AUTOMATED MONEY TRANSFER SERVICES AND CUSTOMER SERVICE QUALITY IN EQUITY BANK IN NAKURU TOWN, KENYA

KINYANJUI SUSAN

D53/OL/NKU/24182/2014

A Project Submitted to the School of Business in Partial Fulfilment of the Requirement for the Award of Masters of Business Administration (Management Information Systems) of Kenyatta University

June, 2018

DECLARATION

This project is my original work and has not been presented to any other university.

Signature_____ Date_____

KINYANJUI SUSAN M. **D53/NKU/OL/24182/2014**

This project has been submitted with my approval as the Kenyatta University supervisor.

Sign _____ Date_____

DR. DAVID M.NZUKI
MANAGEMENT SCIENCE DEPARTMENT
KENYATTA UNIVERSITY

DEDICATION

To my dear parents, baby Blessings, siblings and friends for their moral and financial support throughout my time of study at Kenyatta University.

ACKNOWLEDGEMENTS

I am most grateful to the Almighty God for giving me good health, strength, ability, and peace of mind while studying and during my research. I acknowledge the contribution and support of my research supervisor Dr Nzuki without which this work will not be a success.

Finally am grateful to all my friends with whom l had fruitful discussions.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

OPERATIONAL DEFINITION OF TERMS

Automated Money Transfer Service: Use of electronic or bank-card based payments in carrying out different transactions.

Customer Service quality: Also called customer service to refer to level of satisfaction of a banking product by the customer or banking client

Automated Teller Machine (ATM): Computerized telecommunications device situated in a open space that enables the clients of a banking institution to access their accounts for financial transactions without the human assistance whether cashier or bank teller.

Electronic Payment: Any cash and associated transactions implemented using electronic means.

M-PESA service: Safaricom's money transfer and money saving service via use of mobile phone technology.

Electronic Fund Transfer: Transfer of funds besides those that originate from transactions by cheque, draft, or related paper instruments and which are facilitated by use of such means as telephone, electronic terminal, or any computerized system to authorize any financial institution to credit or debit an account

ABSTRACT

With the banking innovation of the technology of e-banking to enhance banking products and service, numerous studies have been done focusing on its efficiency and profitability. However, its effect on customer service quality is still misunderstood. It is accepted for a fact that delivery of service in banking can be said to be efficient only when the underlying operations are equally efficient. And such confidence in efficiency can only arise in as far as the user's experience for these products and services has been evaluated. The aim of the study was assess the effect of automated money transfer services on customer service in Equity Bank in Nakuru Town. The study was guided three main objectives, namely: to assess the effect of M-PESA, Electronic Funds Transfers, and Automated Teller Machines on customer service in Equity bank. The study adopted modernization theory and the innovation diffusion theory to understand the conceptual issues. The research adopted a descriptive survey design and used simple random sampling to select the sample size for Equity staff. And for customers and bank employees in the customer service department, purposive sampling technique was used. The study used a sample size of 379 respondents. Questionnaires were used to collect data for the study. All the three money transfer services (Mpesa services, EFT and ATMs) studied had a positive effect on customer service at Equity Bank. The study recommended that commercial banks management should consider; tailoring their money transfer options to the MPESA service option considering the fact that this was the most preferred option due to its convenience and speed; raising customer awareness on the advantages of the EFT money transfer service; and enhancing the quality offered by ATMs money transfer service. The management of Equity bank will use such information to gauge the effectiveness of automated money transfers as payment systems.

LIST OF ABBREVIATIONS

ABM	Automated Banking Machine
AMT	Automated Money Transfer
ATM	Automated Teller Machine
CPU	Central Processing Unit
DRC	Democratic Republic of Congo
EFT	Electronic Fund Transfer
GDP	Gross Domestic Product
MTS	Money Transfer Services
PC	Personal Computer
PDA	Personal Digital Assistant
PIN	Personal Identification Number
POS	Point of Sale
SQ	Service quality
SWIFT	Society for Worldwide Interbank Financial Telecommunication

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Globalization and international experience are some the world's great forces that cannot be ignored. The banking industry needs to integrate their activities strategically, amidst these experiences so as to be able provide quality of service to their customers (Jegede, 2014). People (especially the increased number of immigrants around the world) were not satisfied by only making and saving money, but craved for more flexible and reliable ways of accessing or transferring money in distant locations (Badran, 2009). Generally, people in the modern world engage in electronic money transfer to send and receive money for numerous needs including payment of school fees, family needs, settling debts in business and many more. Affordable, reliable and efficient money transfer services (MTS) are therefore very necessary. Effective MTS is where money can be deposited in one location and be available for withdrawal in another area whether urban or rural areas with ease and to the satisfaction of the subscribers. It is worth noting that MTS have been evolving over time. The services have gradually changed over time from the days when people used the post office to the most modern advanced technology where one only needs to click and send, what is referred to as the automated money transfers (Ratha, Mohapatra, Vijayalakshmi & Xu, 2007).

Automated Money Transfer service is the use of bank-card based payments in carrying out different transactions. Among the chief advantages of Automated Money Transfer services is its convenience and cost effectiveness to customers when making payments in all aspects of money transfer to and from various accounts an individual may have in different banks (CBK, 2003). Money transfer service was first introduced in the US in 1871. In the last decade, the adoption of Automated Money Transfer services has been used as a channel of distribution for advancement of the financial services since there has been rapid growth in information technology and intensive competition in the banking sector (Mahdi & Mehrdad, 2010). Common forms of MTS include mobile funds transfer, online transfer services, automated teller machines.

Money transfer services have proved useful in developed countries, especially, and countries with higher income. Immigrants from across the world are more attracted to high income countries such as nations of Western Europe such Great Britain, Germany, France as well as the USA. Besides, these countries rely and accept immigrant labor to supplement theirs. While there these immigrants transfer large volumes of their income back home. Consequently this boosts the economy of their countries in that those transfers increase the total GDP of their countries and improves the payment balance. Money transferred from immigrants working outside the country directly or indirectly increases the total GDP and improves their economy.

In Africa, high poverty level among the poor is attributed to inadequate and inaccessible financial services (World Bank, 2013). Access to finance is very necessary for people in that they require it so as to improve their productivity of their land, for example, by mechanization, improved agricultural methods, boost their level of education, improve their health services, initiate microenterprises , or even search for better opportunities. In countries such as Kenya, the tedious process requiring a physical location and transportation for money transfer has been simplified through automated money transfer services. Most Africans have to travel long distances in the quest of accessing retail outlets, since they do not have bank accounts. For instance, In Zambia, mobile money accounts have already overtaken traditional bank accounts, this is evidence by the large number of users of money transfer services in the country (Malakata, 2015).

Automated money transfer service is an extension of online banking. The types of online banking mostly used include phone banking, ATM, and online platforms from a personal computer. Online banking is the second most used one after phone banking as it is easier to access accounts by use of passwords and user names. Also, because of the increasing number of personal computers and laptop users. Email banking represents a type of banking that operates with the customers by sending and receiving emails. The customer informs the bank about the operations he would like to accept, via sending email to the bank, whereas the bank replies to questions. In Kenya, automated money transfer services mainly include phone applications such as M-PESA, M-KESHO,

Electronic Funds Transfers online banking platforms, automated teller machine (ATM) banking and Society for Worldwide Interbank Financial Telecommunication (SWIFT) (Zayad, 2008). Gichungu and Oloko (2015) concluded that automated money transfer services have had a positive impact on the financial performance of commercial banks in Kenya over the 5 year period. Electronic fund transfer (EFT) refers to transfer of funds besides those that originate from transactions by check, draft, or related paper instruments. Any use of such means as telephone, electronic terminal, or any computerized system to authorize any financial institution to credit or debit an account, equates to electronic fund transfer.

Mobile money transfer has transformed the way people operate in our modern society. Using mobile money transfer has enabled people to accomplish a number of tasks such as social networking, art, photography, retrieval of information, shopping and other numerous financial tasks. People no longer need to carry wallet instead they rely on their cell phones. This even allows people in very remote areas in the developing world to bank using it. Besides, this has led development of digital finance and banking (The Economist, 2012).

1.2 Statement of the Problem

Most studies on the effect of automated money transfer services seem to focus on how profitable they are to the banks with little focus on customer service. Certainly there is growing interest in the need to understand the users' experience (Auta, 2010), since e-banking has been observed as a larger concept than merely user satisfaction. From this perspective, there is need to assess how essential is the user experience with regard to the existing technological products and services. It is accepted for a fact that delivery of service in banking can be said to be efficient only when the underlying operations are equally efficient. In Kenya the main electronic money transfer services used include: MPESA, Electronic Funds Transfers and Automated Teller Machines. The effect of such services has been reported to impact on customer service differently. AMTs as bank innovations are important in reflecting the performance of banking; however, their effect of on customer service quality is still misunderstood because individual AMTs' effect on

bank's customer service has not been equally tested (Nyangosi and Arora, 2011). Lack of understanding on the effect of these automated money transfer services may lead to reduced level of customer satisfaction. Considering the amount of resources spent to promote usage of automated money transfer services, it is prudent for the study to be carried out. In Nakuru town, owing to its rapid growth in population, an understanding of AMT services in satisfying money demand has increased and thus, a study on its effect on customer service is wanting.

1.3 Purpose of the Study

The purpose of the study was to assess the effect of automated money transfer services on customer service quality in Equity Bank in Nakuru Town.

1.4 Specific Objectives

Specific objectives of the study included:

i. To assess the effect of M-PESA services on customer service quality in Equity bank Nakuru town

ii. To establish the effect of Electronic Funds Transfers on customer service quality in Equity bank Nakuru town

iii. To evaluate the effect of Automated Teller Machines on customer service quality in Equity bank Nakuru town

1.3.3 Research Questions

i. What is the effect of M-PESA services on customer service quality in Equity bank, Nakuru town?

ii. What is the effect of effect of Electronic Funds Transfers on customer service quality in Equity bank Nakuru town?

iii. What is the effect of Automated Teller Machines on customer service quality in Equity bank Nakuru town?

1.5 Significance of the Study

This study is significant in that various agencies such as governments, State Corporation, banking sector and other stakeholders can use it in making critical decisions to improve their services by making them more efficient, reliable and user friendly. The reputation of such agencies can only be felt in such situations. Similarly, an efficient payment system is instrumental in the development of the nation's economy and banking sector. Findings of the research could be used by the government and all stakeholders to the management of Equity Bank will be able to use such information to gauge the effectiveness of automated money transfers as payment systems. Future studies may also rely on the findings of this study as background information.

1.6 Scope of the Study

The research was done among Equity Bank, Nakuru branches' customers, and confined itself on users of the automated money transfer services (AMTs) such as phone banking (M-PESA and M- KESHO), ATM, PC banking and email banking. The study covered both institutional and individual customers served by Equity bank. The study area, Nakuru Town Sub-County, is basically the former Nakuru Municipality; the place was selected because of its cosmopolitan nature and various economic classes reside here and are the likely clients. This made the study very interesting, since money transfer experiences are also likely to vary according to purpose of transfer.

1.7 Limitations of the Study

This study experienced the limitation of unwillingness of some of the respondents to provide information sought. This was due to the fact that issues regarding money are always treated confidentially. The research was also limited to residents and businesses in the Nakuru town, yet money transfer services should not be tied to a given geographical limitation.

1.8 Organization of the Study

Chapter one is the introduction to the study. This includes the background, statement of the problem, objectives, and research questions, significance of the study, scope and limitations of the study.

Chapter two presents the literature review. Literature related to the effect of automated money transfer services on customer service in banks in developing countries is examined. Review of related literature is got from various reports, books, and government publications. Among the issues tackled included: theoretical review, empirical review, summary of literature and research gaps and the conceptual framework.

Chapter three of the study describes the research methodology used to carry out the study. The chapter outlines the research designs, where the study is located, the target population, sample size and the sampling procedures used. Also described are the research instruments, piloting, procedures of data collection procedures and method of data analysis.

Chapter four deals with the study findings. These are described under: demographics of the respondents; effect of M-PESA services on customer service, effect of Electronic Funds Transfers on customer service, and effect of Automated Teller Machines on customer service in Equity bank Nakuru town.

Chapter five is the conclusions, summary and recommendations of the study. The main objective of the research was to assess the effect of automated money transfer services on customer service in Equity Bank in Nakuru Town. The chapter contains a summary of the study findings, the conclusion, recommendations and suggestions for further studies.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter examines the literature related to the effect of automated money transfer services on customer service. Review of related literature arises from print sources such as books, government documents, and reports. The sections covered include the theoretical review, empirical review and the conceptual framework. The empirical review is presented thematically according to the study objectives stated in chapter one.

2.2 Theoretical Review

The study was based on Modernization Theory and the Innovation Diffusion Theory.

2.2.1 Modernization Theory

Modernization theory was developed by Rostow Watt in 1960. It is used to clarify the manner in which modernization occurs in societies. Modernization refers to the progressive transition of a society from traditional to a contemporary society which are also referred to as modern society. The theory focuses on the internal factors of a country with the assumption that, developing counties need to follow the path that developed countries passed through, that is follow the same steps for them to attain modern level development levels. The theory assumes that the contemporary society is highly networked. These networks go beyond a country's boundaries, thus breaking the cultural and economic self-sufficiency that nation once experienced. The overall inferences of the interconnections implied in this theory demonstrate that societies co-exist with one another. Meanwhile, amidst forces such as globalization and international experience, the world has been reduced into a global village with information and resources being shared at high speed in existing networks. This theory is relevant to this study as it underscores the relationship between AMTS and banking industry customer service provision as a result of globalization which improve the socio-economic development and political-economy of a nation.

Banking systems have evolved from traditional cash systems and hand-written teller sheets to automatic check processing clearing systems and automated money transfer systems (IBM100). Automation of financial services has led to an increase in revenue generation, money transfer security and quality of service. Through the aspect of modernization, automation of banking services has spread across the globe, fostering economic and socio-economic development in developing nations. This is due to efficient social networks and knowledge transfer systems that exist today, and the need for "Western Standards" (Sharmila, 2005). In developing countries, banking models and customer service design have been built upon shared algorithms from developed countries that have been constantly tested and applied for sound business and customer service quality. Therefore, the theory of modernization, offers a broad view of the development, spread and the adoption of automated money transfer services.

This theory is relevant to this study, since, automated money transfer services are part of an ever-evolving modern technologies, which have succeeded to make the world a global village and made life easier and enjoyable for mankind. This study seeks information and insight on the effect of automated banking systems on service quality, rather than generation of bank revenues. It tries to bring out the significance of modernization of banks on its customers, based on the customer's banking experience, using AMT services system. The study also puts to account that we live in a network society through which cultural and economic practices and services can be shared across territorial and international borders.

2.2.2 Innovation Diffusion Theory

The adoption and acceptability of AMT services among users and general society can be linked with the concept of Innovation Diffusion Theory. Diffusion of an innovation is influenced by a number of factor which include; compatibility (the manner of it being consistent with users' norms and social practices), complexity (the aspect of it being friendly), relative advantage (the range in which technology gives an improvement to the existing instruments), trialability (the chance of trying out a new discovery before using

it), and observability (the range in which the output of technology and its benefits can easily be seen) (Rogers, 1983 & 2003; Dillon & Morris, 1996), These elements cannot predict the extent nor the rate of innovation diffusion, given that they are not mutually exclusive. Brancheau and Wetherbe (1990), Roger (1983) Tornatsky and Klein (1982) and gave grounding for the arguments in Benbasat (1991) who extended to seven the range of innovation characteristics. Of these seven characteristics, three namely: relative advantage, trialability, and compatibility, are derived from Rogers. From the outset, the theory describes the process of innovation decision within organizations, but it does not address in which manner interaction of these innovation characteristics affect organizations when adopted, or whether the nature of organization in terms of type, size, or industry may affect their adoption. Moreover, whereas the theory describes the process of innovation decision for individuals and in organizations, it leaves out to show the interaction of variables when these innovations are diffused across organizations.

This study finds this theory relevant since elements such as relative advantage, compatibility, complexity, trialability, and observability in Dillon and Morris (1996) are critical in determining the most effective automated money transfer service used in Kenya and the rest of the world today. Globally, AMT systems have been embraced by banks and they continue to do so. Such systems, such as ATMs, M-Pesa, M-Kesho among others, offer considerable benefits to both financial institutions and their customers. They enable customers to perform transactions with more convenience of time and location, than during banking hours at branches. In addition, by automating services that were previously completed manually, banking charges are reduced gradually, increasing revenue. These benefits are multiplied when banks share and integrate and internetwork their systems, allowing customers of other banks to access their accounts through a bank's system (McAndrews, 2003).

In Kenya, Automated Money Transfer systems adoption, follow the innovation diffusion theory curve, with adaptability varying among users. M-pesa money transfer service had a very rapid adoption compared to other services. This can be attributed to its ease of use, trialability and relative advantage, over other methods. As an innovation and through development, M-pesa has been able to provide a personal link with user's bank accounts

that allows easy and cheaper money inter-transfers, at the convenience of the user at any time or location.

In the study, the adoption of M-pesa, EFT, and ATM systems were compared and their significance on service quality on customers. Focus on customers' satisfaction based on convenience; cost of service, efficiency and relevance of service will be of priority. Therefore, the study is lays a foundation on the concepts and characteristics of Innovation Diffusion Theory. Which stresses on innovation factors of relative advantage, compatibility and trialability, that affect and influence customer preferences, hence their view on service quality.

2.3 Empirical Literature Review

2.3.1 Automated Money Transfer Services

According to Desai (2012) automated money transfer services are on the increase today, and this is supported by continuous research and development. Desai argues that the mobile money sector is gradually increasing globally and observes that in seventy –two countries there are about 150 mobile money services for those without bank account. Interestingly, 41 of them were started in 2012. This growth is largely attributed to Mobile Network Operators (MNOs), that operates about 72.0% of live facilities and of which72.5% of them were initiated in 2012; most facilities are found in Sub-Saharan Africa. The most commonly used globally include Card Payments such as ATMs, Credit and Debit cards and Smart cards; Mobile Banking and Money Transfer such as M-PESA, CelPay, Msente and M-Kesho; and Electronic Funds Transfers just to mention but a few (Kumbhar, 2011). The underlying purpose of these approaches is to transfer money from one client to the other or from one location to the other.

According to Otieno (2013) these AMT approaches have been adopted globally, for money transfers for example in Ghana has limited types of electronic payment systems that can be accessed customers. Otieno points out that some of the scarce electronic payment systems included the Transfer system, ATM Card, Mobile Money, Credit Card and Telephone Banking. . Other payment systems such as Electronic Purse/Wallets,

Electronic Cheque, Digitized 'E' Cash, Electronic Funds Transfer/Point of Sales (EFT/Pos), Smart Card and Digitized Person- to- Person were not available for use by the customers. The fact that the service providers failed to introduce these payment systems made it impossible for their customers to adopt and use them for electronic transactions. This is opposite compared to Kenya, where the industry continues to register high changes with regards electronic payment systems.

Kumbhar (2011) noted that poverty and other factors contribute to limited availability and effective use of technology in Africa. Besides Kenya and South Africa, the use of mobile money is evident among the poor populations in Africa countries such as Nigeria, Democratic Republic of Congo (DRC), Zambia, Zimbabwe, Tanzania, Uganda, and many other more. The popular money transfer in these countries include: MTN (Mobile Telephone Network) money, of South Africa but which also provides services in twenty one other countries in Africa and the Middle East; CelPayis available in Tanzania, Zimbabwe and Zambia; lastly, Msente operates in Uganda. This service is available to anyone with above sixteen years of age and with proper identification.

Since banks in Kenya started allowing customers to open accounts without deposits, more people in turn have bank accounts and can hence save and consequently alleviate poverty (Mwangi & Njuguna, 2009). A further development in the year 2000 that Mwangi and Njuguna noted was that the Kenyan government opened up competition among telecommunication companies. This was achieved through regulative policies. Communication has rapidly transformed following the competitive nature among companies, thus, creating opportunities for the introduction of mobile money transfers in the country.

Today, there a number of emerging options for money transfer as noted by Equity Direct (2016) which reported that Equity bank has partnered with major financial institutions such as VFX financial PLC from UK and FNB from South Africa to make it easy for its customers to remit money from abroad to Kenya. At an event to acquaint participants with information on how the money transfer service works and the impact it has had on

the Diaspora customers who use it to transfer money from abroad, Equity bank officials shed light on two of their key avenues - Equity Direct and PayPal.

2.3.2 M-PESA Services on Customer Service

The mobile phone has today taken over money transfer services and in addition has allowed people to engage in various online activities like shopping, access of information, social networking and other financial activities. One of the most popular features is the one that enables people in developing countries to do banking using mobile phones. Hence, they are able to undertake money transfer and related activities. According to The Economist (2012), MTS plays a pivotal function in enabling the development of digital finance as well banking. Consequently, their role in ensuring quality transfer services cannot be overemphasized.

According to a report by (TechMtaa 2010), Safaricom Ltd a mobile phone network provider in Kenya became the first to initiate mobile banking system that relies on text-messaging commonly known as *M-pesa*. The initial "M" means mobile, while "pesa" means money in the Swahili language. The report notes that after three years since its launch, it also came up with a banking loaning facility facilitated through M-pesa known as *M-kesho*. "Kesho", also a Swahili word meaning "tomorrow" with reference to the credit facility. This is a wonderful savings and loans arrangement for Safaricom subscribers (TechMtaa 2010). The best example of the possibility of mobile money transfer technology became actualized by Safaricicom Ltd. According to Safaricom Ltd (2012), it has been able to reach a total of 14.91 million customers, who use its services for deposits, sending and receiving, borrowing, and above all saving through their mobile phones. It is important to note that customers have been enabled to transact businesses transactions using M-pesa. Similarly, Munford (2010) observed that in Afghanistan, automated money transfer services, (M-paisa) are utilized in paying salary to police officers (Munford 2010), which is the same case in Tanzania where automated money transfer services are used in tax payments (Tanzania Revenue Authority 2011).

According to World Bank (2013), since its introduction in mid-2007, M-PESA had been adopted by 9 million customers as of late 2009, that is, 40 percent of Kenya's adult

population. Through MTS, is resourceful in enabling transactions averaging to $320 million per month in person-to-person transfers (roughly 10 percent of Kenya's GDP on an annualized basis). An increase in the uptake of M-Pesa Services in Kenya is a great indicator of high demand of the services. Its performance across the years in the payment of salaries and bill collection makes it very necessary both at micro level and macro level. First, it proves that the value of leveraging mobile technology to spread out financial services to large segments of unbanked poor people. Second, it shows the significance of designing usage-based rather than float-based revenue models for ensuring that reaching financial services reach poor customers. Unlike a traditional bank, which typically distinguishes between profitable and unprofitable customers based on the likely size of their ability to absorb credit account balances and, M-PESA serves any Safaricom mobile customer who pays for an account? Thirdly, M-PESA reveals the need for a low-cost transactional platform that enables low-income customers to meet a range of payment needs.

Mwangi and Njuguna (2009) reported that the success of money transfer and saving services by Safaricom has been experienced not only in Kenya but also across its neighboring countries. Since its inception, there has been amazing growth of M-pesa in the country. This can be attributed to its efficiency in reaching a large number of population and in the way it has contributed to financial literacy of all ages.

Ondiege (2010) while discussing about mobile banking observed that mobile banking had a true "revolution" in access to finance. Ondiege further stresses the efficacy of mobile money transfers in reaching a large population in Africa that was completely ignorant of banking using the formal economy. On the same note, Aker and Mbiti (2010) noted that, in spite of handicap of illiteracy rural Africa, mobile phones were the most preferred owing to their ease of use, and this promoted fast spread of financial literacy among users.

According to Kumbhar, (2011) there is a significant relationship between the effectiveness of the provision of a service and overall customer satisfaction. The relationship between effective service delivery and customer satisfaction is demonstrated

by the fact that, when a customer perceives that the manner in which the transactions offered by the bank is good, in equal measure more customers are likely to be satisfied with the bank services. Globally, everyone finds money quite invaluable and hence they want the assurance of the safety of their money. Bank in the world over exist to give this reassurance and hence their popularity. Customers will be satisfied when their money is safely delivered.

One of the most astounding inventions at the tail end of the past century is the mobile phone technology, and which has been embraced extensively in the developing world. Money transfer services today are sustained by prepay cards and inexpensive handsets, hundreds of millions of first-time telephone owners have made voice calls and text messages part of their daily lives. However, many of these same new mobile users live in informal and/or cash economies, without access to financial services that others take for granted. Certainly, there are more individuals with mobile handsets than with bank accounts across the developing world. There are various initiatives where the mobile phones have been used in providing financial services to "the unbanked." These services are available in numerous forms such as long-distance remittances, micropayments, and informal airtime bartering schemes. Interestingly, they are also known by a variety of names such as mobile banking, mobile transfers, and mobile payments. All in all, these initiatives in such countries as Kenya, South Africa, Philippines, to mention a few, have gone beyond the piloting stage to become popular and broadly available. Kenya Commercial Bank Ltd is a leading Kenyan bank with a strong countrywide presence. The bank remains very strong in key parameters with the largest balance sheet (KShs 251.4billion), capital base (Kshs 39.1billion) and a branch network (218) as at 2010.

2.2.3 Electronic Funds Transfers on Customer Service

According to Yakubu (2012), Electronic Fund Transfer (EFT) refers to transfer of funds besides those that originate from transactions by check, draft, or related paper instruments. Any use of such means as telephone, electronic terminal, or any computerized system to authorize any financial institution to credit or debit an account, equates to electronic fund transfer. EFT is not restricted to transfers of point-of-sale,

ATM, deposits, withdrawal of funds nor to those initiated by telephone. It extends to all transfers that result from debit card transactions, and even to those that do not involve an electronic terminal at the time of the transaction.

A study by Karthick (2016) pointed out the reluctance in the adoption of EFT, despite its unquestionable flexibility in performing financial transaction, its speed and ease in use. Several reasons contribute to this stalemate and these are as follows. To begin with, two elements that are perceived as risks are the issue of security and privacy. Secondly, it is worth noting people are hesitant to use the system if they do not have proper knowledge of it. It thus can be argued that the factors that positively impact on the intention to adopt EFT are its supposed usefulness, consumer's knowledge and its ease of use, whereas perceived risk has a negative impact. Perceived effectiveness of EFT prompts customer's intention to adopt this technology of money transfer. Likewise, the likelihood of bank customers' adoption of EFT is high especially when found to be easy to use. The implication is that bank clients hinge their EFT adoption intention to the benefits they derive its user friendliness.

On the use of Information and Communication Technology (ICT) in banking operations in Nigeria Agboola (2006) pointed out that banks investment in adoption of ATMs, EFT, besides its profitability there was guaranteed quality customer service. It was also seen as boosting the banks' image and leading a more efficient market which is wider and faster. Agboola underscores the necessity for bank management to intensify investment in ICT products so as to make the services accurate, convenient and increase speed lest they lose out to competitors. EFT thus, is associated with enhanced customer service quality and satisfaction.

Sana, Mohammad, Hassan & Momina (2011) in their Pakistan study found that electronic banking positively influenced incomes for the banks. On the same note, the Central Bank of Kenya (CBK) (2012) reported a decline in Electronic Fund Transfer payments in Kenya from July 2009 to June 2012in the order of 2357 transactions worth KShs 397 billion to 2266 worth KShs 214 billion respectively. The report also shows a partial replacement of the Kenya EFT system by the Real Time Gross Settlement (RTGS)which

has seen an increase in the from transaction worth KShs. 1.2 billion in July 2009 to KShs 1.6 billion in June 2012.

According to Ngumi (2013) compared to cheques clearing system, automated money transfers such as EFT system improves the speed of money within the banking transaction system. Consequently, more money moves within the economy in a short period. Therefore the banks are able to make more money. Since EFT transaction charges are higher than cheque clearance charges, banks are able to make more income. The study however, did not demonstrate the effect of these money transfer services on customer service.

2.2.4 Automated Teller Machines on Customer Service

According to Jegede (2012), Automated Teller Machine (ATM), which at times is referred to as the automated banking machine (ABM) or Cash Machine is a computerized telecommunications device situated in a open space that enables the clients of a banking institution to access their accounts for financial transactions without the human assistance whether cashier or bank teller. Ross (1999) observes that an ATM unit that combines a computer terminal, record-keeping system and cash vault that allows customers to access the bank's book keeping system using a plastic card that has a Personal Identification Number (PIN) whereby customers simply punch this code into the computer terminal which has live connection to the bank's computerized records 24/7. Upon entry into the banking service, customers can access numerous retail services. ATMS are often situated outside banks, also at airports, shopping malls, and at strategic places away from the banks where bank clients are available. Initially, they started off as cash dispensing machines but with time especially due to development in technology, their services expanded to include deposits, payments of bills and funds transfer. This device enables banks to have a competitive edge over other banks.

Effectiveness of banking can be attributed to the introduction of ATM as Jegede (2012) found. Technological advancement is an important force today, its growth and development remains a major factor of the market nowadays. The introduction of ATM

facilities has radically changed the banking sector. The Nigerian banks are quite aggressive in advocating issue and use of Automated Teller Machine cards, smart cards, debit cards, and credit cards- in a quest to outwit competitors and boost performance.. However, even though the study does not directly show the effect on customer service, we note that enhanced performance and ability to kill competition are a function of enhanced customer service.

According to Ogbuji *et al.* (2012), ATM enables a bank client to access their bank accounts to make transactions almost all over the world wherever an ATM machine is available . In spite of their spread, these machines have been creating many operational problems since customers encounter numerous disappointments in using them. At times the ATMs have no cash to dispense, other times; the cards get stuck before the transaction is complete. Their study demonstrates the fact that notwithstanding the service benefits of ATMs, there are associated challenges.

Banks have been seen to use ATMs surcharge to marshal deposits and hence it has been observed that there exists a positive relationship between the level of ATM surcharge and deposits market share of large banks. (Massoud, Saunders & Scholnick, 2006).In similar study in Turkey, Milne (2006) came to the conclusion that the use of ATMs resulted in an increase of customers and consequently to large deposits because of the ease and accessibility of bank accounts. This was because customers appreciated services offered through ATMs.

According to Gichungu & Oloko (2015), an Automated Teller Machine consists of the following: a central processing unit (CPU)at the back end which controls the interface and transaction devices that users interact with a magnetic card reader to identify the customer's user card, a display unit where the customer executes the transaction and finally, function buttons that customers use to select the desired service. Automated Teller Machines are used globally in commercial banks and operate as cash dispenser machines. Gichungu & Oloko while referring to Commercial Banks in Kenya noted that there ATMs were often used with great success.

2.2.5 Customer Service Quality

Customer service quality deals with the way businesses are concerned with meeting customers' expectations as a way of creating a competitive edge since the customer is at the heart of any successful business venture. Service quality and customer satisfaction are closely related as the former is a cause while the latter is the effect. Good customer service leads to customer satisfaction (CS) as it creates loyalty, eliminate any negative energy as customers' expectations are met, ensures retention of customers and eventually boosts profitability of the business. Customer satisfaction is a now prominent field in marketing and has been examined in numerous studies. The study by Janahi (2017) on Islamic banking sector in Bahrain observes several factors of customer service quality such as compliance, assurance, reliability, tangibility, empathy and responsiveness that impinge on customer satisfaction.

Service quality (SQ) has been mentioned widely by scholars and researchers as important antecedent to customer satisfaction (CS). (Fen & Lain 2007), and thus, is appreciated in the study. Many studies have established that SQ is an important factor influencing CS. (Hume & Mort, 2008), profitability (Harris, 2010), and a key competitive advantage for modern business firms ((Levy & Weitz, 2012)). Indeed SQ is not just a corporate offering, but a competitive weapon which is necessary for corporate profitability and survival (Kang'arua, 2015). Together with customer satisfaction, SQ has been noted as playing a huge role in the success of businesses (Fen & Lian 2007). Many authors agree that in today's dynamic market place and market space, organizations no longer compete only on cost but more importantly on service/product quality for the retention of customers.

Since the introduction of the internet, the evolution of internet-based services (e-services) has radically changed the manner of interaction between firms and consumers. E-service has drawn interest among practitioners and academics. E-service refers to any web-based service or interactive service that is transmitted via the internet. Rowley (2006); (Ghosh et al (2004; Zeithaml *et al.*,(2000) conceptualize E-service as any act, attempt or

performance which use information technology as its medium. However, such revolutions are not without challenges in service quality. For example, Nimako, Gyamfi & Wandagou (2013) in their study on service quality of internet banking service in Ghana concluded that customers were dissatisfied with response to their queries for assistance but are slightly satisfied with speed of internet banking.

Studies have been done on the impact of service quality on customer satisfaction for example Selvakumar (2015) argues that service quality is the key differentiator among banks in India providing comparative better services. Whereas, there are many predicators of SQ affecting CS, the writer clearly shows the impact of service quality on customer satisfaction using key indicators such as reliability, empathy, responsiveness, assurance and tangibility. This study instead focuses on speed, convenience, relevance and cost of SQ as affecting CS.

2.3 Summary of Research Gaps in the Literature Review

From the literature review above it is clear that the use of automated money transfers has made life easy for the bank (Karthick, 2016). Studies from the banks point of view show that automated money transfer approaches such as M-PESA, EFT and ATMs have a positive influence on boosting the effectiveness of service provision by banks (Agboola 2006). However, these studies are mostly carried out exclusively, or for a specific AMT approach. No study attempts to combine the approaches and compare their effects of customer service. When seen from the banks position, it would mainly be for purpose of evaluating enhanced profitability (Sana, Mohammad, Hassan & Momina, 2011), so the question remains what about from the customers' point of view? The study sought to fill this gap of knowledge by collecting and analyzing customers' views on the three AMTs approaches.

2.4 Conceptual Framework

The study sought to examine the following variables and their relationship between:

i) M-PESA services and service quality in Equity bank

ii) Electronic Funds Transfers services and service quality in Equity bank

iii) Automated Teller Machines and service quality in Equity bank

Figure 1 below diagrammatically shows the relationship between the independent and dependent variables used in the study:

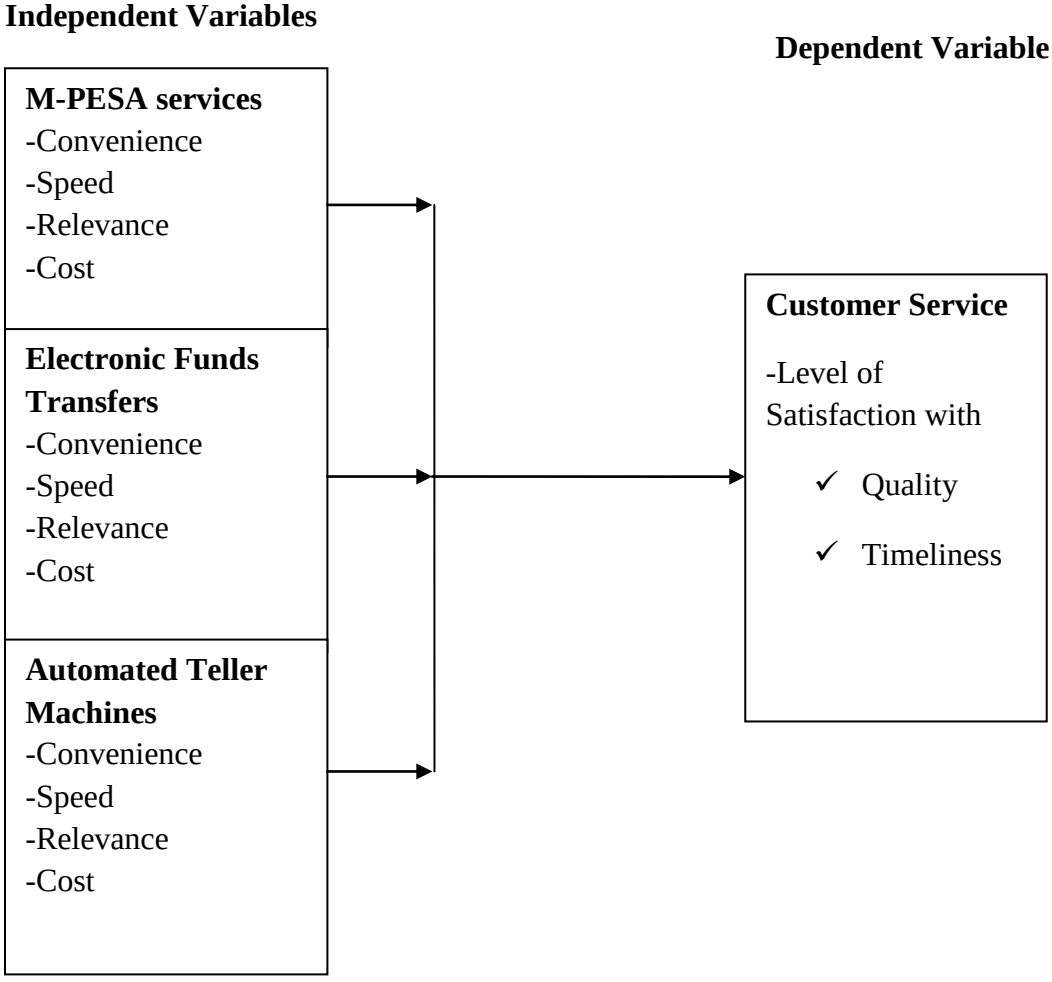

Figure 2. 1: Effect of Automated Money Transfer Services on Customer Service

Source: Researcher (2016)

The study conceptualizes that Automated Money transfer services such as M-PESA services, Electronic Funds Transfers (EFTs), and Automated Teller Machines (ATMs) (Independent Variables) have some effect on level of satisfaction with customer service (Dependent Variable).

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology used to carry out the study. It outlines the research designs, where the study is located, the target population, sample size and the sampling procedures used. Also described are the research instruments, piloting, procedures of data collection procedures and method of data analysis.

3.2 Research Design

The study uses a descriptive survey design because the data collected is descriptive in nature. This is in accordance with Mugenda & Mugenda, (2003), who propose a descriptive survey design by collecting data for purposes of answering questions in relation to a subject of study. A research of this type describes among others attitudes, values, and related behavioral characteristics. Using questionnaires, interview schedule and observation checklist, the study was able to collect data of both quantitative and qualitative type. The descriptive survey design is adopted allows for use of descriptive statistics and Pearson correlation which was the effect of automated money transfer services on customer service in Equity Bank in Nakuru Town.

3.3 Operationalization and Measurement of Variables

The Operationalization and Measurement of Variables is given in Table 3.1

Table 3.1: Operationalization and Measurement of Variables

Variable	Type	Operationalization	Measurement	Hypothesized Direction
M-PESA services	Independent	_ Convenience _ Speed _ Relevance _ Cost	Scale of 1 - 5	None
Electronic Funds Transfers	Independent	_ Convenience _ Speed _ Relevance _ Cost	Scale of 1 - 5	None

Automated Teller Machines	Independent	_ Convenience _ Speed _ Relevance _ Cost	Scale of 1 - 5	None
Customer Service	Dependent	_ Level of Satisfaction	Scale of 1 - 5	None

3.4 Target Population.

According to the Equity Bank Customer Service Department on average there are 357 customers using ATM and online services each day, and 22 customer care employees. Therefore, the target population was made up of an estimate total of 379 Equity Bank Nakuru Branch respondents utilizing the automated money transfer services and well as employees in the customer service department. The customers and employees were preferred as respondents because of their privileged position to provide information that the study required. This was guided by the sample frame shown below.

Table 3. 2:Target Population sample frame

Respondents	Target population
Customers	357
Customer care employees	22
Total population	379

3.5 Sampling Design

The sample was selected using simple random sampling technique given the large number of respondents with the same characteristics. The sampling frame was made up of a list of customers. Bank employees from the customer service department were selected using purposive sampling technique. From the study population of approximately 379 respondents, a sample size of 30% was used. Thus, the sample size was 113.7, that is 107 customers and 7 customer care employees.

3.5 Data Collection Instruments

Instrument that was used to collect data in the study was the questionnaire, since the researcher was mainly concerned with the views, opinions, perception and feelings regarding automated money transfer services on customer Nakuru town. Questionnaires were used due to their convenience and reliability to suit the needs of the study. A questionnaire is a carefully designed instrument consisting of a set of items to which the respondents are expected to react, usually in writing (Amin, 2005).

3.5.1 Piloting

Piloting was conducted using one Equity bank (10 percent of the sample) in Nakuru Town. These piloted banks were excluded from the actual data collection. According to Cooper & Schindler, (2006), piloting has two major aims: detecting weaknesses in design and implementation and for the purposes of providing a proxy during data collection in order to get a probability sample. By integrating the two, the study was able to improve the quality data collected and ultimately achieve the research objectives. The findings of the pilot study was used to the improve questionnaires, test validity and reliability of research instruments.

3.5.2 Validity

The validity of research instruments is crucial and ought to be confirmed before the actual process of data collection (Drost, 2011). Mugenda and Mugenda (2003), advises on the need to establish validity of the instruments of research instruments for purposes of achieving the expected results. The researcher ensured this was done so that the instruments were reliable and credible results could be adduced when making conclusions and forming opinions. The supervisors helped ensure content validity by giving guidance and verifying research objectives are addressed in the research instruments. The questionnaires were evaluated to rid them of ambiguities when doing the pilot study. The findings of the pilot study was used to the improve questionnaires, test validity and reliability of research instruments

3.5.3 Reliability

The researcher used Cronbach's alpha to test the stability and consistency of the values in the questionnaire. A score that is derived is correlated with scores got from other items in the research instrument (Sekaran 2006). After being duly filled, responses of the questionnaire were fed into the computer programme statistical computer package for social sciences (SPSS) and analyzed to give assesses reliability. The same questionnaires were administered after some time for example after three weeks so as to the correctness of the results**.**

3.6.4 Data Collection Procedure

The study started after the researcher got an introductory letter to from Kenyatta University. Thereafter, the researcher obtained a research permit from the National Council for Science, Technology and Innovation (NACOSTI). The two documents were then presented to the management of Equity Bank management informing about the intended study. The researcher then has access to the employees. The purpose of the study was discussed with the respondents so as to solicit their informed consent.

3.5 Data Analysis and Presentation

The researcher collected both qualitative and quantitative data. Thereafter the data was categorized, edited, coded, and analyzed. In order for quantitative analysis to be done, responses were given numerical values. Qualitative data that was obtained from the questionnaires was analyzed by grouping together similar answers in accordance with the responses from key themes of analysis. Next was identification of the key themes and patterns in the informants' responses so that they could be analyzed to determine the adequacy, relevance and consistency.

Using SPSS Version 21 and Microsoft Excel 2010, quantitative data was computed for descriptive statistics (frequencies, means and percentages). After this, the results were then expressed in tables and charts; in case of relationship between two variables, cross tabulations was used. Pearson correlations (r) computed with aid of SPSS were used to

establish the relationship between the independent variables. These techniques show the direction and magnitude of the relationship between given variables (Mugenda, 2008).

The following regression model guided the study.

$CS = \beta_0 + \beta_1 MPS + \beta_2 EFT + \beta_3 ATM + \varepsilon$

Where:

CS=Customer Service

MPS = MPESA Service

EFT = Electronic Funds Transfers

ATM = Automated Teller Machines

β_0 = Constant

$\beta_1, \beta_2, \beta_3$: Regression coefficients

ε = Error/Disturbance Term

The study findings were presented in statistical tables that reflect both descriptive and inferential statistical results.

3.6 Ethical Consideration

The researcher undertook to satisfy ethical consideration of research by getting approval from the University as well as research authorization from NACOSTI. In addition, before conducting research, the respondents permission was sought while informing them of the purpose of the study and assuring them of confidentiality of their responses. Where used, the respondents' names were kept confidential or stated as anonymous. As anonymous, all their details were undisclosed to other people. In so doing, the respondents' fears were allied and it prevented them from any possible psychological harm.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discusses the study's findings. These are discussed under: Demographic characteristics of the respondents; effect of M-PESA services on customer service, effect of Electronic Funds Transfers on customer service, effect of Automated Teller Machines on customer service in Equity bank Nakuru town.

4.2 Sample Characteristics

4.2.1 Rate of Response

One hundred and fourteen (114) questionnaires were prepared and administered to the respondents. However, three(3) respondents were either not in position to help in filling the questionnaires or provided contradictory responses, 1 item was a spoilt case, thus, one hundred and ten(110) respondents completely responded to the items. This translated to a response return rate of 96.5 percent. This was sufficient to enable the researcher come up with reliable conclusions and recommendations. Dommeyer, Baum, Chapman & Hanna, (2002) reported that the acceptable response rate for on-paper surveys is 75 percent therefore the attained percentage was good and found acceptable to the researcher.

Table 4. 1: Rate of Response

Respondents	Sample	Response	Sample
Customers	107	103	107
Customer care employees	7	22	7
Total population	114	379	379

4.2.2 Demographic Characteristics of the Respondents

This section presents the results according to the demographic characteristics of the respondents. The subsections presented here are age of the respondents, sex of the respondents, marital status and their general view on the effect of automated money transfer services on customer service in Equity Bank in Nakuru Town.

4.2.3 Age of the Respondents

The findings in respect to age of the respondents were provided as in Table 4.2.

Table 4. 2: Age of the Respondents

Age Bracket (years)	Frequency	Percentage
15-19 yrs	15	14.6
20-25 yrs	29	28.2
26-30yrs	5	4.9
31-35 yrs	24	23.3
36-40 yrs	7	6.8
41-45yrs	19	18.4
45 and above	4	3.9
Total	103	100

Survey Data (2017)

According to the findings in Table 4.2, 68.1 percent of the respondents were aged 35 years and below, while 31.8 percent were aged between above 35 years. This implied that most of the respondents were youth. The important fact is that the study was able to get respondents of across all the age brackets, and thus, there was good representation. The findings also show that money transfer services appear to have been used mostly among the respondents aged below 35 years. The findings are similar to those in a study by Waitara, Waititu & Wanjoya (2015) who found higher usage of money transfer services among persons aged 35 between 18 and 35 years.

4.2.4 Sex of the Respondents

Below are the findings according to the gender of the respondents. These are presented in Figure 4.1

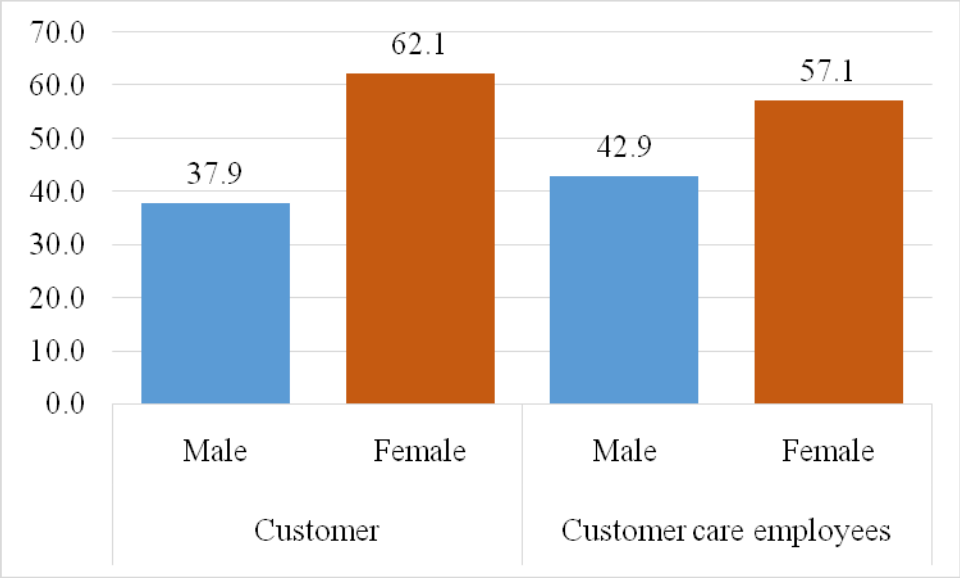

Figure 4. 1: Sex of the Respondents

Survey Data (2017)

The findings in Figure 4.1 show that 62.1 of the customers and 57.1 percent of the customer care employees were female, while 37.9 percent of the customers and 42.9 percent of the customer care employees were male. Hence conclude that more female participants responded compared to male respondents. Consequently, it can be argued that there are more female clients as well as employees for Equity Bank in Nakuru Town. Even though, the study is able to capture pertinent information on all genders used in the study. More female clients were using automated money transfer services. This was contrary to the findings in a study by Kirui, Nyikal & Njiraini (2013) who established that gender affected the likelihood of using automated transfer services. Their study found that male farmers were better able to use automated money transfer services than their female counterparts.

4.2.5 Respondents' Marital Status

The response with respect to the respondents' marital status is provided in Table 4.2.

Table 4. 3: Respondents' Marital Status

Marital Status	Frequency	Percentage
Divorced	5	4.5
Single	36	32.7
Separated	17	15.5
Married	52	47.3
Total	110	100

Survey Data (2017)

The findings show that 47.3 percent of the responds were married 15.5 percent separated, 32.7 percent were single, while 4.5 percent were divorced. This was useful as marital status of the respondent was considered in this study to be of importance in influencing their perception towards satisfaction for services provided. It was viewed that married persons could be more users of AMT services than single, widowed and divorced. However, a study in Uganda by Scott *et al*. (2004) reported that cultural values are likely to influence the productive use of mobile phones. Consequently the freedom of moving about for married women is limited hence they are likely to be hindered from accessing AMT services as easily as the unmarried.

4.2.6 Respondents' Membership at Equity Bank

The respondents were required to show the period they had been members of Equity bank; their response is shown in Table 4.4.

Table 4. 4: Membership at Equity Bank

Response (in years)	Frequency	Percentage
Less than 1 yr	38	36.9
Between 1 - 3 yrs	36	35
Above 3 yrs	29	28.2
Total	103	100

Survey Data (2017)

The findings show that 35 percent of the customers had been members of Equity bank for a period above 28.2 percent, whereas 35 percent had been members of Equity bank between 1 and 3 years, similarly only 36.9 percent had been in employment for less than one year. The implication of this findings meant that the customers interviewed had been with the bank for considerable period of time to comprehend the effect of automated money transfer services on customer service in Equity Bank.

4.2.7 Rating of the Quality of service provided by Automated Money Transfer services

The respondents were asked to show their assessment of the quality of service provided by automated money transfer services and the response is provided in Table 4.5.

Table 4. 5: Rating of the Quality of service provided by Automated Money Transfer services

		Frequency	Percentage
Valid	Very Low	10	9.7
	Low	20	19.4
	Moderate	31	30.1
	High	22	21.4
	Very High	20	19.4
	Total	103	100.0

Survey Data (2017)

Table 4.5 show that 30.1 percent of the respondents indicated that the quality of service provided by automated money transfer services was moderate, 21.4 percent indicated that the quality was high, 19.4 percent very high, 19.4 percent low, and 9.7 percent very low. This implied that most of the customers were satisfied with the quality of service provided by automated money transfer services. These findings were in agreement with that of Sharmila (2005) who established that automation of financial services has not only led to an increase in revenue generation, money transfer security but also it has brought about quality of service.

4.3 Descriptive Results for the Specific Factors.

4.3.1 M-PESA services for money transfers at Equity Bank

Objective one of this study aimed at establishing the effect of Electronic Funds Transfers services on customer service in Equity bank Nakuru town. The findings in respect to this objective are therefore presented in this section. The respondents were asked to indicate how often they used M-PESA services for money transfers at Equity and the findings are provided in Table 4.6.

Table 4. 6: Frequency in Using M-PESA services for money transfers at Equity Bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	12	11.7	11.7	11.7
	Rarely	13	12.6	12.6	24.3
	Sometimes	28	27.2	27.2	51.5
	Often	27	26.2	26.2	77.7
	Very Often	23	22.3	22.3	100.0
	Total	103	100.0	100.0	

Survey Data (2017)

The findings in the Table 4.6 show that 48.5 percent of the customers indicated that they often used M-PESA services for money transfers at equity bank 27.2 percent sometimes used this services, whereas, 12.6 percent rarely used this service while 11.7 percent did not use M-PESA for transfers purpose at Equity Bank. This implied that most of the customers were using M-PESA services for transfers with the bank. Therefore, the study benefited from this aspect since the customers were providing responses based on experience. Mwangi and Njuguna (2009) reported that Safaricom's automated money transfer and saving services was most often used in Kenya for money transfer.

4.3.2 Customers Satisfaction with M-PESA Services for Money Transfers

The customers were asked to indicate how they rated select aspects of the MPESA service, which were service convenience, service speed, service relevance and cost of service, in respect to MPESA services for Money Transfers. Table 4.7 shows these responses.

Table 4. 7: Customers Satisfaction with M-PESA Services for Money Transfers

	Very Poor	**Poor**	**Fair**	**Good**	**Very Good**	**Total**
MPESA Service Convenience	2.9	19.4	20.4	33.0	24.3	100.0
MPESA Service Speed	10.7	16.5	30.1	35.9	6.8	100.0
MPESA Service Relevance	9.7	10.7	12.6	60.2	6.8	100.0
MPESA Cost of Service	6.8	17.5	31.1	38.8	5.8	100.0

Survey Data (2017)

The findings in the Table 4.7 show that 57.3 percent of the customers were satisfied with the M -PESA service convenience, 42.7 percent were satisfied with M-PESA service speed, 67 percent appreciated service relevance, while 44.7 percent were satisfied with cost of service. The findings are in agreement with a study by Kumbhar (2011) who found that M-PESA service was among the most convenient automated Money Transfer services. The study also established that most customers were satisfied with the MPESA service as an automated money transfer service.

4.3.2 Descriptive Statistics – Satisfaction with MPESA service

Means scores were computed and the results were as shown in Table 4.8.

Table 4. 8: Descriptive Statistics – Satisfaction with MPESA service

	N	Minimum	Maximum	Mean	Std. Deviation
MPESA Service Convenience	103	1.00	5.00	3.5631	1.14335
MPESA Service Speed	103	1.00	5.00	3.1165	1.10525
MPESA Service Relevance	103	1.00	5.00	3.4369	1.09069
MPESA Cost of Service	103	1.00	5.00	3.1942	1.01998
Valid N (list wise)	103				

a. Respondent Category = Customer

Survey Data (2017)

The results in the above table show that the indicators reported the mean scores as follows: service convenience (3.5631), service relevance (3.4369), and cost of service (3.199942) speed (3.1165). Customers preferred services that were convenient and that helped them achieve a specific aim at less costs. Furthermore, the results show that the MPESA service was fast and thus customers were able to transact using the transferred money in a reasonable time. Past research also demonstrate this finding, as pointed out by the World Bank (2013), an increase in the uptake of M-Pesa Services in Kenya is a great indicator of high demand of the services. This show that the customers were registered much satisfaction with service relevance, followed by service convenience, the cost of service and service speed illustrated in Figure 4.2.

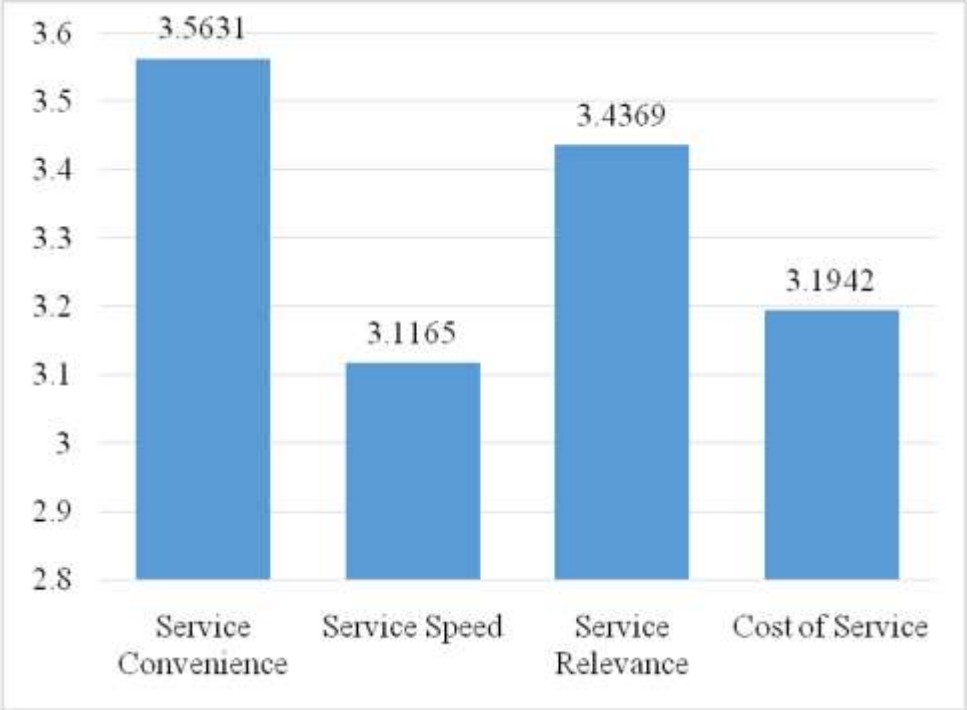

Figure 4. 2: Mean Scores showing customer satisfaction with MPESA service

Survey Data (2017)

4.3.3 Customer Satisfaction with Money Transfers using Electronic Funds Transfers

The customers were asked to give their rating of money transfer using Electronic Funds Transfers and the findings are as shown in Table 4.9.

Table 4. 9: Customer Satisfaction with Money Transfers using Electronic Funds Transfers

	Very Poor	**Poor**	**Fair**	**Good**	**Very Good**
EFT Service Convenience	18.4	22.3	32.0	21.4	5.8
EFT Service Speed	10.7	20.4	26.2	35.9	6.8
EFT Service Relevance	17.5	21.4	29.1	27.2	4.9
EFT Cost of Service	16.5	2.9	35.0	37.9	7.8

Survey Data (2017)

The findings show that the customers were satisfied with all the four indicators of measuring EFT efficacy as follow 53.4 percent of the respondent rated service convenience as good, 62.1 percent rated EFT service speed as good, 56.3 percent rated EFT service relevance as good, while 72.8 percent rated EFT cost of service as good. This shows that according to most customers EFT service had a positive influence on the quality of service in respect to money transfer services. Agboola (2006) pointed out that besides banks investment in adoption of ATMs, EFT for profitability there was guaranteed quality customer service.

4.3.4 Descriptive Statistics – Satisfaction with MPESA service

Means scores were completed and the findings are as shown in Table 4.10.

Table 4. 10: Descriptive Statistics – Satisfaction with MPESA service

	N	Minimum	Maximum	Mean	Std. Deviation
EFT Service Convenience	103	1.00	5.00	2.7379	1.16283
EFT Service Speed	103	1.00	5.00	3.0777	1.12624
EFT Service Relevance	103	1.00	5.00	2.8058	1.16365
EFT Cost of Service	103	1.00	5.00	3.1748	1.16676
Valid N (list wise)	103				

Survey Data (2017)

The findings in Table 4.10 show that the variables under study recorded mean scores as follows. EFT Service Convenience (2.7379), EFT Service Speed (3.0777), EFT Service Relevance (2.8058), and EFT Cost of Service (3.1748). EFT cost of Service recorded the highest mean scores, followed by service speed. This shows that even though most customers rarely used this service, they were aware of its advantages. This finding is in agreement with Ngumi (2013) who observed that since Electronic Fund transfer transaction charges are higher than cheque clearance charges, banks are able to make

more income. Customers however, shied away from the EFT for fear of the costs associated with it.

4.3.5 Frequency in Using Electronic Funds Transfers (EFT) services for money transfers at Equity Bank

The customers were asked to indicate how often they used EFT for money transfers at Equity Bank, and the response was provided in Figure 4.3.

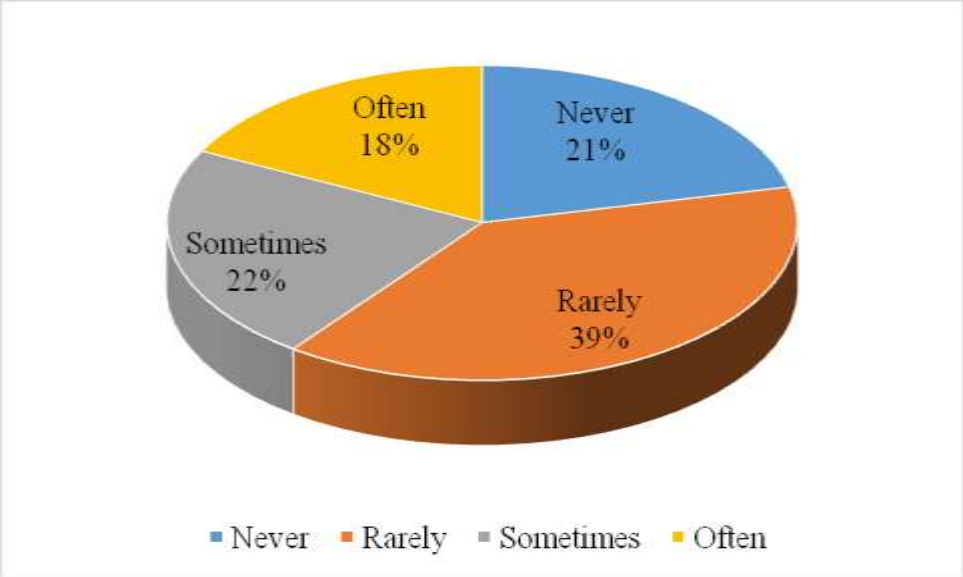

Figure 4. 3: Frequency in Using Electronic Funds Transfers (EFT) services for money transfers at Equity Bank

Survey Data (2017)

The findings show that 39 percent of the customers rarely used EFT services for money transfers 21 percent never used, 22 percent sometimes used, while 18 percent often used this service. This implied that there was little use of EFT among the customers. However, the customers demonstrated awareness of existence of such a service at the bank. This argument is in line with Karthick (2016) who concluded that although EFT provided flexibility in performing financial transaction, fast and easy, individuals were still reluctant to adopt the system because of several reasons.

4.3.6 Customer Satisfaction with Money Transfers using Automated Teller Machines

The customers were asked to give their rating of money transfer using Automated Teller Machines and the findings are as provided in Table 4.11.

Table 4. 11: Customer Satisfaction with Money Transfers using Automated Teller Machines Transfers

Variable	Very Poor	Poor	Fair	Good	Very Good
ATM Service Convenience	4.9	9.7	22.3	36.9	26.2
ATM **Service Speed**	7.8	7.8	20.4	35.0	29.1
ATM **Service Relevance**	7.8	13.6	35.0	27.2	16.5
ATM **Cost of Service**	7.8	13.6	35.0	27.2	16.5

Survey Data (2017)

The findings in the Table 4.11 show that 63.1 percent of the customers were satisfied with the Automated Teller Machines' service convenience, 64.1 percent were satisfied with M-PESA service speed, 43.7 percent appreciated service relevance, while 43.7 percent were satisfied with cost of service. The findings show that the most important attributes of ATM according to the customers were service convenience and service speed. These findings were in agreement with a study by Milne (2006) in Turkey who came to the conclusion that introduction of ATMs contributed to large customers base and consequently large deposits because of their convenience, speed and the ease of accessing their bank accounts. This was because customers appreciated services offered through ATMs.

4.3.7 Descriptive Statistics – Satisfaction with Automated Teller Machines

Means scores were completed and the results were as shown in Table 4.12.

Table 4. 12: Descriptive Statistics – Satisfaction with Automated Teller Machines

	N	Minimum	Maximum	Mean	Std. Deviation
Service Convenience	103	1.00	5.00	3.6990	1.10998
Service Speed	103	1.00	5.00	3.6893	1.19505
Service Relevance	103	1.00	5.00	3.6408	1.18697
Cost of Service	103	1.00	5.00	3.3107	1.13784
Valid N (list wise)	103				

Survey Data (2017)

The findings show that the variables of the study reported the following mean scores: service convenience (3.6990), service relevance (3.6408), cost of service (3.3107) speed (3.6893). All the scores were above mid mean (neutral value) at 2.5. This implied that the three main ATM satisfaction attributes that bank customers were satisfied with were service convenience and service speed. This show that most customers registered much satisfaction with service convenience and service speed, followed by service relevance, and the cost of service illustrated in Figure 4.4. These findings were in agreement with Jegede (2012) who reported on the convenience, reliability and speedy nature of Automated Teller Machines in Nigeria's commercial banks. ATMs are able to provide a wide range of services, such as making deposits, funds transfer between two or accounts and bill payments. However, the study was not in agreement with a study by Ogbuji *et al.* (2012) who found that ATMs were associated with many challenges. Ogbuji argued that the spread of the machines has been creating many operational problems, as customers face a splurge of frustration in using it; either the machines will not dispense cash, or debit transactions when cash is not properly dispensed or cards get stuck in them.

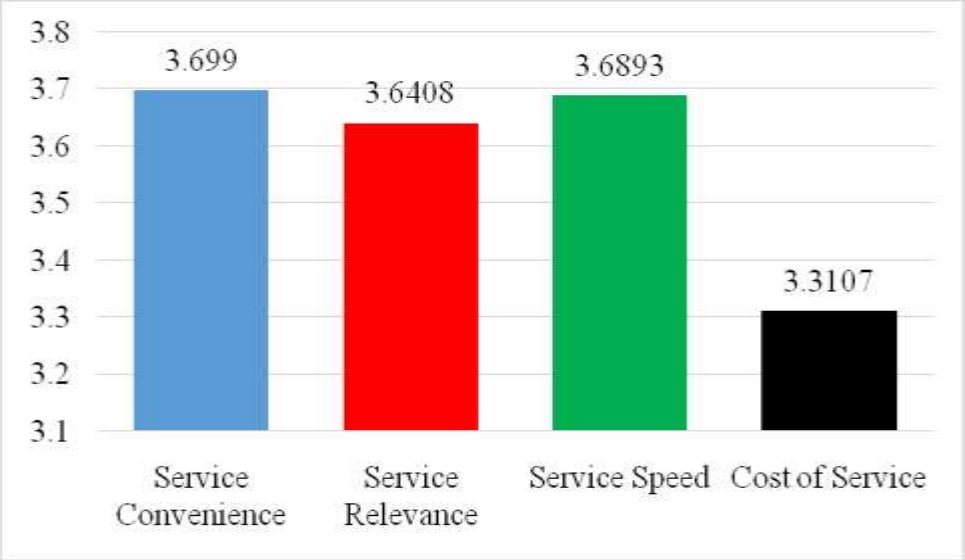

Figure 4. 4: Satisfaction with Automated Teller Machines

Survey Data (2017)

4.3.8 Frequency in Using Automated Teller Machines (ATM) services for money transfers at Equity Bank

The customers were asked to indicate how often they used ATM for money transfers at Equity Bank, and the response was provided in Figure 4.5.

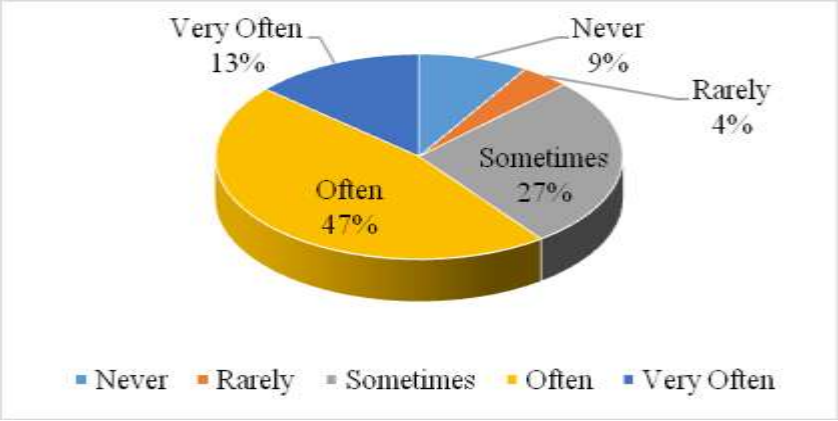

Figure 4. 5: Frequency in Using Automated Teller Machines (ATM) services

Survey Data (2017)

The findings in Figure 5 show that 60 percent of the customers indicated that often they used ATM for money transfers at Equity Bank, 27 percent sometimes used ATM, 9 percent never used this service, while 4 percent rarely used the service. This implied most customers used ATM for money transfer often and this could either because they were happy with the quality or they did not have an alternative. This findings were in agreement with a study by Gichungu and Oloko (2015) who while studying the use of ATMs in Commercial Banks in Kenya observed that there ATMs were often used with great success.

4.4 Correlations

4.4.1 Correlations between M-PESA services and Customer Service

The result of a Pearson correlation between M-PESA services and customer service quality at equity bank was as provided in Table 4.13.

Table 4. 13: Correlations between M-PESA services and Customer Service

		Customer Service	M-PESA services
Customer Service Quality	Pearson Correlation	1	.246*
	Sig. (2-tailed)		.012
	N	103	103
M-PESA services	Pearson Correlation	.246*	1
	Sig. (2-tailed)	.012	
	N	103	103

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

a. Respondent Category = Customer

Survey Data (2017)

The findings show that there was a positive Pearson correlation between customer service quality and M-PESA services for money transfer at 0.246*. The p value (sig value) was

0.012, there implying that the relationship is statistically significant. This means that M-PESA service form of money transfer had a positive influence to customer service at the bank. Customers' were satisfied with the quality of service they received through MPESA. The findings are in agreement with Mwangi & Njuguna (2009)'s study who observed that the success of MPESA was evidenced by customers' satisfaction with service quality.

4.4.2 Correlations for Electronic Funds Transfers (EFT) services

The result of a Pearson correlation between Electronic Funds Transfer services and customer service at equity bank was as provided in Table 4.14.

Table 4. 14: Correlations for Electronic Funds Transfers (EFT) services

		Customer services	**EFT Services**
Customer Service Quality	Pearson Correlation	1	.103
	Sig. (2-tailed)		.300
	N	103	103
EFT Services	Pearson Correlation	.103	1
	Sig. (2-tailed)	.300	
	N	103	103

Survey Data (2017)

The findings show that there was a positive Pearson correlation between customer service and EFT Services for money transfer at 0.103. When the p value is less than 0.05, the relationship is interpreted to be significant. The p value (sig value) was 0.300, there implying that the relationship is statistically significant. This means that EFT Services form of money transfer had a positive influence to customer service at the bank. This finding was in agreement with Sana, Mohammad, Hassan & Momina (2011) who in their

Pakistan study concluded that electronic banking positively influenced customer satisfaction through incomes for the banks.

4.4.3 Correlations for Automated Teller Machines (ATM) services

The result of a Pearson correlation between Automated Teller Machines (ATM) services and customer service at equity bank was as provided in Table 4.15.

Table 4. 15: Correlations for Automated Teller Machines (ATM) services

		Customer service quality	ATM Services
Customer service quality	Pearson Correlation	1	.198*
	Sig. (2-tailed)		.038
	N	110	110
ATM Services	Pearson Correlation	.198*	1
	Sig. (2-tailed)	.038	
	N	110	110

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

Survey Data (2017)

The findings show that there was a positive Pearson correlation between customer service quality and Automated Teller Machines (ATM) services for money transfer at 0.198*. The p value (sig value) was 0.038. When the p value is less than 0.05, the relationship is interpreted to be significant. Therefore the relationship between customer service quality and Automated Teller Machines (ATM) services was statistically significant. This means that Automated Teller Machines services form of money transfer had a positive influence to customer service at the bank. The findings find concurrence with Ogbuji, *et al* (2012) observation that the ATM performs the traditional functions of bank cashiers and other counter staff. It is electronically operated and as such response to a request by a customer is done instantly.

4.5 Regression Results

4.5.1 Regression Analysis for M-PESA services

Multiple regression analysis was done to establish the relationship between the independent and dependent variables and the results are presented in this section. The variables under investigation included MPESA Services, EFT Services, ATM Services (Independent variables) and customer service in Equity bank (dependent variable). The results are as presented in the Table 4.16 below.

Table 4. 16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.302[a]	.091	.065	.82399

a. Predictors: (Constant), ATM Services, MPESA Services, EFT Services

The R Square value in the model summary table shows the amount of variance in the dependent variable that can be explained by the independent variables. In this case, the independent variable of ATM Services, MPESA Services, EFT Services accounts for 9.1 per cent of the variability in customer service in Equity bank.

Table 4. 17: Analysis of Variances (ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.203	3	2.401	3.536	.017[b]
	Residual	71.969	106	.679		
	Total	79.173	109			

a. Dependent Variable: rate your level of customer satisfaction with the bank money transfer services

b. Predictors: (Constant), ATM Services, MPESA Services, EFT Services

From Table 4.17, the p value is 0.017, which is less than 0.05 (Coefficient level). This indicates that the combined effect of all the independent variables (ATM services, MPESA services and EFT services on the dependent variable is statistically significant.

This is also confirmed by the F-test whereby the calculated F = 3.536.This is reported as F (3, 106); p < 0.05; the conclusion therefore is that the regression is statistically significant. This shows that the automated money transfer services significantly contributed to quality customer service at Equity bank.

Table 4. 18: Beta Coefficients and Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.185	.832		1.424	.157
	MPESA Services	.307	.137	.214	2.234	.028
	EFT Services	.249	.199	.120	1.251	.214
	ATM Services	.250	.136	.178	1.832	.042

a. Dependent Variable: Customer Service in Equity Banks

$$\mathbf{CS = \beta 0 + \beta 1MPS + \beta 2EFT + \beta 3ATM + Ɛ. (1)}$$

$$\mathbf{CS = 1.185 + 0.307MPESA + 0.249EFT + 0.250ATM + 0.832 (2)}$$

The unstandardized Coefficients B column, gives us the coefficients of the independent variables in the regression equation including all the predictor variables. From the findings, it emerges that the variable with the highest influence on customer service was s MPESA services (Beta = 0.307). This was followed by EFT Services (Beta = 0.249); and ATM Services (Beta = 0.250). The findings show that MPESA service was associated with quality service compared to the other AMTs. MPESA services and ATM services were significant predictors of service quality, since their p value at 0.028 and 0.042 were less than 0.05 test significance level. The findings showed that all the three modes of money transfer had an effect on the customer service quality. However, the effect for EFT services was not statistically significant. The t value for MPESA Services (t = 2.234, p = .028), given that p < 0.05 shows that the regression was statistically significant. The null hypothesis H_{o1}suggesting that there was no statistically significant relationship between M-PESA services and service quality in Equity bank was therefore rejected. Therefore, we note that MPESA service had a significant relationship with service quality

received by customers of Equity bank. This finding was in agreement with past studies that hailed the effectiveness of MPESA services. For instance, the World Bank (2013) reported the increase in the uptake of M-Pesa Services in Kenya was a great indicator of high demand of the services. Its performance across the years in the payment of salaries and bill collection makes it very necessary both at micro level and macro level. Similarly, as nearly a decade ago, a study by Mwangi & Njuguna (2009) found that MPESA money transfer and saving services had registered great success in the country and in the neighboring countries.

The t value for EFT Services (t = 0.1.251, p = 0.214) indicates that the regression was statistically insignificant. This was the null hypothesis H_{o2} implying that there was no statistically significant relationship between EFT services and service quality in Equity bank was therefore accepted. This showed that though EFT services had a positive relationship with customer service, the relationship was not statistically significant. Therefore, EFT services did not positively contribute to customer service quality. This was in agreement with a study by Ngumi (2013) who established that EFT services positively influenced service quality, subsequently leading to customer satisfaction.

The t value for ATM Services (t = 1.832, p =0.42) showed that the regression was statistically significant. Null hypothesis Ho_2 implying that there was no statistically significant relationship between ATM services and service quality in Equity bank was therefore rejected. These results find concurrence with Adeoti (2011) who established a significant relationship between ATM services and service quality in Equity bank. Adeoti stressed that the use of ATM was safe and convenient. The ATM has made settlement of bills in the Nigerian banking system easy and saver. These benefits have resulted into phenomena growth in number of ATMs in Nigeria. This study demonstrated the fact that this was also the situation in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study. The main objective of the study was to assess the effect of automated money transfer services on customer service in Equity Bank in Nakuru Town. The chapter contains a summary of the study findings, the conclusion, recommendations and suggestions for further studies.

5.2 Summary of the Study

The purpose of the study was to assess the effect of automated money transfer services on customer service in Equity Bank in Nakuru Town. The study was carried out among Equity Bank, Nakuru branches' customers, mainly users of the automated money transfer services such as Phone banking (M-PESA and M- KESHO), Automated Teller Machine, Personal Computer banking, and Email banking. The specific objectives guiding the study included: finding out the effect of M-PESA services on customer service in Equity bank; establishing the effect of Electronic Funds Transfers on customer service in Equity bank; and finding out the effect of Automated Teller Machines on customer service in Equity bank. Chapter two presented the literature review of the study. The study was supported by the modernization theory and the innovation diffusion theory. Chapter three presented the research methodology of the study. For its methodology, the study used a descriptive survey design in which simple random sampling was used to arrive at the desired sample size for customers whereas purposive sampling technique was used to get sample for customers and bank employees in the customer. The sample size used was of 379 respondents. . Data for the study was collected by use of questionnaires. The data adduced was subjected to SPSS version 21.0 for analysis in order to derive descriptive and inferential statistics. Chapter four presented the results and discussion and the summary.

5.2.1 Summary of the Findings

The findings show that most of the respondents were youth below 35 years. Most participant were female, either married or single. The findings also show that 63.2 percent of the respondent had been members of Equity bank for a period more than one year. The findings also show that 40.8 percent of the customers were satisfied with the quality of money transfer services offered by the bank.

5.2.2 Effect of M-PESA services on Customer Service in Equity bank Nakuru town

The findings show that most of the customers (52.9% as average for the four indicators tested) often used M-PESA service for money transfer at Equity Bank. The study shows that most of the customers were using M-PESA services for transfers with the bank often. It was established that most respondents were satisfied with M-PESA services convenience, speed, relevance and cost of service. It was established that customers using MPESA option were more satisfied with service convenience and service relevance.

5.2.3 Effect of Electronic Funds Transfers on customer service in Equity bank Nakuru town

The findings show that 40.8 percent of the customers were satisfied with quality of service resulting from using Electronic Funds Transfers service. It was established that there was little use of EFT among the customers. Although the study shows that most of the customers rarely used this service, they were aware of its advantages. The most appreciated EFT attributes were EFT service speed and EFT cost of service. The influence of Electronic Funds Transfers on customer service was not statistically significant.

5.2.4 Effect of Automated Teller Machines on customer service in Equity bank Nakuru town

The findings show that most customers registered much satisfaction with Automated Teller Machines service convenience and service speed, followed by service relevance,

and the cost of service. Most customers used ATM for money transfer often and this could either because they were happy with the quality or they did not have an alternative.

5.3 Conclusions

With view of the study objectives the following conclusions were established:

In assessing the effect of M-PESA services on customer service quality, the study concludes that MPESA money transfer services had a positive effect on customer service at Equity Bank K Ltd. Customers mostly use MPESA money transfer services to make payments and do business related transactions. M-PESA reveals the need for a low-cost transactional platform that enables low-income customers to meet a range of payment needs.

In the second objective being to establish the effect of Electronic Funds Transfers on customer service quality, the study concludes that the quality of service resulting from using EFT service was greatly appreciated by the customers. However, not so many customers used the EFT service in money transfer. The customers were satisfied with aspects such as Real Time, that is, once funds are sent; they are instantly delivered to the beneficiary's bank account. EFT service was convenient, affordable, flexible, secure and easy to use. It appears most customers were not very familiar with the EFT money transfer service.

Lastly in evaluating the effect of Automated Teller Machines on customer service quality, the study concluded that Automated Teller Machines had a positive effect on customer service in Equity bank Nakuru town. Equity Bank customers in Nakuru were not experiencing problems with using ATMs. The use of ATMs by Equity Bank customers is safe and convenient. The ATM has made settlement of bills in the Kenyan banking system easy and safer. They were considered reliable and efficient in the transfer of money by most customers. This was contrary to a study by Ogbuji *et al.* (2012) as opposed to customers face a splurge of frustration in using it; either the machines will not dispense cash, or debit transactions when cash is not properly dispensed or cards get stuck in them. Similarly, Jegede (2014) observed that the impact of ATM on the performance of banking institutions have been without some challenges.

5.4 Recommendations

With a view of the above finding and conclusions, the study made the following recommendations: -

As the study found out that MPESA service has tremendous effect on customer service as more people use the service for related purposes, the study makes the following recommendation. The management of commercial banks should consider tailoring their money transfer options to the MPESA service option considering the fact that this was the most preferred option due to its convenience and speed. The MPESA provider should consider lowering the money transfer service, to accommodate a wider base.

With regard to the finding that the quality of service resulting from using EFT service was greatly appreciated by the customers, study recommends that the bank management should consider raising customer awareness on the advantages of the EFT money transfer service. This can be realized through the application of modern marketing approaches. Bank management should consider lowering improving on the cost of the EFT service, so as to attract more customers.

On the finding that Automated Teller Machines had a positive effect on customer service in Equity bank Nakuru town because of its safety, convenience and reduced problems, the study recommends the following: bank management should consider enhancing the quality offered by ATMs money transfer service. Measures need to be put in place to enhance its convenience and security. In a way of promoting the banking sector and micro finance banks, government should hold firm the laws on automated money transfer fraudsters and scammers so as to boost economic of the nation.

Equity bank management can employ customized software that records relevant information on automated money transfers so as to establish the effect of customer service.

5.5 Suggestions for Further Study

The study focused on the effect of effect of automated money transfer services on customer service in Equity Bank in Nakuru Town. The scope of the study was limited to Nakuru town yet considering the fact that customer purchase behavior may not be the same across the county and country, there is need to undertake research that compare the aspects investigated on customers of Equity Bank across the County. This would give detailed information on the studied effect of automated money transfer services.

REFERENCES

Abor, J. (2004). Technological innovation and banking in Ghana, an evaluation of customers' perspective. *American academy of financial management*, 1(3), 338-356.

Adeoti, J.A. (2011). 'Automated Teller Machine (ATM) frauds in Nigeria: The way out. *Journal of Social Sciences*, 27(1), 53-58.

Agboola A. (2006). Information and communication technology (ICT) in banking operations in Nigeria: an evaluation of recent experiences, Retrieved from http://unpan1.un.org/intradoc/groups/public/

Amin, M.E. (2005) 'Social science research: conception, methodology and analysis'. Makerere University Press, Kampala.

Angeli, D, A. Conventry, L., Johnson, I, G., (2003) "*ATM's adoption in developing countries: Déjà vu or not?* " Hague: Hoffstede.

Chorafas, D. S. (1988). *Implementing networks in banking and financial services*. Houndmilss: Macmillan Press.

Costello, D. (2003). "*Micropayment and mobility*," Retrieved on April 20, 2016. http://www.epaynews.com/downloads/zafion_WP.pdf

Desai, S. (2012), Mobile money for the unbanked, GSMA (Annual Report 2012). Retrieved on 4th Sept 2016 from http://www.gsma.com/mobile fordevepment

Dommeyer, C.J., P., Baum, K. Chapman, & R.W. Hanna, 2002. 'Attitudes of business faculty towards two methods of collecting teaching evaluations'. *Assessment and Evaluation in Higher Education* 27, no. 5: 455–462.

Drosti, E. (2011). 'Validity and reliability in social science research.' *International Perspectives on Higher Education Research 38(1), 105-124·*

Fen, Y. S. & Lian, K. M. (2007). 'Service quality and customer satisfaction: Antecedents of customer's re-patronage intentions' Sunway Academic Journal 4, 59-73. Retrieved from cite.seerv.st.psu.edu/viewdoc/

Gichungu, Z. and Oloko, M. (2015). Relationship between bank innovations and financial Performance of commercial banks in Kenya. *International journal of education and research.* Vol. 3 No. 5, 443 – 446.

Giddens, E. (2008). *A first look at communication theory.* New York: McGraw Hill.

Harris, E. K. (2010). *Customer service: A practical approach.* 5th ed. New Jersey: Pearson Prentice Hall.

Hinton, P. Mcmurray, I. and Brownlow, C. (2014). *SPSS Explained*. 2nd ed. Routledge Tailor and Francis Group. London.

Hume M and Mort G. S. (2008) Satisfaction in performing arts: the role of value? *European journal of marketing 42 (3/4),* 2008, 311-326.

IBM100 Icon of Progress (n.d.). "*The automation of personal banking.*" Retrieved June 17, 2016. http://www03.ibm.com/ibm/history/ibm100/us/en/icons/bankauto/

Janahi, M. A. (2017). 'The impact of customer service quality on customer satisfaction in Islamic banking'. *Journal of Islamic Marketing*, Vol. 8 Issue: 4, 595-604. Retrieved from https://doi.org/10.1108/JIMA-07-2015-0049

Jegede, C. (2014). Effects of automated teller machine on the performance of Nigerian Banks. *American journal of applied mathematics and statistics,* 2014 2 (1), 40-46.

Kang'arua, L. M. (2013). 'Factors influencing engagement of the youth in promoting positive behavioural change: a case of National Christian Youth Network in Nairobi County', Doctoral dissertation.

Karthick, S. (2006). 'A study on customer attitude towards electronic fund transfer system in Thiruverumbur'. *IOSR Journal of Business and Management (IOSR-JBM):* 2319-7668, 51-53 www.iosrjournals.org

Kirui, O. Nyikal, J.& Njiraini, G. (2013). Impact of mobile phone-based money transfer servicesin agriculture: evidence from Kenya. *Quarterly Journal of International Agriculture 52, No. 2: 141-162*

Kumbhar, V. (2011). 'Service quality perception and customers' satisfaction in internet banking service: a case study of public and private sector banks'. MPRA Paper No. 36959, Retrieved from http://mpra.ub.uni-muenchen.de/36959/

Levy, M. & Weitz, B. (2007). *Retail management*. 6th Ed. New York: McGraw Hill/Irwin.

Mahdi, S. and Mehrdad, A. (2010). E-banking in emerging economy: empirical evidence of Iran. *International journal of economics and Finance,* Vol. 2, No. 1, 201-209.

Massoud, N., Saunders, A., & Scholnick, B. (2006). The impact of ATM surcharges on larger versus smaller banks: Is there a switching effect? *The Journal of Business* 79(5), 32-36

McAndrews, J. J. (2003). Automated teller machine network pricing – A review of the literature. Review of network economics, Federal Reserve Bank of New York. New York, USA.

Milne, A. (2006). What's in it for us? Network externalities and bank payment innovation. *Journal of banking and finance,* 30, 1613-1630.

Mwangi S. K, & Njuguna S. N. (2008). 'Expanding the financial services frontier: Lessons from mobile phone banking in Kenya'. Retrieved https://www.brookings.edu/articles

Mugenda, O.M, & Mugenda A.G, (2003). *Research methods:* Quantitative and qualitative approaches. Nairobi, ACT Press.

Ngumi, P. (2013). *Effect of bank innovations on financial performance of commercial Banks in Kenya.* Jomo Kenyatta University of Agriculture and Technology.

Nimako, S. G., Gyamfi N. K, & Wandaogou A. (2013). 'Customer satisfaction with internet banking service quality in the Ghanaian banking industry'. *International journal of scientific & technology research*. Vol. 2 No. 7, 165-175.

Nyangosi, R. & Arora, J. S. (2011). Emergence of information technology in the Kenyan banking sector: An empirical study.

Ogbuji, C. N. *et al.* (2012). Analysis of the negative effects of the automated teller machine (ATM) as a channel for delivering banking services in Nigeria. *International journal of business and management* 7, (7) April 2012.

Otieno, L. (2013). Mobile money transfer: A focus on the impact and usage. Laurea University of Applied Sciences.

Pierce, M. (2001). Payment mechanism designed for the internet. Retrieved on 21st April, 2016 http://ganges.cs.tcd.ie/mepeirce/Project/oninternet.html: http://ganges.cs.tcd

Ratha, Mohapatra, Vijayalakshmi & Xu, (2007). *Remittance Trends 2007.* Migration and development brief 3 development prospects group, migration and remittances team.

Rose, P. S. (1999). *Commercial banking management* (4th Ed). Boston:. Boston: Irwin/MacGraw-Hill.

Sana, H. S., Mohammad, K. M., Hassan H. S., & Momina, A. (2011).The impact of E-banking on the profitability of banks: A study of Pakistani banks. *Journal of Public Administration and Governance* 1(1).

Scott, N., McKemyey, K., & Batchelor, S. (2004). 'The use of telephones amongst the poor in Africa: Some gender implications'. *Gender Technology and Development*, 8 (2), 185–207

Selvakumar. J. J. (2015). 'Impact of Service Quality on Customer Satisfaction in Public Sector and Private Sector Banks'. SMS Varanasi Vol. VIII, No. 1, March–August

Sharmilla Joshi (2005) "*Theories of development: Modernisation vs dependency."* Retrieved on 17th June 2016. Available at http://infochangeindia.org/defining-development/theories-of-development-modernisation-vs-dependency.html

Waitara, J. K., Waititu, A. G. & Wanjoya A. K.(2015). 'Modeling adoption and usage of mobile money transfer services in Kenya using structural equations'. *American Journal of Theoretical and Applied Statistics*, 4, No. 6 : 513-526. Accessed at *article.sciencepublishinggroup.com/html/10.11648.j.ajtas.20150406.22.html*

World Bank, (2013). *Mobile payments go viral: M-PESA in Kenya*. Retrieved on 16th March 2016 from http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/

Yakubu, A. (2012). *The adoption and use of electronic payment systems in Ghana, A case of E-Zwich in the Sunyani Municipality*. Kwame Nkrumah University of Science and Technology.

Zeithaml, V.A., Parasuraman, A. and Malhotra, A. (2000), "A conceptual framework for understanding e-service quality: implications for future research and managerial practice", *MSI Working Paper Series No 00-115*, Cambridge, MA, 1-49.

Zika, J. (2005). *Retail electronic money and prepaid payment instruments.* Prague: Institute of economic studies, Charles University.

APPENDICES

Appendix I: Research Questionnaire

1. Age

   15-19 ( )
   20-25 ( )
   26-30 ( )
   31-35 ( )
   36-40 ( )
   41-45 ( )
   45 and above ( )

2. Sex

   Female ( )
   Male ( )

3. Marital status

   Married ( )
   Separated ( )
   Single ( )
   Divorced ( )

4. How long have you been a member of Equity Bank?

   Below 1 year ( )

   Between 1 and 3 years ( )

   Above 3 years ( )

5. How would you rate quality of service provided by automated money transfer services?

   Very High ( )
   High ( )
   Moderate ( )
   Low ( )
   Very Low ( )

Section B: Effect of M-PESA services on Customer Service in Equity bank

6. How often do you use M-PESA services for money transfers at Equity?

   Very Often ( ) Rarely ( )

   Often ( ) Never ( )

   Sometimes ( )

7. How would you rate your the following in respect to MPESA services for Money Transfers? Use the choices provided to answer.

	Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
MPESA Service Convenience					
MPESA Service Speed					
MPESA Service Relevance					
MPESA Cost of Service					

Section C: Effect of Electronic Funds Transfers on customer service in Equity bank

8. How often do you use Electronic Funds Transfers (EFT)for money transfers at Equity?

   Very Often ( ) Rarely ( )

   Often ( ) Never ()

   Sometimes ( )

9. How would you rate the following in respect to Electronic Funds Transfers for Money Transfers? Use the choices provided to answer.

	Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Service Convenience					
Service Speed					
Service Relevance					
Cost of Service					

Section D: Effect of Automated Teller Machines on customer service in Equity bank

10. How often do you use Automated Teller Machines (ATMs)for Money Transfers at Equity?

    Very Often ( ) Rarely ( )

    Often ( ) Never ( )

    Sometimes ( )

11. How would you rate the following in respect to Automated Teller Machines for Money Transfers? Use the choices provided to answer.

	Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Service Convenience					
Service Speed					
Service Relevance					
Cost of Service					

Section D: Customer Satisfaction Levels

How would you describe your level of satisfaction with the service offered by Equity Bank in respect to the following?

	Very Satisfied	**Satisfied**	**Slightly Satisfied**	**Dissatisfied**	**Very Disatisfied**
Quality of Service					

Appendix II: Letter from Graduate School

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 08th November, 2016

TO: Susan Kinyanjui
C/o Management Science Dept.

REF: D53/OL/NKU/24182/2014

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 2nd November, 2016 approved your Research Project Proposal for the MBA Degree Entitled, **"Automated Money Transfer Services and Service Quality in Equity Bank in Nakuru Town".**

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

JACKSON LUVUSI
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Management Science Department.

Supervisors:

1. Dr. David M. Nzuki
C/o Department of Management Science
Kenyatta University

Appendix III: Letter from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email:dg@nacosti.go.ke
Website: www.nacosti.go.ke
when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No **NACOSTI/P/16/12837/14940**

Date
8th December, 2016

Susan Muthoni Kinyanjui
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Automated money transfer services and service quality in equity bank in Nakuru Town,"*** I am pleased to inform you that you have been authorized to undertake research in **Nakuru County** for the period ending **7th December, 2017.**

You are advised to report to **the Bank Branch Manager, Equity Bank Nakuru, the County Commissioner and the County Director of Education, Nakuru County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Branch Manager
Equity Bank, Nakuru.

The County Commissioner
Nakuru County.

Appendix IV: Research Permit

THIS IS TO CERTIFY THAT:
MS. SUSAN MUTHONI KINYANJUI
of KENYATTA UNIVERSITY, 647-20106
molo,has been permitted to conduct
research in *Nakuru County*

on the topic: *AUTOMATED MONEY TRANSFER SERVICES AND SERVICE QUALITY IN EQUITY BANK IN NAKURU TOWN*

for the period ending:
7th December,2017

.....
Applicant's Signature

Permit No : NACOSTI/P/16/12837/14940
Date Of Issue : 8th December,2016
Fee Recieved :ksh 1000

.....
Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officer will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEACH CLEARANCE PERMIT

Serial No.A 12262

CONDITIONS: see back page