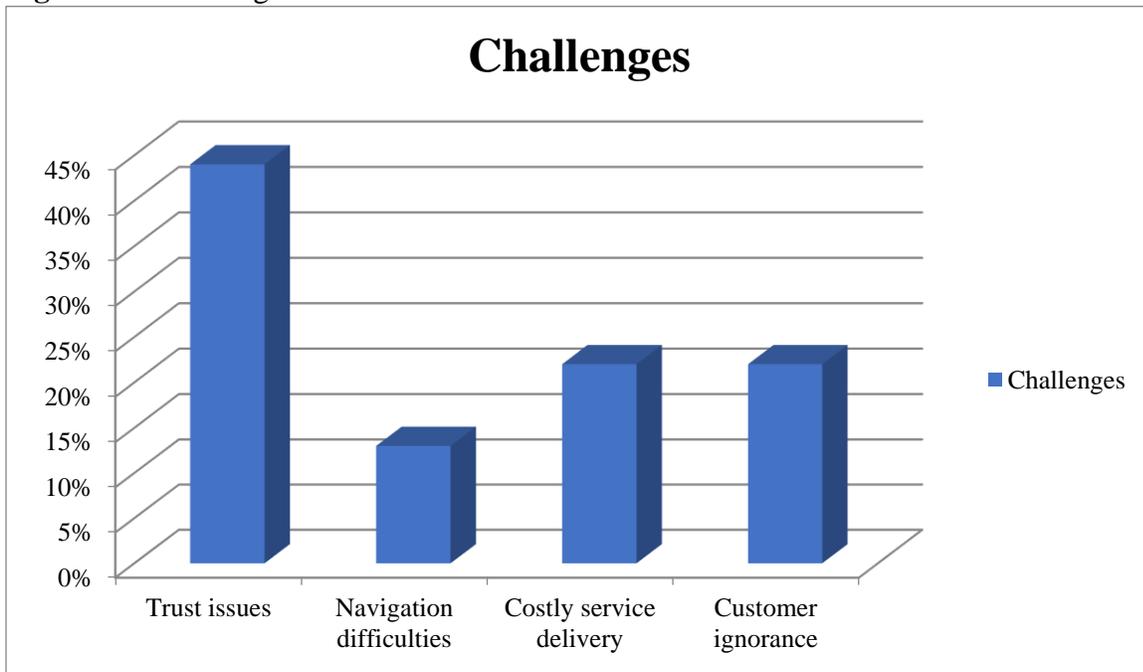
#### 4.5.5 Challenges faced

The respondents were asked to indicate the challenges they face in service delivery by using electronic banking. Their responses were recorded in the table below:

**Table 17:** Challenges

<b>Challenges</b>	<b>Frequency</b>	<b>Percentage</b>
Trust issues	20	44%
Navigation difficulties	6	13%
Costly service delivery	10	22%
Customer ignorance	10	22%
<b>Total</b>	<b>46</b>	<b>100%</b>

The findings are represented in the figure below:

**Figure 17: Challenges**

The findings indicated in table 18 and illustrated by figure 18 show that banks in Kenya face various challenges when executing their duty and dealing with customers. 44% of the respondents highlighted trust issues while 22% indicated ignorance on the part of the customer. 13% indicated difficulties in navigation and 22% showed customers not conversant with electronic banking. Therefore, it can be concluded that trust issues is the biggest challenge affecting electronic banking and its service delivery. The reason for this is that most of the customers are not well educated especially on matters technology hence the resistance and fear.

#### **4.6. Chapter Summary**

This chapter has been able to present all the research findings and presented them in tables and figures vividly.

#### **4.6.1 Profitability**

The study and analysis of data has shown that profits have improved since banks in Kenya started using electronic banking. Consequently, there is a positive impact on the financial performance of the banks in Kenya.

#### **4.6.2 Costs**

The study has indicated that there have been both positive and negative impacts in terms of cost. Despite the increase in costs, the banks have been able to introduce electronic banking across all their branches and carry out customer education on electronic banking. This has brought more customers on board which means more profits.

#### **4.6.3 Services**

The study has indicated that banks in Kenya have continued to encourage their customers to get into e-banking by using measures like reduction of subscription fees.

## CHAPTER 5

### 5. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter discusses the results found in the study and concludes what has been found in the research. It also highlights the limitations of the study and what the research recommends for electronic banking in Kenya.

#### 5.2 Discussion

##### 5.2.1 Profitability

In average, the return on equity of the banks involved in the study declined by 8.3% in 2016. This was due to capping of interest rates by the central bank of Kenya as well as liquidity problems of borrowers. The study shows that many of the banks have been able to increase profitability steadily over the past few months and they need to expand their customer base so as to maximize their profits.

##### 5.2.2 Cost

The research has clearly indicated that the banks involved in this study dealt with semi-variable and variable costs owing to their variance with borrowers and customers. Transaction costs through e-banking are minimal therefore, a lot of consumers have been able to afford the services.

##### 5.2.3 Services

Majority of the banks in Kenya have introduced mobile banking, internet banking, ATM banking and many other forms of electronic banking platforms so as to enhance service delivery to their

clients. However, it is critical for these services to include programs that can widen consumer consumption by building on their knowledge in the ever growing and innovating banking industry. For instance, internet banking is very fast and convenient, yet it has not gained the acceptance it needs among many Kenyans due to security and apprehension fears in this type of banking. Just like many other developing countries, Kenya is in its budding stage in terms of development. Many banks are now adopting electronic banking with majority of them having at least two technology-based forums. Previously, infrastructural issues, legislation and education have been the main hindrances to this development.

### **5.3 Conclusion**

#### **5.3.1 Impact of Electronic Banking on Profitability**

The study aimed at investigating whether electronic banking had some impact on the Kenyan Banks profitability as well as the impact electronic banking has had on the financial performance of these institutions. It was found out that profits have improved after the introduction of electronic banking in the banks involved in this study.

#### **5.3.2 Impact of Electronic Banking on Costs**

It is clear that the introduction of e-banking cost the banks significantly. The study found out that the increased costs have had both positive and negative impact to the financial performance of the studied banks. This has led to the banks diversifying their resources and reducing the subscription fees for POS banking, mobile banking as well as Internet banking as a measure to bring down the increased costs.

### **5.3.3 Impact of Electronic Banking on Services**

The study aimed at investigating whether electronic banking had any, positive or negative, impact on the intensity and extant of services offered by the institutions. It was established that e-banking has had a positive impact on the services offered as more customers have been able to transact different services electronically. It has also been very easy to access their accounts and therefore saving on valuable time.

### **5.4 Recommendations**

Based on the findings in this study, it is recommended that:

1. Banks should embark on educating and creating awareness among their customers on the benefits if electronic banking and the charges involved.
2. Kenyan banks should invest more on electronic banking so as to reach more customers electronically.
3. The study has shown that electronic banking has a positive impact on the financial performance of the banks and therefore they should offer more targeted online services as well as come up with more technology based services that are easily reachable by customers.

### **5.5 Limitations of the study**

In the course of the study, a number of limitations were encountered. The research faced financial and time constraints. Some respondents were slow to fill and return the questionnaires and therefore it required a lot of follow up to get the results. Some respondents answered the questionnaires hurriedly and therefore the results were limited. Some respondents were not willing to give interviews and others withheld information due to institutional secrecy.

## **5.6 Further Research**

Further research can be carried out in the following topics;

1. To investigate measures that Kenyan banks are putting in place to enable all customers access more than one platform of electronic banking.
2. How electronic banking impacts return on equity.

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## APPENDICES

### Appendix 1: Questionnaire

My name is Michael Mwangi Kiragu, I am a student at Vaasa University of Applied Sciences in Finland carrying out a study on the effects of E-banking on the financial performance of Kenyan banks. This is in partial requirement for fulfillment of the award of the degree of Bachelor of Business Administration (BBA) in International Business and any information given will be treated as confidential.

Your cooperation will be highly appreciated. Thank you.

#### Fill/Mark where appropriate.

Name (optional).....

Gender      Male.....              Female.....

#### Introduction

1. How many branches does this bank have in Kenya?

- a.       1-20
- b.       21-50
- c.       more than 50

2. When was E-banking first introduced in this bank?

.....  
 .....

3. For how long has this bank been in operation?

- a.       10 – 20 years
- b.       21-30 years
- c.       over 31 years

4. Please indicate the range of services offered by the bank?

- a.       Mobile/SMS banking

- b.  Internet banking
- c.  Telephone banking
- d.  ATM banking
- e.  Electronic Fund Transfer
- f.  PC banking

Any other please specify

.....  
.....

- 1. How do you rate the level of service delivery since introduction of E-banking?
  - a.  Very fast
  - b.  Fast
  - c.  No improvements
  - d.  Slow
  - e.  Very slow

7. What challenges has the bank faced with the adoption of E-banking?

.....  
.....

**A: PROFITABILITY**

1. How has E-banking impacted on the financial performance of this bank?

- a.  positively
- b.  negatively
- c.  no impact

2. What has been the range of profits in the previous years?

1B - 2B

3B – 5B

[ ] 6B ABOVE

1. How have earnings per share changed since electronic banking was introduced?

.....  
.....

2. What portion of your profitability do you attribute to electronic banking?

.....  
.....

**B: COSTS**

1. Is electronic banking costly?

Yes [ ]

No [ ]

2. How costly is it?

.....  
.....

3. What are the types of costs are incurred?

Variable costs [ ]

Fixed costs [ ]

Semi variable costs [ ]

Others

.....  
.....  
.....

4. Has the increase in costs had any impact on the financial performance of this bank?

[ ] yes

[ ] no

5. What measures are in place to cut down on these costs?

.....  
 .....  
 .....

6. How has this bank benefited from investing in electronic banking?

.....  
 .....

### **C: SERVICES**

1. What kind of services does this bank offer electronically?

- a.  payment of bills
- b.  online viewing of statements
- c.  bank transfers
- d. Others:

.....  
 .....

2. How reliable is electronic banking to its customers in service delivery?

- a.  Very reliable
- b.  Moderately reliable
- c.  Unreliable

3. Has customer service improved since the launch of e-banking?

- a.  yes
- b.  no
- c.  maybe

4. How has this impacted on the financial performance of this bank?

- a.  positively
- b.  negatively

c.  no impact

5. What are the challenges faced so far in relation to service delivery?

a.  trust issues

b.  customer ignorance

c.  navigation difficulty

d.  costly service delivery

e. Others:

.....

.....

**APPENDIX 2 - WORKING PLAN**

<b>Activities</b>	<b>Dec 2016</b>	<b>Jan - March 2017</b>	<b>April - May 2017</b>	<b>June 2017</b>	<b>July - August 2017</b>	<b>September - 2017</b>
<b>Proposal Writing</b>						
<b>Literature Review</b>						
<b>Data Collection</b>						
<b>Field Work</b>						
<b>Data Analysis</b>						
<b>Report Submission &amp; Presentation</b>						