INFLUENCE OF ELECTRONIC DELIVERY SERVICES ON CUSTOMER SATISFACTION IN SAVINGS AND CREDIT COOPERATIVES, A CASE OF MWALIMU NATIONAL SACCO, KENYA

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DECLARATION

This research project report is my original work and has not been presented for an academic award in this or any other university.

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L50/84780/2016

This research report has been submitted for examination with my approval as the University of Nairobi supervisor.

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DEDICATION

I dedicate this project to my spouse Mike Nangole and children Daniel Nangole, Tesse Nangole, Enock Nangole and Steve Simiyu. Thank you for your moral support while I was undertaking the study.

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ABBREVIATIONS AND ACRONYMS

ATM	Automated Teller Machine
CRM	Customer Relationship management
EDC	Electronic Delivery Channels
ICA	International Cooperative Alliance
ICT	Information Communication and Technology
POS	Point of Sale
SACCO	Savings and Credit Cooperative
SAPS	Structural Adjustment Programs
SASRA	Sacco Society Regulation Authority
WOCCU	World Council of Cooperative Union

ABSTRACT

ICT innovations have tremendously shifted the dynamics of service delivery in financial institutions which have similarly impacted in Savings and Credit Cooperatives. The purpose of this study was to investigate the influence of Electronic Services on customer satisfaction in Savings and credit cooperatives, a case of Mwalimu National Savings and Credit Cooperative. Operations in Sacco's have tremendously been influenced by changes in technology, services are no longer confined to an office, members access services electronically via Automated Teller Machines, Mobile banking and the Internet channels. Regardless of availability of these channels, members do experience congestion in the banking hall especially during end month and festive seasons due to occasional failure of these electronic services. The objective of this study was to determine how Automated Teller Machines, Mobile banking and the Internet services influence customer satisfaction in Mwalimu National Sacco. The study is hoped to be valuable to members of staff in identifying and sealing gaps in provision of service through the electronic channels and findings may add valuable information for future researchers. The study was guided by Diffusion of Innovation Theory. The population consisted of 267 Mwalimu members who are also employees of the Sacco. Yamane formulae was used to determine the sample of 139 respondents, stratified sampling method was used to select the sample. Closed ended questionnaires were used in data collection. Numerical data was coded and analyzed by means of statistical package for social scientists (SPSS). Descriptive and inferential statistics was used in data analysis. Measures of dispersion specifically mean median, standard deviation, regression statics and Analysis of variance (ANOVA) were used in analysis. The findings of the study indicated that Automated Teller Machine service attribute timely issuance of new cards had a significant influence on customer satisfaction with a mean of 2.602 and standard deviation of 1.066. Mobile banking attribute ease of use had the greatest influence on customer satisfaction with a mean of 1.676 and standard deviation of 0.783 while for internet banking accessibility of service had the great influence on customer satisfaction with a mean of 2.0827 and a standard deviation of 0.649.Recommendations for policy makers included training in cybersecurity for the Saccos as a way of mitigating fraud, increased budget allocation for the ICT to facilitate infrastructure update and thus enhance availability of the electronic services. Amongst ATM, Mobile banking and internet banking services, mobile banking service was the most utilized service by members.

CHAPTER ONE

INTRODUCTION

1.2 Background of the Study

Technological innovations in the banking sector have tremendously enabled adoption of electronic delivery channels aimed at enhancing service delivery. These innovations facilitate speedy processing and dissemination of information, performance and productivity, reduction of operation costs, access to a wider customer base over multiple channels independent of distance and time limits, consequently improving customer satisfaction by provision of efficient and quality services. Additionally, electronic transactions provide higher accuracy and efficiency due to reduced human a (Alhaliq & Almuhiraf, 2016). Electronic banking is defined by Schaechter (2002) as utilization of electronic delivery channels to deliver services and products to the customer. Electronic delivery channels include the internet, wireless communication, ATM, telephone and mobile banking amongst others. This study will address services delivered over the ATMs, Mobile Phone and the Internet.

The first ATM was installed in London Barclays bank in 1967, electronic banking was popular in 1980s, then later in New York and United Kingdom in 1983. It comprised of PC banking, home, internet and mobile banking (Driga & Isac, 2014). Globally, Africa and in most developing countries has been slow in adoption of electronic service but there is noted progress especially in mobile banking adoption. According to World Bank (2016) report findings revealed that more people can access mobile phones compared to basic needs such as electricity and water. As a result, mobile banking has been adopted widely in Africa to reach the unbanked population. Business magazine (2014) reports that Africa's ATM density is lo with a total of 36,000 ATMs, 80% concentrated in South Africa, Egypt and Morocco. Strong (2011) in the study on alternative channels observed that 90% of daily transaction were electronic and those institutions with strong beliefs in branch networks will not be able to serve tomorrow's customers who never visit counters. According to Rodgers (2012) in the study on the future of EDC's argues that physical branches are still relevant for relationship building and unique services that may not be offered

electronically. A survey by Accenture Consulting (2016) for North America showed that online banking was the most popular channel with 60% of the users, the dominance is owed to customers focus on value and convenience, results showed that 87% of the customers still intend to utilize counter services in the future; thus, branches are still relevant therefore there is a need to balance and brand the modern branch with a mix of digital and branch banking.

The financial sector in Kenya is driven by five major sub sectors namely; Banks, Insurance, Capital markets, Pensions and Sacco's. Financial institutions operate under government regulations; banks and micro finance institutions are governed by the finance bill and banking Act while Sacco's are regulated by Sacco Society Act, SASRA. Sacco's or Credit Unions as referred to in most developed countries are unique financial institutions that are not for profit making and thus interest rates may be below the market rates, Sacco members are owners and account holders at the same time and services are offered to members only. Sacco's provide banking services similar to banking services like operation of a savings account and other services that are customized to suit Sacco members. According to FSD Kenya (2007) Sacco's are excluded from the National Payments Systems and thus they rely on collaboration with commercial banks to access ATM's and electronic Funds transfer services, this therefore compels Sacco's to charge a higher transaction fee per ATM transaction in comparison to those charged by banks . Most Sacco's have partnered with banks to facilitate access for example, Mwalimu has partnership with Spire bank, Stima Sacco with Family bank, Unaitas Sacco with Commercial Bank of Africa and many others with Cooperative bank. Emergence of modern technologies, competition and government regulations and deregulations have also compelled Sacco's to shift their mode of operation towards satisfying the emerging demands (Deshpande and Karl, 2014).Hays and Ward (2013) in the study on Technology leader's vs laggards argue that adoption of Technology may not guarantee reduction in cost and improvement in performance but the lack of it can cause mediocre performance in Credit Unions.

Sacco's play a major role in economic development worldwide, WOCCU (2016) statistical report in 109 countries in 6 continents showed that there were 60,500 credit unions in the world,

223,000,000 members with savings of 1.5 trillion (USD) and loans worth 1.2Trillion (USD). In Kenya, there were over 22,000 active Sacco's and unions with over 14 million members, with total assets of 1.32 trillion, loans and advances of 329 billion aggregate savings and deposit worth 640 billion (Kenya Economic Survey ,2016). Developing countries are challenged in adopting technology due because of poor ICT infrastructure, skills, unreliable equipment and high capital requirements for ICT investments. Technological shortcomings as observed by Deloitte (2014) in their report on cyber security indicated that the financial sector is very susceptible to cyber threats resulting from increase in innovations such as the adoption of mobile and web applications. ICT involves massive investments in technical skills, infrastructure, hardware and software to fight cyber security risks, fraud can have a negative impact through loss of revenue. Technological challenges may also include interoperability between devices and the systems necessitating further financial investments in customization of a solution to fit customer needs, rapid obsolescence of technology, system failures and down time amongst others. High capital investments requirements in setting up new technologies and statutory regulations may be a major obstacle for Sacco's to achieve optimally from technology.

Mwalimu National Sacco has over 75,000 active members spread across the country. For effective services delivery they have invested in modern ICT infrastructure which connects all the sixteen branches where members can access services in any branch across the country. Additionally, they have implemented a Management Information System which integrates with the ATM, s, mobile banking and agency banking in its effort to bring services closer to the customer. Members can also access product and services information on the website, upcoming events and download documents on the provided links instead of visiting the branches. The web portal facilitates access and retrieval of statements, members register for services and a password is issued to for access. Regardless of these initiatives, feedback from member's expose challenges in accessing the electronic services such as network inaccessibility, authentication failure, lack of communication in the event the electronic services are down, fraudulent withdrawals from ATMs and Mobile banking channels. The strategic plan for 2018 recognizes customer focus as one of the key pillars towards improving service delivery and thus a need to address the various challenges encountered by the customers with a view to improve customer experience with the e-banking services.

The study seeks to investigate the influence of Automated Teller Machines, internet and mobile banking services on customer satisfaction.

1.3 Statement of the problem

In response to the changing business environment and customer demands, Mwalimu National Sacco invested in ICT by upgrading its network and acquiring a Management Information System integrated with ATM and Mobile banking services. The main objective was to reduce operation costs and improve service delivery to the customers by offering optional channels accessible 24 hours, achieve high processing speed and accuracy in transaction processing thus reduction of long waiting time and ques in the traditional banking halls.

Members were still experiencing long queues especially during end month and school holidays owing to frequent downtimes of the electronic services. According to Mwalimu strategic plan (Mwalimu, 2016), service delivery scores were 73.5% against the target of 100% therefore the need to come up with solutions towards improvement in service delivery. Some of the problems related with these financial innovations are ATM card fraud, frequent system failure and delays in ATM card issuance. Other Challenges faced while accessing ATM include lack of connectivity, lack of interoperability of the ATM with those of other banks and inadequate coverage of ATM's in rural areas. Mobile services access is challenged by connectivity problems occasioned by application failures, delays in loan processing, member's waiting for too long before, mobile service activation, delays in processing of transactions and untimely communication from the Sacco during service interruptions. Members who use the internet and mobile for communication have also reported incomplete or no feedback (Mwalimu, 2016).

Failure to access services when required may cause time wastage that leads to inconvenience to the member and unnecessary embarrassment. The challenges impact negatively on Mwalimu when dissatisfied members pass over negative information arising from the bad experience. This may in effect dissuade prospective members from joining or withdrawal of membership this translates to reduced income and loss of revenue where the customers shy away from engaging the service due to uncertainties in service availability. Convenient and efficient service channels are among the

most powerful tools that can be used to enhance customer satisfaction (Ernest and Young, 2014). While there is evidence that electronic channels improve customer satisfaction, failure of the services can adversely affect customer satisfaction. Recent studies have focused on the impact of electronic banking on the financial performance of financial institutions but few have focused on the effect of e-banking on customer satisfaction. Koduk (2015) carried out a study on the effect of Electronic Banking on Financial Performance on Saccos in Nairobi and it revealed that electronic banking influenced performance of Sacco's. Keah (2014) researched on the effect of ICT adoption on the financial performance of savings and credit co-operative societies in Nairobi County, whose findings revealed that regulatory restrictions hindered adoption of ICT. Indira (2012) studied the effect of automated service on financial performance of savings and credit cooperative societies licensed by Sacco society regulatory authority in Kenya, the findings indicated that majority of Sacco's had Internet, Mobile and ATM services.

1.4 Purpose of the study

The purpose of the study was to investigate the influence of Electronic Services on customer satisfaction in Savings and Credit Cooperatives, a case of Mwalimu National Sacco.

1.5 Objectives of the study

The objectives used in the study were:

(i) To establish how Automated Teller Machines influence customer satisfaction in Mwalimu National Sacco.
(ii) To assess how Mobile banking influence customer satisfaction in Mwalimu National Sacco.
(iii) To investigate how Internet banking influence customer satisfaction in Mwalimu National Sacco.

1.6 Research questions

The research questions used in the study were:

(i) What influence does Automated Teller Machines service have on customer satisfaction in Mwalimu National Sacco?

(ii) How does mobile banking service influence customer satisfaction in Mwalimu National Sacco?

(iii) How does Internet banking service influence customer satisfaction in Mwalimu National Sacco?

1.7 Significance of the study

The study is hoped to be valuable to the stakeholders amongst them Mwalimu Sacco staff, members and future researchers. The findings may be used in sensitization of staff member involvement during projects design and testing to ensure that staff understand how the service channels work for effective training and customer awareness. The findings will facilitate recommendations to the management to facilitate improvement of customer service in the use of electronic services. Future researcher's in Sacco's may find the study valuable especially a study including other Sacco's and on larger population since this study focused on one Sacco only.

1.8 Basic Assumptions of the study

Respondents responded willingly and truthfully. This was addressed by assuring anonymity of respondents and guarantee that the feedback will be solely for academic purposed. Secondly, that the sample chosen was a representation of Mwalimu population.

1.9 Limitations of the study

Availability and access to information was not easy due to policies and procedures on disclosure of customer information to third parties. This was overcome by adhering to the data confidentiality policy regarding customer data. The population under study may not be generalized to other Sacco's in the country because of the focus on exclusively Mwalimu Sacco. Lack of honest feedback from respondents due to fear of unknown, which was addressed by assuring respondents' confidentiality and anonymity.

1.10 Delimitation of the study

The researcher was limited to study three out of the many available electronic services as the independent variables: Automated Teller Machine service, Mobile Banking service and Internet Banking service while the dependent variable was Customer Satisfaction. The respondents were drawn from Mwalimu National Sacco staff members in Nairobi and thirteen counties.

1.11 Definition of terms used in the study

The terms electronic delivery channels, customer satisfaction, automated teller machine, internet banking and point of sale mobile banking have been defined as applied in the study.

Automated teller machine: it is an electronic outlet that dispenses cash and any other banking services outside the physical branch regardless of time or geographical location barriers.

Customer satisfaction: The degree to which customers are pleased with goods or services purchased or used from a firm

Electronic Services: use of telecommunication networks computers and other digital electronic devices to perform service to customers in financial institutions.

Internet banking: it is a system that uses an institutions website hosted on the Internet and allows customers to communicate to the bank, Transfer funds pay bills amongst others.

Mobile Banking: it is a facility provided by financial institutions to allow customers access the bank details and transact using a cell phone or a computer through a downloadable application, a website or unstructured supplementary service structure (USSD).

1.12 Organization of the study

The study is organized into five chapters. Chapter one covers introduction and the background of the study that highlights transformations in the banking industry, concept of electronic services, its application in financial institutions, application in Sacco's and challenges inherent in these services. The statement of the problem section explores the problem under study and its impact to Sacco members, purpose of the study, objectives of the study covers specific aspect of the study; the research questions provides a guide to design questionnaires to be used to gather information from the respondents. The chapter also covers a section on the significance of the study to other stakeholders, basic assumptions, and the scope of the study which defines the boundaries.

Chapter two presents a review of literature with reference to various authors, explanation of the customer satisfaction concept. Subsequent section focuses on the study objectives, citation, comparisons and analyzing literature by authors who carried out studies on various dimensions that influence customer satisfaction in the use of electronic services. This is followed by a section on theories relevant to the study, a conceptual framework consisting of an overview of independent and dependent variables. Finally, gaps in literature review and a summary of the literature review.

Chapter three contains the research methodology, research design, target population, sampling procedure, sample size, research tools, data collection procedure, data analysis technique and the operational definition of variables used in the study.

Chapter four consists of analysis, discussions, presentation and interpretation of data in line with study objectives. Chapter five constitutes summary of findings, conclusions and recommendations for policy action.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter entails literature from authors both local and international on electronic banking services and customer satisfaction themes followed by review of the theoretical framework, conceptual framework which illustrates the independent and dependent variables.

2.2 Customer satisfaction in Savings and Credit Cooperatives

Technology has enabled customers to access services and products available in the market both locally and internationally these members compare services offered by the Sacco to other providers especially the banks thereby creating a competitive environment and pressure to their Saccos in service delivery. The Sacco industry has responded to this threat by investing in technology to offer services and products that satisfy their customer's changing needs. Customer satisfaction is the outcome of the experience after testing the performance of a service and the feeling that the expectations have been met. Hansemark and Albinson (2004) say "satisfaction is the general customer attitude towards a vendor service, or a reaction to the difference the customer expectations and the actual service received. Gronroos (1984) as cited in (Leninkumar, 2016) defined service quality as the outcome of the evaluation process, where the customer compares his perceived service with the actual service received. Customer satisfaction is critical for service delivery since a satisfied customer will make repeat purchases and share the pleasant experience while dissatisfied customers will tell more people about the unpleasant experience. Customer satisfaction is derived from individual judgment on perception and the actual service received. SERVQUAL service quality model has been used by authors to measure quality service in the banking industry. Competence, security, credibility, access, communication, knowing the customer, tangibility and responsiveness are dimensions used in the model (Parasuraman et. al.1988).

Ernst and Young (2014) survey on access and global banking found that customers value convenience and simplicity as evidenced in their emphasis on easy access to branches, excellent

online features, ease of conducting frequent banking and quick handling of transactions. Globally findings showed that digital channels functionality, complexity of use, security, slow speed and poor infrastructure were some of the major challenges that customer's encounter while accessing electronic services. According to Meuteret et al., (2000) in their study identified attributes that customers look for in electronic service as solution to an intensified need, a better option than the alternative, easy to use, accessibility and time saving. The dissatisfaction aspects identified were; process failure, technology failure, service design problem and customer driven failure. To satisfy the customer, management must understand their needs this can be achieved by involving the customer expectation during design and testing phases. Abubakar et al., (2001) notes that "service delivery is a strategic tool in banking industry that distinguishes a firm's products and services in an extremely competitive environment". The study identified behavioral factors such as security of personal and financial information, convenience of service and cost of service equally contributes to effective service. They further mentioned that electronic services define what can be offered to the customer, but the customer defines the service to use hence the need to know the customer then design electronic services that meet the needs of the customer and not the bank's needs.

According to Rodgers (2012) members in Credit Unions ought to be the focus for electronic channels services design hence stakeholder participation is key to the success. Management should consider staff involvement in implementation electronic channels in order to patronize the service and transfer the knowledge to the member. Wamuyu (2015) affirms that users of an ICT infrastructure have some parameters that determine continued use of technology such as service quality, cost of use and customer service influence. Technology innovations has enhanced emergent of new business which have revolutionized the distribution channels of financial systems and thus reduction in the transaction and operation costs to some extent and improvement in convenience and accessibility by the customers (Devlin, 1995). According to Norton (1992) and Mishkin and Strahan (2009) this is a major component in transforming financial system. Innovations facilitates monitoring of businesses by investors and financial institutions, thereby enhance information for timely decision making. As such, financial institutions which have not heavily budgeted and invested in technology have faced attrition of their market shares to other

nonbanking institutions. Developments in technologic advance speed on access of information within and across borders, which is becoming increasing important for successful banking transaction. (Bradley and Steward, 2002).

2.3 ATM and customer satisfaction in Savings and Credit Cooperatives

Prior to introduction of ATM's in Sacco's members used to withdraw cash from their FOSA' s and then deposit the money in their commercial bank accounts hence the introduction of ATM's has brought convenience to the members. The card is linked to ones saving account and allows one to withdraw money or pay goods at the point of sale. A Debit card allows one to buy goods from authorized merchants, a debit card is linked to a deposit account but may be authorized to over draw while a credit card allows one to use credit facilities within agreed credit limits at an interest. Automated Teller machine (ATM) is a computerized telecommunication device that customers use to access bank services without the help of a teller (Hossain et al., 2013). A user inserts a magnetic striped card with a chip that contains security information and other information such as card expiry date, bank account and name. Authentication is achieved entering a Personal Identification Number (PIN) which is digitally verified by the bank. ATM services include cash withdrawal, cash deposit, cash recycling and dispensation of cash in different denominations and currencies. Modern ATM's have more advanced features one can stop payments, funds transfer to different accounts, bill payment, mini statements, enquiries on bank location, advertisements amongst other services. It extends convenience to customers in access of services anytime, anywhere at a reduced cost and provides privacy and flexibility. It eases congestion in banking halls, cuts down on operation costs and it is a source of revenue to the financial institutions. ATM's are usually installed in convenient places outside the banking halls, shopping malls, restaurants and petrol stations for ease of access.

POS is a device which is connected via a telephone or a wireless communication to the financial institution's server (Hossein & Mohammed, 2012). A customer has the option to use a debit, credit, mobile money or cash at the point of sale. Merchants who wish to acquire POS must have a bank account as the merchant is credited directly to the bank account. It benefits the buyer by reducing risks in cash handling and it is convenient. The merchant benefits by reduction of cash management

risks, enhances reconciliation and fewer missed purchases. The bank benefits in reduced queues and additional revenue from fees charged to the merchants (FSD, 2007). In a study carried out in Iran bank, POS users consisting of 200 shoppers' findings showed that the customers' satisfaction is measured on security and the cost of service (Mirhosseini, Shaker, Foutuhi, 2015).A banking survey by (KPMG, 2016) on customer satisfaction with banking services findings showed that Ghanaian's prefer branch banking but occasionally use alternative channels for its convenience and flexibility however they were concerns on security as a result of rampant frauds , delays in transaction , accurate and complete information. Findings from a population of 600 customers in Accra, Kumasi and Takoradi, revealed that 3% of the customer used internet weekly, 4% used mobile and only 2% used POS weekly. Compared to the findings in Kenya, access on a weekly basis showed that internet 3%, ATM 43%, mobile 26% while POS has the lowest preference of 5%. Resulting from the above study findings it is factual that customers value the use of electronic services but then there exist challenges which ought to be addressed by the financial institutions in order to improve customer experience.

ATMs have eliminated the need for customers to visit the bank for basic transaction and in effect convenience to the customer. Accenture (2016) ATM survey observed that ATM's have evolved from basic to complex functionality, in the UK ATM's are used for mobile phone top-up, charity donations, sell stamps, in Russia Multicarte ATMs are used for internet services and credit card application. Other services include loans application, Western Union remittances, currency exchange, cash and cheque deposits. Several studies have been carried out to establish the attributes that customers look for in ATM's. A study on online banking in Malaysia consisting of 500 university students found that 33% of the students use ATM while 29% use internet banking (Kadir et al., 2011). Islam (2015) findings on ATM services usage in Bangladesh by means of structured questionnaires indicated that 61.22 % use ATM to access money while 38% use other channels. Security, privacy and safety were ranked top in customer expectations. The respondents in a study carried out in Nigeria indicated that customers are dissatisfied by ATM due to poor network performance and few ATM locations.

Customer satisfaction is determined by the service quality rendered by the stakeholders. Findings in a study carried out in Nigeria (Odusina, 2014) revealed that people use the services to avoid congestion, when these expectations are not met then customers are dissatisfied with the service. Mwatsika (2016) found that ATM satisfaction is influenced by fees charged, reliability, convenience, availability of cash and responsiveness by employees on resolution of ATM problems. Simon and Thomas (2016) on e-banking on customer satisfaction studies in selected commercial banks in Kenya showed that ATM's affect customer satisfaction by its ease of access, user friendliness and privacy. According to central Bank report ATMs deployed dropped from 2,718 to 2,656 a sign of banks moving to convenient cost-effective digital platforms. Equity banks 90% transactions are digital, and their plan is to migrate 80% of the transactions to digital platforms by 2018 Juma (1st September 2017 business daily). (Okeke et.al 2015) studied quality aspects of online services which customers value and found that ATM's malfunctions, running out of cash debiting un-dispensed cash and insecurity are some of the challenges that dissuade customers from using the service. Service quality dimensions users focus are consistent with other studies (Singh, 2011). The questionnaires in the study were based on these attributes Cash availability, Location and proximity of the ATM, time taken to process a request, cheque drop box, statement print outs and cash deposit facility, response to queries and availability of shared ATMs.

ATM service has been in existence for quite a while since 1967 it has evolved from a simple cash dispensing machine to a more complex one in functionality and thus remains relevant for cash transactions. However, the channel is hampered with challenges emanating from fraud, counterfeit cards, card interception, stolen cards and fraudulent card applications this is in accordance to findings in a survey carried out by (Federal Reserve, 2016). Frequent failures of services impact negatively to both the financial institution and the customer this therefore requires financial institutions to ensuring that security controls are put in place to deter fraud, manage downtimes by provision of technical support to ensure availability of services.

2.4 Mobile banking and customer satisfaction in Savings and Credit Cooperatives

Mobile banking is the use of mobile devices such as cellular phones and smart phones to communicate and perform banking services such as checking account balances, search recent

account activity, transfer funds from one account to another, pay bills, find nearest ATM facility amongst others Shah (2009). Banking industry is moving away from the traditional banking to electronic banking owing to changes driven by technological innovations, changing market environments and competition. Mobile banking adds business value, increased efficiency, cost reduction and improved customer service (Kahandawa and Wijayanayake, 2014). It is the newest technology made possible by the availability and capacity of the mobile infrastructure around the world. According to a World Bank (2016) survey more households in developing countries have access to mobile devices than basic needs such as electricity and water. Studies on mobile banking in e-payments identifies Kenya as the world leader in mobile money via Safaricom's Mpesa , orange and Airtel money platforms that have accelerated financial inclusion to less penetrated rural population and the poor USAID (2011). Studies by (Economic Survey 2016) statistics show that there were 3.4 trillion Kenya shillings transferred through mobile phones, 46.3 billion SMS sent, and 1.7 trillion worth of money sent under mobile commerce.

Customer satisfaction is measured by how a product or service meets or surpass customer expectations. Mobile banking has opened a new window for both the customers and the service provider. Several studies have been carried out to determine the attributes that customers consider when using mobile banking. A study carried out in Sri Lankan state commercial bank (Kahandawa and Wijayanaki, 2014) by use of questionnaires on 64 respondents found that usefulness, ease of use, relative advantage, perception of risk, user's lifestyle and current needs influence customer satisfaction for mobile services. Findings showed that 87% respondents were anxious on perception of risk and considered it a crucial factor in customer satisfaction however 90% of the customers were satisfied with mobile service. These findings are supported by (Saleem and Rashid,2014) in their study in Pakistan banks using nonprobability sampling in three banks based on a sample of 230 bank employees and 230 customers observed that customers critically consider security, authenticity and reliability of mobile services to measure satisfaction of the mobile banking services. A study on effectiveness of mobile services in KCB bank Morogoro in Tanzania showed that customers were satisfied with mobile banking though network challenges, delays in transaction processing and delay in resolutions of cases where customers sent money to wrong numbers (Haonga, 2015) were some of the challenges that hindered use of the service. Findings in

a study on customer satisfaction on mobile banking carried out in Jordan where questionnaires were distributed to 360 customers based on the dimensions: reliability, flexibility, privacy, accessibility, ease of navigation, efficiency and safety attributes that influence satisfaction showed that privacy and accessibility had the highest influence on customer satisfaction (Asfour & Haddad, 2014).

2.5 Internet banking and customer satisfaction in Savings and Credit Cooperatives

Banking services have traversed tremendous changes stemming from advances in technological innovations. Internet banking refers to a being able to access one's bank account and carry out financial transactions via the internet. The prerequisites of internet delivery channel are internet accessibility, a website, back and front end, customer relationship management (CRM), ICT infrastructure to link e-banking payments system and a middleware to integrate diverse systems. Internet is the latest and cheapest technology used in online banking services. The bank website can be used to access account or product information, funds transfer between accounts, bill payment, access bills, online loan application and approval, business banking services, interaction, accounts aggregation, cross selling and electronic funds transfer (Shah, 2009). There are two forms that may be adopted namely information sharing and transaction processing or both. Financial institutions provide a website to its prospective and current customers where products and services information is displayed. Customers are issued with usernames and passwords to verify access. Other forms of information sharing include web portals and email communication between the bank and its clients. Transactional processing is where the bank's core banking system is accessed via the internet over a middleware and it enables the customers to perform banking services such as bill payments and funds transfer.

It has been projected that internet banking will positively impact in reduction of routine time-consuming processes and tasks, reduction of human error and extension of access for banking related services, designed to provide convenience for the customer. The internet also provides customers with information that would otherwise be costly on a person-to-person basis. Similarly, it allows customers to perform several tasks simultaneously in their convenience. Dabholkar (2009) says that direct interaction with technology accords users a feeling of greater control. Smith

(1987) believes that initially, banks embraced technology as a cost cutting measure through the division of back office and front office operations. However, it has led to more efficiency in service provision and internet banking refers to provision of banking services and information on products over the World Wide Web (WWW). The financial services has undergone tremendous transformation in areas of financial markets and intermediation e.g. e-finance, e-money, e-brokering, e-banking, e-insurance, e-supervision and e-exchanges. As the industry continues to witness rapid advances in information technology and increased competition, there has been an extensive adoption of e-banking as a distribution channel (Mahdi & Mehrdad, 2010). These emerging factors complicate the processes of designing organizational strategies, which are threatened by the unpredictability of the economic environment.

Internet exposes consumers to information from other financial service providers giving those options for comparisons, a platform for marketing and advertisement for service providers, e-commerce and formation of virtual organizations such as Amazon, Smile.co.uk (Shah, 2009). According to Young, (2001) More than 11,000 banks in the US utilize the click and mortar strategy where customers use transactional websites to perform banking without leaving their business or homes, but customers visit banking halls for personalized services. It was predicted that internet banking adoption rate would be faster than ATM in 5 -10 years and that if banks failed to embrace internet banking, they will lose their competitiveness to cyber banks (Yan and Paradi, 1998). This prediction is yet to be fulfilled thus brick and mortar strategy has not been replaced instead the physical branches have been customized to suit changing customer needs by provision of alternative channels. A survey by Accenture Consulting (2016) for North America showed that online banking was the dominant channel with 60%, but still 87% of the customers use branches and therefore the need to balance the modern branch with a mix of digital, by extension of operation hours and human interaction.

Internet adoption by customers is determined by several factors as observed in the various studies. Some of the factors that determine use are awareness, security and accessibility. United Arab Emirates (UAE) banks have adopted Internet banking but traditional banking is still the preferred channel for customers. Multiple channels are utilized depending on the nature of the transaction,

respondents' acknowledged that trust and privacy were limitation to access online services (Jham & Ganderen, 2012).Trust affects user's willingness to use online money transfer, fear of sharing sensitive information online, banks and consumers consider security as a threat. There is need for managers in financial organizations to build trust by implementing strong security controls and convince customers of mechanisms put in place to safeguard security concerns to encourage use (Jham, 2016). Jham defines E-trust as the degree with which customers trust online exchanges. Customers regard reliability, efficiency, security and confidence while accessing online services. These findings are also supported by Maroofi, and Nazaripour (2012) in the study on factors affecting customer loyalty in Iran, trust, habit and reputation of the banks was found to highly affect customer loyalty and satisfaction. Trust can be inspired by provision of safe reliable websites and an attractive user interface coupled with security measures. According to (Arshad, et.al., 2005) the world over, users compare services and products offered by different firms and select one that meets their needs easily and at less cost compared to traditional means, thus there is need to give quality service. Some of the dimensions used were reliability-meeting expectations, completion of funds transfer, Access-ability to access without time and geographical limitations, and security – trust in online privacy. Internet adoption by customers is determined by several factors as perceived from the various studies. Some of the factors that determine use are awareness, security accessibility amongst others. Internet use for funds transfer is broadly adopted by banks as compared to microfinance institutions and Sacco's. A study by Okiro and Ndungu (2013) on financial institutions in Nairobi, banks had the highest internet usage at 43%. Balance enquiry was the most service used at 40% while bill payment was at 3.3 %.

Internet banking is a cost-efficient service and therefore financial institutions are perceived to be moving towards online banking to harness the benefits of lower operation cost while enhancing customer satisfaction. Barriers include security threats accessibility, trust by the customers, and lack of awareness. Mitigation measures include huge investment in security controls and human expertise security threats.

2.6 Theoretical framework

The study used Diffusion of Innovation Theory (DIT) by Rogers (1995) to guide the direction. Rogers' Diffusion of Innovation Theory (1995) is a theory that explains reasons for adoption of an innovation aimed at reducing uncertainties about the unknown. The rate of adoption is the relative speed at which members of a social system adopt/embrace an innovation. This is measured by the number of persons adopting the new idea within a specific period.

Rogers (1995) identified five attributes that influence use of innovation. The first attribute is relative advantage, which is the degree to which users perceive an innovation to be better than the idea it succeeds. The second attribute is Compatibility. This is the degree to which a new idea is seen to be consistent with past experiences, existing values and the needs of the adopters. Experience with old ideas can either hasten adoption or be a barrier to adoption. Thirdly, complexity measure the extent to which an innovation is seen as difficult to understand or use. Triability measures the degree to which an innovation may be tested to determine how it works and may increases confidence and quicken adoption. Observability measures the possibility of the outcomes of an innovation being visible to others. This can be attained by seeing others utilizing the technology leading to confidence for expected users. Rogers (2003) also noted that communication is passed using mass and interpersonal channels as a means through which an organizations or individuals receive information. The nature of communication channels and agent's promotion efforts influence rate of adoption either slowing down or slowing down.

Rogers (2003) identifies five stages of innovation adoption; Knowledge stage where an individual learns about an innovation and seeks further information about the technology. Persuasion stage; where an individual has a negative or strong attitude towards the innovation, persuasion by a change agent may influence the user to change mind and adopt. Decision; where an individual chooses to adopt or reject, rejection is possible in every stage in the innovation decision process. Implementation-where the innovation is put into practice, reinvention may occur to modify the existing idea. Confirmation where individual looks for support for his decision from peer's later adoption or discontinuance happens at this stage.

Diffussion of innovation was relevant to this study in that customers look for attributes that either push or pull them towards adoption of technology.They raise such questions as what are the benefits?how easy it is to use? will they get better services as compared to visting the branch?Will they be compatible for example ability to transfer funds, pay bills and withdrawal money. Customers are concerned on the user friendliness in terms of how easy it is to use the service, long steps, repeated information asked and unclear instructions will disuade a customer.The institution should demonstrate how a service works especially when they visit or share instructions on the website for reference so that customer confidence can be won.Communication is vital, foremost the staff should be involved in implementation inorder to patronage use of electronic services and pass over knowledge to customers. Sacco's should organise education forums and if possible advertise in the media to create awareness of the electronic services.

2.7 Conceptual framework

The conceptual framework shows the relationship between the independent and the dependent variables.

Independent variables **Dependent Variable**

Electronic delivery services

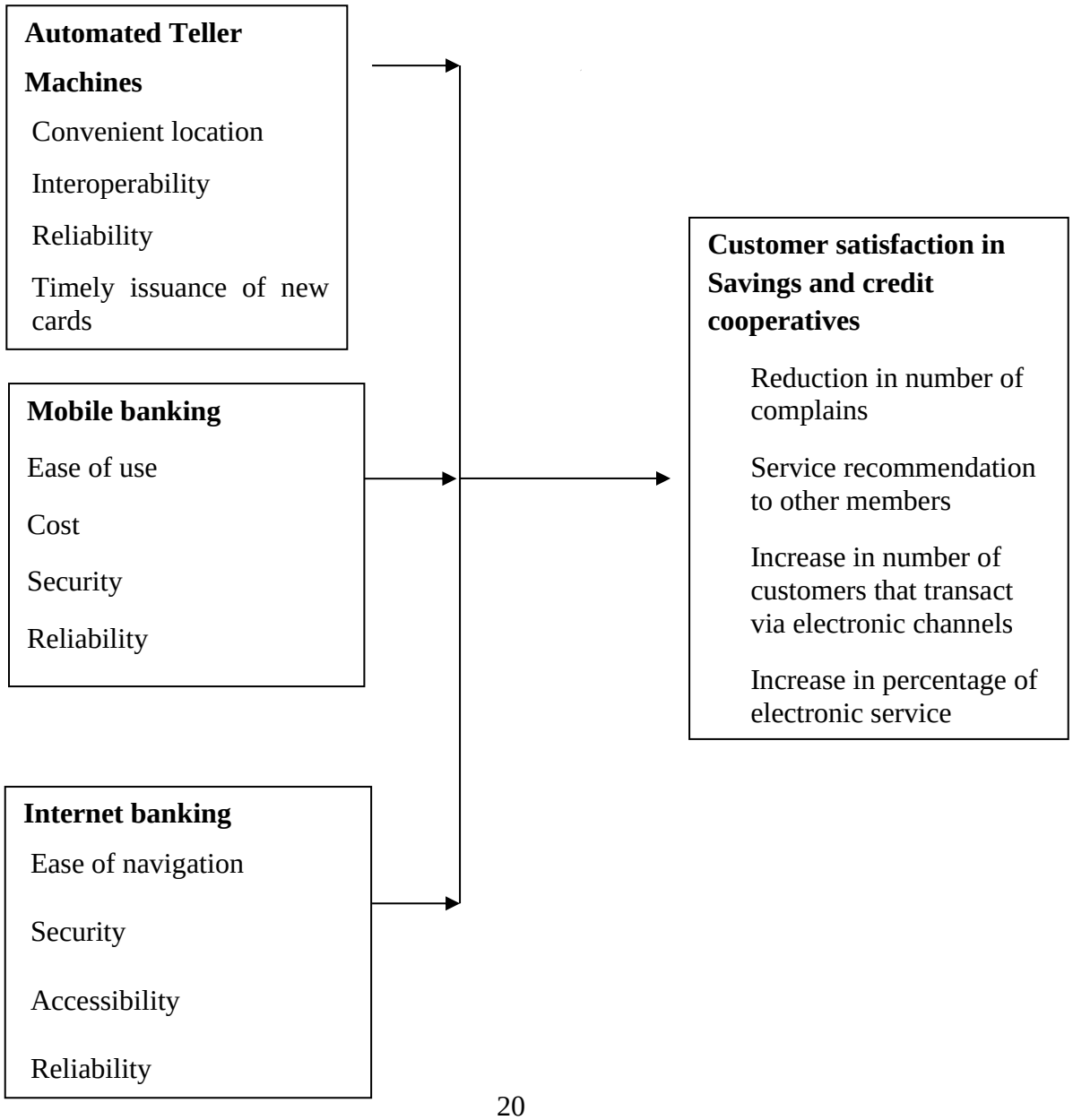

Figure 1: Conceptual Framework of electronic services in Savings and Credit Cooperatives

Independent variables were electronic delivery services namely Automated Teller Machines services, mobile banking services and internet banking services while the dependent variable was customer satisfaction. The literature reviewed by several authors demonstrated attributes that leads to either satisfaction or dissatisfaction of the customers.

Customer satisfaction in this case was based on the quality of ICT infrastructure that internally runs the core banking system interconnected to the various channels, the institutions support by provision of adequate financial resources and skilled human resource. Ones the ICT infrastructure was in place customer satisfaction was evaluated by the actual service encounter at the channels, service dimensions such as usefulness, and ease of use, security, reliability and accessibility compared to the expected performance as perceived by the customer.

Indicators of Customer satisfaction on use of services was measured by increase in members using services and new application of such services by new members, reduction of failed electronic transactions, increase in revenue collection from the electronic services and increase in customer satisfaction scores in the strategic plan.

2.8 Knowledge gaps

Most studies undertaken focused mainly on electronic services in Banks in other countries and Kenya however further studies on the influence of electronic services on customer satisfaction in the Sacco industry should to be carried out. Juma (2013) studied customer service delivery in banking industry in Bungoma County, Mburu (2015) studied adoption of mobile banking in Nairobi county Sacco's, Ongori (2013) carried out a study on self-service technologies and effect on customer satisfaction in banking industry. Findings showed that electronic service reliability, responsiveness and security influence customer satisfaction.

Table 2.1 Knowledge gap

Variable	Author/ Year	Title of the study	Findings	Gap
Customer satisfaction	Ernst & Young (2014	EY Global consumer banking survey	Banks should enhance customer problem resolution experience	The study based on banks This study focuses on electronic services in Saccos
Customer satisfaction	Juma (2015)	Influence of E-Banking services on Customer on Customer service delivery in banks a Case of Bungoma	There was Great influence of e-banking services on customer satisfaction	The study was carried out in banking industry. This study population is Sacco's
Customer satisfaction	Abubakar et al., (2001)	Review of the Influence of Electronic Banking Services on Customer Service delivery	Behavioral factors like security, convenience and service cost contribute to effective service	Population-banks Research method-qualitative
Automated Teller Machines\Debit cards	Accenture consulting (2016)	North America Consumer Digital Banking Survey	ATM, s has evolved from basic to complex functionalities	Population – banking sector

Automated Teller Machines	Kadir et Al., (2011)	Study on Online Banking and ATM services in Malaysia	33% of University students use ATM compared to internet 29%	Population-students Industry-Banking
Automated Teller Machines	Islam (2015)	Customer satisfaction and ATM services: The base of Bangladesh	ATM was the preferred channel at 61%, while those who do not use cited poor network performance and few ATMS	
Automated Teller Machines	Odusina (2014)	Automated Teller Machine Usage and Customer Satisfaction in Nigeria	ATM, s decongests banks and provide convenience	Nigeria banks
Automated Teller Machines	Mwatsika(2016)	Factors Influencing Customer Satisfaction with ATM banking	ATM satisfaction is influenced by fees charged, reliability, availability of cash and responsiveness of employees in resolving problems	
Automated Teller Machines	Simon &Thomas (2016)	Effect of Electronic Banking on customer	ATMs affect customer by ease of access, user	

		Satisfaction in Selected Commercial Banks	friendliness and privacy	
Automated Teller Machines /Debit Cards	KPMG (2016)		Use of POS low in Ghana and Kenya	
Mobile banking and customer satisfaction	Kahanda &Wijayanaya ke(2014)	Impact of Mobile Banking Services on Customer Satisfaction	Mobile banking adds business value, increased efficiency, cost reduction and improved customer service	Population-Sri Lankan State Commercial Banks
Mobile banking and customer satisfaction	World bank Survey (2016) Survey	World Development Report: Digital Dividends (2016)	More households in Africa have access to mobile banking than basic needs	World population- A gap exits in Saccos
Mobile banking and customer satisfaction	USAID (2011)			
Mobile banking and customer satisfaction	Mburu (2015)	Adoption of mobile banking services in Nairobi County Sacco's		Nairobi county The study specific to Mwalimu National

Mobile banking and customer satisfaction	Economic Survey Statistic (2016)		3.4 Trillion Kenya shillings transferred thru mobile banking and 1.7 Trillion-shilling worth under mobile commerce	Kenya Mobile money
Mobile banking and customer satisfaction	Saleem and Rashid(2014)	Relationship between Customer Satisfaction and Mobile Banking	Findings showed that customers value security, authenticity and reliability of mobile services	Population Pakistan banks
Mobile banking and customer satisfaction	Haonga(2013)	Effectiveness of Mobile Banking on Customer Satisfaction in Banking Services a case of KCB bank Morogoro branch	Customers satisfied by mobile banking services however delays in transaction processing and delays in resolving money transferred to wrong recipient was a concern to them	Population KCB bank Morogoro
Mobile banking and customer satisfaction	Asfour and Haddad (2014)	The impact of Mobile Banking on Enhancing	Privacy and accessibility had the highest influence on	Population

		Customers E-Satisfaction	customer satisfaction	
Internet and Customer satisfaction	Accenture Consulting (2016)	Mobile banking and customer satisfaction	Online Channel was dominant with 60%	North America
Internet and Customer satisfaction	Jham &Ganderen(2012)	Strategic Adoption of Multichannel Banking by Customers in UAE	Traditional banking still preffered due to concerns on trust and privacy	UAE
Internet and Customer satisfaction	Maroofi and Nazaripour	Factors Affecting Customer Loyalty of using Internet Banking in Iran	Reputation of the bank affected customer loyalty and satisfaction	
Internet and Customer satisfaction	Okiro and Ndungu (2013)	The Impact of Mobile and Internet Banking performance of Financial Institutions in Kenya	Banks had the highest internet usage compared to microfinance institutions	Population financial institutions

The objective of this study was to establish the influence of electronic delivery services on customer satisfaction in Savings and Credit Cooperatives a case of Mwalimu National Sacco to address the gap and add more knowledge for future researchers willing to carry out a study in Sacco's.

2.9 Summary of Literature Review

The chapter consisted of the literature reviewed from various authors pertaining to the electronic delivery services and customer satisfaction based on the study objectives.

2.91 Customer satisfaction in Savings and Credit Cooperatives

Technology has enabled customers to access products and available services in the market both locally and internationally. majority of the Sacco members own a commercial bank account hence they often compare services offered by the banks to what they get creating pressure to improve services. The Sacco industry has responded to this threat by investing in technology to offer services and products that satisfy their customer's needs. Arising from the literature reviewed from different authors; customer expectation is influenced by changing technology trends and thus customer expectations are dynamic. This therefore demands that the service provider innovate ways to meet them. Members should be the focus while developing electronic channels in order to meet their expectations Rodgers (2012).The customers measure satisfactions on a some parameters that determine use such as service quality, cost of use and customer service Wamuyu (2015).ICT innovations enhance service delivery by providing access to optional channels but the customer defines the service to use and thus there is need to know the customer as observed by Abubakar et.al.., (2001)

2.9.2 ATM and customer satisfaction in Savings and Credit Cooperatives

The financial sector in Kenya is driven by five major sub sectors namely; Banks, Insurance, Capital markets, Pensions and Sacco's. According to FSD Kenya (2007) Sacco's are excluded from the National Payments Systems and thus they rely on collaboration with commercial banks to access ATMs and electronic Funds transfer. Most Sacco's have formed partnerships with banks to facilitate access for example, Mwalimu has partnership with Spire bank, Stima Sacco with Family bank, Unaitas Sacco with Commercial Bank of Africa and many others with Cooperative bank.

Automated Teller Machines is the oldest form of electronic service that allows customers to make basic transactions without the help of a teller. Advanced types of ATM's have these functionalities; accept deposits, account transfers, enquiries, and bill payments amongst other functions. The

literature review indicated dimensions that determine use of ATM services as convenience and flexibility, 43% of Kenyans use ATM services as reported by KPMG (2016) in the Banking Survey. Security privacy and safety were ranked highly compared to other factors as determinants of customer satisfaction.

2.9.3 Mobile banking and customer satisfaction in Savings and Credit Cooperatives

Mobile banking is the latest and fast-growing technology due to its convenience and availability, according to a World Bank (2016) survey more households in developing countries have access to mobile devices than basic needs such as electricity and water. The innovation has increased financial inclusivity the unbanked populations. From the literature reviewed determinants for customer satisfaction by (Kahandawa and Wijayavaki 2014) were ease of use, usefulness, perception of risk and relative advantage. Findings in a study on customer satisfaction on mobile banking in Jordan by means of questionnaires distributed to 360 customers based on flexibility, reliability, privacy, ease of navigation, accessibility, safety and innovation as attributes that influence satisfaction showed that privacy and accessibility had the highest influence on customer contentment (Asfour & Haddad, 2014).

2.9.4 Internet banking and customer satisfaction in Savings and Credit Cooperatives

Internet adoption by customers is based on several attributes like awareness, security and service accessibility. According to study carried out in United Arab Emirates (UAE) banks have adopted Internet banking but traditional banking is still the preferred channel for customers. Multiple channels are utilized depending on the nature of the transaction, however the respondents' highlighted trust and privacy concerns as a limitation to access online services (Jham & Ganderen, 2012).Trust affects user's willingness to use online money transfer, fear of sharing sensitive information online likely banks and consumers view security as a threat. There is need for managers in financial organizations to build trust by implementing strong security controls and convince customers of mechanisms put in place to safeguard security concerns to encourage use (Jham, 2016). Jham defines E-trust as the degree with which customers trust online exchanges. Customers consider reliability efficiency security and confidence while accessing online services. These findings are further supported by Maroofi, and Nazaripour (2012) in the study on factors

affecting customer loyalty in Iran, trust, habit and reputation of the banks was found to highly affect customer loyalty and satisfaction. Trust can be inspired by provision of safe reliable websites and an attractive user interface coupled with security measures.

In order to obtain satisfaction in electronic services several attributes should be considered as gathered from the literature reviewed, there is a need to understand customer needs prior to implementation of electronic services.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter highlights the research methodology employed in the study, which include the research design, target population, sampling procedure, sample size, data collection processes and instruments data analysis procedures, definition of variable and ethical considerations.

3.2 Research design

The study adopted descriptive research design and it fits in the descriptive survey because the findings in the field are reported as they are without manipulation. Quantitative data was collected by use of self-designed closed ended questions and a Likert scale to rate members attitudes on electronic services. According to Mugenda and Mugenda, (2003) in this design it reports things the way they are. Kothari (2004) observes that descriptive research includes surveys and fact-finding enquiries that state affairs as they are, the researcher has no control and can only report things as they are.

3.3 Target population

Mwalimu National membership is drawn from different institutions beside teachers who are employed by the teacher's service Commission, the various institutions are grouped into units referred to as departments. The population targeted in this study was Mwalimu National, a department whose members are also employees of Mwalimu National spread across 16 branches as is summarized in Table 3.1.

Table 3.1: Target Population

Branch	Number of members
Nairobi	168
Nyeri	7
Kisumu	15
Webuye	10
Eldoret	7
Nakuru	7
Meru	7
Embu	7
Machakos	7
Kakamega	7
Kitui	5
Homabay	6
Mombasa	7
Kisii	7
Total	**267**

Source (Mwalimu, 2018)

3.4 Sample size and sampling procedures

Sample size describes the number of elements to be chosen from the universe to represent the sample while the sampling procedure refers to the process used in selecting the sample. (Kothari, 2014).

Yamane (1967) formulae was used to determine the sample from the population.

$$n = \frac{N}{1+Ne2}$$

n is the sample size, N refers to the Population size, e Level of precision while is 1 the probability of an event happening.

N = 267

e =.05

$$\frac{267}{1+212(.05)2=} 138.5$$

Table 3.2: Sample size

Branch	Total	sample Size
Nairobi	168	87
Nyeri	7	4
Kisumu	15	6
Webuye	10	4
Eldoret	7	4
Nakuru	7	4
Meru	7	4
Embu	7	4
Machakos	7	4
Kakamega	7	4
Kitui	5	3
Homabay	6	3
Mombasa	7	4
Kisii	7	4
Total	**267**	**139**

Source (Mwalimu National, 2018)

3.4.2 Sampling Procedure

Upon computation of the expected sample of 139 members, stratified proportionate sampling method was used to select the members to represent the target population. The population was

grouped into branches as per Table 3.2. To get a proportionate sample the desired sample n was derived by calculating the percentage of the total members. Random sampling was used to select the units to represent the population.

3.5 Data collection instrument

Email survey by use of google online forms was used to design the questionnaires which were distributed to the respondent's via email address. Controls were put in place to avoid submitting incomplete forms. The questionnaires were grouped into five sections; section A constituted of the background information of the respondents while section B captured ATM service, C captured mobile banking and D internet service. Section E contained questions on the overall satisfaction level of electronic services. The questionnaires had closed ended questions, data collected was used in quantitative analysis to determine patterns and trends. According to Kothari (2004) questionnaires are cost effective, free from bias of the interviewer; respondents who might be difficult to approach can be reached by the questionnaires conveniently.

3.5.1 Pilot testing of the instruments

It is practical to test questionnaires to establish whether one will obtain the required results before distributing to respondents. The questionnaires were administered to four members in Nairobi branch and their feedback was used to improve the areas pointed out. Areas tested included respondents understanding of the questions, length, structure, wording and the time taken to answer the questions.

3.5.2 Validity of the instrument

When an instrument measures what it intends to measure and performs to the expectation is referred to as valid (Cherry, 2015). In general, measures the soundness of a research. To ensure content validity the questionnaires were discussed with the supervisor who is considered as an expert to ensure the study constructs have been covered and that questions reflected the study objectives. The feedback from the supervisor was used to correct the questionnaires and ensure that the questions elicited the desired feedback as per the topic of the study.

3.5.3 Reliability of the instrument

Reliability is the quality and the ability of the measurement instrument to maintain repeatability and consistency. Data is rated as reliable if it is consistent, dependable and stable. When measuring variables, researchers want to make sure that the measurement will result in consistent and dependable results (Mugenda & Mugenda, 2003). The researcher distributed questionnaires to 14 members and redistributed after one week. The correlation coefficient for two sets of responses was 0.8 indication of a reliable measure. According to Mugenda and Mugenda (2003) a pilot study that comprise of 10% of the sample is considered appropriate.

3.6 Data collection procedures

Prior to data collection permission was sought and granted by the University of Nairobi and National Commission for Science Technology and Innovation (NACOSTI). Upon obtaining necessary approvals and the introduction letter, respondents were called and briefed on the purpose of the study before emailing the questionnaires.

3.7 Data analysis techniques

Once data had been collected the attention shifted to analysis where data was interpreted, conclusions drawn, and decisions made about the findings. This involved editing collected data to detect errors and omissions, coding by assigning numbers and symbols to reduce data entry required and grouped into different categories. Finally, data was keyed in the database for analysis using Statistical Package for Social Scientists (SPSS). Descriptive statistics was used to quantify and describe the data by means of measures of central tendency specifically mean ,mode and median consequently measures of dispersion –range, standard deviation ,ANOVA and regression was employed in data analysis to show the direction and degrees of relationships between the dependent and independent variables. Negative coefficients showed negative relationships while positive coefficients positive relationships.

3.8 Ethical considerations

Permission was sought from concerned authorities including National Commission for Science Technology and Innovation. Consent from the respondents was sought by a letter of introduction the respondents were briefed on the purpose of the research and assurance on confidentiality of information collected.

3.9 Operationalization of Variables

The study objectives, independent and dependent variables their indicators and measurement scales are as illustrated in in Table 3.2.

Table 3.2: Operational definition of the variables

Objective	**Variable**	**Indicator**	**Measuring scale**	**Data analysis Techniques**	**Tools of Data Analysis**
To determine how Automated Teller Machines Service influence customer satisfaction in Mwalimu National Sacco.	**Independent** ATM Service	Availability of ATM service when needed Ability to access service on other banks ATMs Acceptability to pay for goods and services Time taken to replace lost card Time taken to issue new card security of the card	Nominal Nominal Nominal Ordinal Nominal Nominal	Descriptive statistics Inferential statistics	Mean median Standard deviation ANOVA
To determine the influence of mobile banking service on	**Independent** Mobile banking service	Ease of using the mobile phone to make a transaction Cost of service	Nominal Ordinal		Mean median Standard deviation

customer satisfaction in Mwalimu National Sacco.		Security of service Reliability of the service	Nominal Ordinal	Descriptive statistics Inferential statistics	ANOVA
To determine the influence of Internet service on customer satisfaction in Mwalimu National Sacco.	**Independent** Internet channel	Ease of use Security of service Time taken to access service Reliability Ability for staff to resolve a problem when raised Notify member when service is down	Nominal Nominal Ordinal Nominal Nominal Ordinal Ordinal	Measures of Central tendency; Mean Inferential statistics	Mean median Standard deviation ANOVA
	Dependent Customer satisfaction in Savings and Credit Cooperatives	Reduction in number of complains Increase in number of recommendations of electronic services to other members Increase in electronic transactions	Nominal	Descriptive statistics	

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

The chapter presents analysis of data gathered, interpretation and discussion of the results arising from data collected using mail questionnaires. The data collected was analyzed by use of descriptive and inferential statistics.

4.2 Questionnaire Return Rate

Questionnaires were distributed to 139 respondents, 133 were completed and submitted while 6 were not submitted by the respondents. The rate of returned responses was 95.6% and according to Mugenda & Mugenda (2003) a response of over 80% is adequate for the study and thus the return rate for the questionnaires was above the recommended margin.

4.3 Demographic Characteristics of Respondents

Demographic characteristics of the respondents were collected from the respondents as they could form a basis under which the responses on electronic services may be analyses. The demographic characteristics were Gender, Age of respondents, channels used for service and the specific electronic service used to transact.

4.3.1 Gender Distribution of Respondents

The researcher sought to ascertain the gender for the respondents and results are shown in Table 4.1.

Table 4.1: Gender Distribution of Respondents

Gender	Frequency	Percentage
Female	66	49.6
Male	67	50.3
Total	**133**	**100**

The findings showed a balance in gender representation, females were 66 at 49.6% while males were 67 at 50.3%.

4.3.2 Distribution of respondents by their Age bracket

The researcher sought to determine the respondent's age brackets and the results are tabulated in Table 4.2.

Table 4.2: Distribution of Respondents by their Age bracket

Age Bracket	Frequency	Percentage
Below 30 years	23	17%
between 31 and 40 Years	62	47%
between 41 and 50 Years	32	24%
Above 50 Years	16	12%
Total	**133**	**100%**

The results showed a representation from diverse age groups below 30 years were 17%, between 31 and 40 years 47% between 41 and 50 years 24%. And above 50 years 16%. Majority of the respondents were drawn from ages 31-40 at 47% while the lowest representation was above 50 years at 12 %.

4.3.3 Service channel of choice

The respondents were asked to select the service channels they use to transact electronically the findings are summarized in Table 4.3.

Table 4.3: Service channel

Service Channel	Frequency	Percentage
Automated Teller Machine	88	66
Mobile Banking	112	83
Internet banking	26	19
	133	**100%**

The respondents were asked to select the channel used to perform electronic services in Mwalimu National. The results revealed that ATM channel use was at 66%, Mobile banking channel had highest frequency at 83% while Internet channel at 19% as shown in Table 4.3.The findings indicated that most Mwalimu members used the Mobile banking channel to access services this could be attributed to convenience, ease of use, availability and security. ATM low access could be as a result of location of the ATM being out of reach for those in rural areas and delays in issuance of new cards to the members. The internet channel had the lowest usage this may be due to lack of awareness, accessibility and lack of transactional services. The factors limiting use should be addressed in order to increase usage of ATM and Internet services.

4.3.4 Electronic services

Amongst the three channels, respondents were asked to select the electronic services they use to perform transactions at Mwalimu Sacco. The results are shown in Table 4.4.

Table 4.4: Responses on electronic services used

Electronic Delivery Service	Frequency	Percentage
Cash withdrawal by ATM Card	74	55
Payment of goods by ATM card	54	40
Withdrawal of cash by mobile banking	118	89
View member statement on Mwalimu online portal	57	43
View products and information on Mwalimu website	41	31
M-Loan application	77	58
Total	133	100%

Results showed cash withdrawal from ATM at 55%, payment of goods with the ATM card 40%, Withdrawal of cash by mobile banking 89%, viewing statements via online portal 43% and M-Loan application at 58%.Viewing products and information on Mwalimu website was lowest at 31% the ratings may be enhanced by training and creating awareness of the services to the members. The results show that members use different channels to access services. It can be deduced from the results that mobile banking was very popular for access of services due to convenience and ease of access. ATM service was also popular for cash withdrawal and payment of goods, this can be enhanced by ensuring that ATM cards are issued and replaced on time to increase use.

4.4 Automated Teller machines and customer satisfaction

The respondents were asked to state their level of agreement or disagreement on the given ATM service attributes as illustrated in Table 4.5.

Table 4.5 ATM and customer satisfaction

ATM attributes	Mean	Standard Deviation
Convenient location of the ATM	2.053	0.801
Interoperability with other ATMs	2.263	0.852
Reliability of the ATM	2.271	0.962
Timely issuance of new ATM card	2.602	1.066
Timely replacement of lost cards	2.767	0.984
Make payment of goods and services	2.226	0.974
extent to which ATM use influence satisfaction	3.729	0.889

Convenient location of the ATM had a mean of 2.053 and standard deviation of 0.801, interoperability with other ATM's had a mean of 2.263 and a standard deviation of 0.852, Reliability of the ATM had a mean of 2.271 and standard deviation of 0.962, Timely issuance of new ATM cards had a mean of 2.602 and a standard deviation of 1.066, and timely replacement of lost cards had a mean of 2.767 and a standard deviation of 0.984 while payments of goods and services mean was 2.226 and a standard deviation of 0.889. The findings show that many respondents agreed that timely replacement of lost ATM cards influence customer satisfaction. This implies that the Sacco should ensure that ATM cards are replaced on time in order to satisfy customers.

In relation to satisfaction of ATM card service by Customers in Mwalimu National Sacco, the means of all the attributes attached to ATM use were not far different, all had a mean of between 2 to 2.7 .However looking at the medians, timely replacement of lost cards had the highest median this implies the attribute highly influences customer satisfaction in the use of ATM's. Comparing standard deviations however, convenient location of ATM's had the least standard deviation with the least mean as well, the least standard deviation shows how the responses were closely packed around its mean yet it had a mean of 2 denoting that majority of respondents agreed that it influences their satisfaction compared to all the other factors in comparison. This proves that

customers are highly influenced by the location of these ATMs. Therefore, location has the least influence on satisfaction about use of ATMs. Past experiences while accessing this service when needed may create a negative attitude towards the location, the bank and the service in general. It is therefore very critical for financial institutions and Sacco's to manage downtimes by providing technical support for the customers to ensure that services are available when needed, Accenture (2016). A banking survey by (KPMG, 2016) findings in Kenya on ATM access revealed 43% of the population preferred ATM compared to mobile banking due to the convenience, this is in dissimilar to the findings in this study findings showed mobile banking use was higher than the ATM. These findings are in line with Islam et.al (2007) study on the impact on ATM service on customer satisfaction in Indian bank identified promptness in card delivery as one of the attributes that was significant to customer satisfaction.

Respondents were further asked to indicate the extent to which ATM service in general influenced their satisfaction. A Likert scale of 1-5 was used (where 1 to a very low extent and 5 was to a very great extent). The findings showed a mean of 3.729 with a standard deviation of 0.889. This implies that The ATM service influence customer satisfaction and therefore areas of dissatisfaction such as the delay replacement of lost ATM cards thus the management should put measures in place to ensure that lost cards and new cards are replaced on time this will make the service accessible to many members. Effectiveness of ATM services are determined by attributes such as availability and convenient location especially for members in rural areas where ATM's are fewer Mwalimu should consider forming more partnerships with other banks to increase access, reliability of the network service can be achieved by ensuring that the application system is always available and training staff to be responsive to customers complaints so that they are timely resolved.

4.5 Mobile banking and customer satisfaction.

Respondents were asked to state their level of agreement or disagreement on the given statements as relates to mobile banking service. The findings were as presented in Table 4.6.

Table 4.6: Mobile Banking services and customer satisfaction

Groups	Mean	Standard Deviation
Mobile banking is easy to use	1.676	0.783
Mobile banking is not costly	2.977	0.933
Mobile banking is secure	2.203	1.028
Mobile banking is reliable	2.496	1.084
Mobile banking is convenient	1.849	0.949

The findings revealed that ease of use had a mean of 1.676 and standard deviation 0.783, mobile banking service is not costly had a mean of 2.977 and standard deviation 0.933, mobile banking is secure mean was 2.203 and standard deviation 1.028, mobile banking is reliable mean was 2.496 and standard deviation 1.084, mobile banking is convenient had a mean of 1.849 and standard deviation of 0.949. Majority of the respondents agreed that the given attributes for mobile banking influence satisfaction however, the results indicate slight differences between the statements being studied hence there was need for further comparison, ANOVA analysis was carried out to determine the variance and the results are shown in Table 4.7.

Table 4.7 Analysis of variance

Source of variance	SS	DF	MS	F	P-value	F crit
Between groups	143.716	4	35.924	38.882	2.9989E-29	2.385429
Within Groups	609.784	660	0.9234			

As per the ANOVA it's evident that most respondents agreed that mobile service ease of use had the highest level of satisfaction and therefore the attribute highly influence satisfaction than all the other factors. Responses on cost of mobile services had a mean of 2.9 showing that the respondents were neutral about the cost. Security and reliability got almost same scores showing most respondents agreed that the attributes influence satisfaction. This therefore implies that ease of use had the most significant influence on satisfaction. Mwalimu National members are least satisfied with the cost attached to the mobile service and highly satisfied with the ease of use. These findings are however dissimilar to studies by (Asfour & Haddad,2014) in Jordan banks where privacy and accessibility had the highest influence on customer satisfaction.

Respondents were asked about the extent to which they were satisfied with mobile banking service by means of a Likert scale of 1 to 5.Comparable to ATM satisfaction, Majority of the respondents were satisfied with mobile banking service with a mean of , however the rate of satisfaction for mobile banking was higher at 53% against 37% for ATM. This could be attributed to the changing market environments and technology where most households have access to a cell phone hence mobile banking service becomes the most accessible and easy to use service as suggested by world bank (2016) in the study on World Development Report, Digital Dividends. This therefore implies that for Mwalimu customers to achieve optimum satisfaction there is needed to continually invest in technology to ensure that the service is secure, reliable and the cost of service should reflect the market rates so that the members do not perceive the cost to be high.

4.6 Internet Services on Customer Satisfaction

The respondents were given statements on internet services to state the level of agreement or disagreement, the findings are as tabulated in Table 4.8

Table 4.8 Internet Services on Customer Satisfaction

Attributes	Mean	Std dev
Internet service is easy to navigate through	2.1288	0.8385
Internet service is secure	2.1429	0.7866
Internet service is accessible	1.9248	0.7004
Internet service is reliable	2.0827	0.6494
Staff are responsive to enquiries	2.1203	0.7563

Based on the findings ,internet service is easy to navigate through with a means of 2.1288 and a standard deviation of 0.8385, Internet service is secure means of 2.1429 and standard deviation of 0.8385, internet banking is accessible with a means of 1.9248 and a standard deviation of 0.7004, internet service is reliable with a means of 2.0827 and a standard deviation of 0.6494, staff are responsive to enquiries with a means of 2.1203 and a standard deviation of 0.7563.The findings show that most respondents agreed that internet services were easy to navigate through.

4.6.1 Anova single factor analysis: Internet service and customer satisfaction

One-way ANOVA was used to compare the means of the all factors attached to Internet use the findings are shown in Table 4.9

Table 4.9 one-way ANOVA on internet services and customer satisfaction

ANOVA

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	4.2597	4	1.0649	1.8839	0.1115	2.3855
Within Groups	372.51	659	0.5653			
Total	376.77	663				

The findings reveal that most respondents agreed that internet services were accessible therefore accessibility highly influences customer satisfaction with internet services. However, the means

were almost similar with not much difference hence prompting further analysis with linear regression as tabulated in Table 4.10.

4.6.2: Linear Regression on internet services and customer satisfaction

Table 4.10: Linear regression on internet services and customer satisfaction

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.59257
R Square	0.35114
Adjusted R Square	0.32559
Standard Error	0.7172
Observations	133

ANOVA

	df	SS	MS	F	Significance F
Regression	5	35.35145123	7.0703	13.7455	1.00E-10
Residual	127	65.3252405	0.5144		
Total	132	100.6766917			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	5.1551	0.2164	23.8256	0.0000	4.7270	5.5833
Ease of navigation	0.0090	0.1239	0.0724	0.9424	-0.2361	0.2541
Security	0.1956	0.1249	1.5664	0.1197	-0.0515	0.4427
Accessibility	-0.4436	0.1742	-2.5474	0.0120	-0.7882	-0.0990
Reliability	-0.2489	0.1769	-1.4069	0.1619	-0.5990	0.1012
Responsiveness	-0.2744	0.1460	-1.8800	0.0624	-0.5633	0.0144

to examine the slope and extent of the influence of the Independent variables on internet banking, and whether there is any significance. The model described 59% of the data hence an R-value of 0.59.

Arising from the analysis there was only a single P-value of less than .05 hence only one factor had a significant influence on satisfaction of internet use thus Internet accessibility had a significance of 0.01.

This therefore tells that $Y= \beta_0+ \beta_1X_1+\varepsilon$. As the regression model

Would be; $Y=5.1-0.44\ X_1$

This therefore shows a negative correlation between accessibility and satisfaction derived from the use of Internet services in Mwalimu National. That if internet services are made inaccessible by a unit of time, then there would be a 44% decrease in satisfaction by the customers using internet banking. (44% is equivalent to approx. 2.6 level in our Likert scale of 1-5).

4.6.1 Overall Satisfaction with Electronic services in Mwalimu National Sacco

The respondents were asked to rate overall satisfaction with the three electronic services and the results are as tabulated in Table 4.11.

Table 4.11: Overall satisfaction with Electronic services in Mwalimu National Sacco

Electronic Service	Mean	Standard deviation
Mobile banking service	3.609	0.7543
Automated Teller Machine service	3.473	0.7211
Internet banking service	3.015	0.9498

The findings indicated Mobile banking had a mean of 3.609 and standard deviation of 0.7543, Automated Teller machine service had a mean of 3.473 and standard deviation of 0.7211 while internet banking service had a mean of 3.015, standard deviation of 0.9498. Comparing level of Customer satisfaction on using ATM, Mobile banking and Internet using a Linkert scale of 1-5,

Mobile banking had the highest mean with a median of 4 showing highest level of satisfaction, followed by ATM then Internet services had the least satisfaction.

All the three electronic services do not satisfy customers optimally, therefore it was found logical to compare the independent variables attached to each, in order to make a sound decision, findings showed that the cost attached to mobile banking was the major hindrance to satisfaction hence if adjusted satisfaction would be achieved at a scale of 5 or a mean of more than 4. Mobile Banking had the highest level of satisfaction compared to ATM and Internet banking. A study carried out by KPMG (2016) in Kenyan banks for a population of 600 showed that on a weekly basis internet access was the lowest at 3%, followed by mobile services at 26% while ATM access was highest at 43%. These findings are dissimilar to the study the reason could be based on the time the study was carried-out changes in technology and availability of mobile networks and ease of access to phones has enabled growth in mobile banking proving to be a popular and convenient means of money transfer in financial institutions.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter represents a summary of the findings as discussed in Chapter 4, conclusions and recommendations for policy action, suggestions for further studies and its contribution to the body of knowledge. The study was based on the topic influence of electronic delivery services on customer satisfaction in Savings and Credit Cooperatives, a case for Mwalimu National.

5.2 Summary of findings

The study findings were based on three study objectives namely: To establish how Automated Teller Machines service influence customer satisfaction in Mwalimu National Sacco, to assess how Mobile banking service influence customer satisfaction in Mwalimu National Sacco and to investigate how Internet services influence customer satisfaction in Mwalimu National Sacco.

5.2.1 Automated Teller Machine service and customer satisfaction in Mwalimu National Sacco

The findings for the given ATM service attributes were: convenient location of the ATM had a mean of 2.053 and standard deviation of 0.801, interoperability with other ATM's had a mean of 2.263 and a standard deviation of 0.852, Reliability of the ATM had a mean of 2.271 and standard deviation of 0.962, Timely issuance of new ATM cards had a mean of 2.602 and a standard deviation of 1.066, and timely replacement of lost cards had a mean of 2.767 and a standard deviation of 0.984 while payments of goods and services mean was 2.226 with a standard deviation of 0.889. The findings showed that most respondents agreed that timely replacement of lost ATM cards influenced customer satisfaction. This implies that the Sacco should ensure availability of ATM cards and expedited on replacements in order to improve customer satisfaction with the service.

5.2.2 Mobile banking service and satisfaction in Mwalimu National Sacco.

The second objective was to assess the influence of Mobile banking delivery service on customer satisfaction in Mwalimu National Sacco. Based on the statements given to respondents it was established that ease of use had a mean of 1.676 and standard deviation 0.783, mobile banking service is not costly had a mean of 2.977 and standard deviation 0.933, mobile banking is secure mean was 2.203 and standard deviation 1.028, mobile banking is reliable mean was 2.496 and standard deviation 1.084, mobile banking is convenient had a mean of 1.849 and standard deviation of 0.949. Majority of the respondents agreed that the given attributes for mobile banking influence satisfaction however, the results indicated slight differences between the statements being studied hence there was need for further comparison, ANOVA analysis was carried out to determine the variance , the findings showed that mobile service ease of use had the highest level of satisfaction and therefore the attribute highly influence customer satisfaction than all the other factors

5.2.3 Internet banking service influence on customer satisfaction in Mwalimu National Sacco.

Based on the internet service statements given to the respondents: internet service is easy to navigate through had a means of 2.1288 and a standard deviation of 0.8385, Internet service is secure had a means of 2.1429 and standard deviation of 0.8385, internet banking is accessible had a means of 1.9248 and a standard deviation of 0.7004, internet service is reliable had a means of 2.0827 and a standard deviation of 0.6494, staff are responsive to enquiries had a means of 2.1203 and a standard deviation of 0.7563.The findings showed that most respondents agreed on internet services being easy to navigate through .The Sacco should consider improving the customer experience by creating awareness and by including financial services to make the site useful and resourceful.

5.3 Conclusions

Based on study findings it can be concluded that electronic delivery services such as the Automated teller machines, Mobile banking and the internet services influence customer satisfaction in

Sacco's. Electronic services enhance customer satisfaction by providing convenient access to services irrespective of distance location or time. It equally provides alternative options for the customer to select from depending on the need and accessibility. Electronic services facilitate reduction in operating costs where customers access services anywhere without visiting the physical branch while decongesting service points while giving high levels of transaction accuracy due to limited human intervention.

Resulting from the findings we can conclude that timely replacement of new ATM cards influences customer satisfaction. For mobile banking service, ease of use greatly influence satisfaction while internet banking satisfaction is influenced by accessibility of these services. Mobile banking service is the most used channel while Internet is the lowest used amongst the members. Customer satisfaction can be achieved by making electronic services available when needed.

5.5 Recommendations for policy action

First because of the technology advancement and increased risk associated to electronic service use like mobile and internet banking, I would recommend training in cyber security to mitigate fraud and other security lapses inherent in electronic services. They should also provide adequate financial resources for continuous improvement of electronic services. Implementation of electronic services involve third party vendors and therefore appropriate due diligence should be carried out to guarantee selection of credible service providers.

Secondly, I would recommend the cost of Mobile banking to be reduced in line with the market rates this will allow for increased usage amongst the dissatisfied and neutral respondents.

The internet service was among the least used service and therefore I recommend that the management create awareness through training and complement the informational service with financial transactions where members can have functionalities such as balance enquiry, account to account transfer and bills payment.

Regarding use of ATM, I would recommend that the card replacement be done at the shortest time possible to improve satisfaction derived from its use. Sacco managements should ensure ICT infrastructure has the capacity to sustain availability, security and reliability of the services.

5.6 Suggestions for further studies

The variables in this study explained only 53% of the variance in satisfaction derived from use of the three electronic services, this suggests that there are other factors that explain the rest of the variance in satisfaction of either ATM use, mobile banking, or Internet service. This study therefore suggests other studies to be carried out using different models to expose the other variables that could explain the other variance in satisfaction derived from using electronic services as a means of transaction in Mwalimu cooperative Sacco.

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APPENDICES

Appendix I: Letter of transmission of data collection instrument

1st January 2018

Joanne Ruth Tambasi

Po Box 62641, 00200

NAIROBI

Dear respondent

LETTER FOR PARTICIPATION IN A RESEARCH STUDY

I am a postgraduate student at the University of Nairobi pursuing master's degree in Project Planning and Management. As a requirement for partial fulfillment of the study completion I am carrying out a study on "The influence of electronic delivery services on customer satisfaction in savings and credit cooperatives, a case of Mwalimu National Sacco".

I humbly request that you spare some time to fill the questionnaire. The purpose of the study is purely academic and therefore confidentiality will be observed.

I look forward to your positive consideration to fill the questionnaire.

Yours faithfully

Joanne R. Tambasi

Appendix II: Questionnaire for Mwalimu National Sacco members on influence of Electronic Delivery services on Customer satisfaction

Section A: Background information

Instructions: Please click in the box against the answer

1 What is your gender?

Female ☐ Male ☐

2. What age group do you belong to?

Below 30 years ☐ 31- 40 ☐ 41-50 ☐ Above 50 years ☐

3. Which of the following Electronic channels do you use to transact in Mwalimu Sacco?

Automated Teller machine ☐

Mobile banking ☐

Internet banking ☐

4. Which of the following electronic services do you perform with the selected channels?

Cash withdrawal by ATM Card ☐

Payment of goods by ATM card ☐

Withdrawal of cash by mobile banking ☐

View member statement on Mwalimu online portal ☐

View products and information on Mwalimu website ☐

M-Loan application ☐

Section B: Automated Teller Machine (ATM Card)

Instructions: Indicate by ticking in the box your level of agreement or disagreement on the given attributes regarding the ATM service.

5. To what extent does the following statements on ATM card service influence customer satisfaction in Mwalimu National Sacco using the attributes given?

Attribute	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Convenient location of the ATM					
Interoperability with other ATMs					
Reliability of the ATM					
Timely issuance of new ATM card					
Timely replacement of lost cards					
Make payment of goods and services					

6. Indicate the extent to which Automated Teller Machine (ATM card) influence customer satisfaction?

To a very low extent [ ] To a low extent [ ]

To a moderate extent [ ] To a great extent [ ]

To a very great extent [ ]

Section C: Mobile phone banking services

Instructions: Indicate by clicking in the box your level of agreement or disagreement on the given attributes regarding the Mobile phone banking service.

7. To what extent do the following statements on mobile banking services influence customer satisfaction in Mwalimu National Sacco

Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
Mobile banking is easy to use					
Mobile banking is affordable compared to branch visit					
Mobile banking is secure					
Mobile banking is reliable					

8. Indicate the extent to which mobile banking services influence customer satisfaction?

To a very low extent [ ] To a low extent [ ]

To a moderate extent [ ] To a great extent [ ]

To a very great extent [ ]

Section D: Internet services

Instructions: Indicate by clicking in the box your level of agreement or disagreement on the given statements regarding the Internet banking service.

9. What extent does the Internet service portal attributes influence customer satisfaction in Mwalimu National Sacco?

Statements	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
Internet service is easy to navigate through					
Internet service is secure					
Internet service is accessible					
Internet service is reliable					
Staff are responsive to enquiries					

10. In your own opinion, indicate the extent to which internet services influence customer satisfaction?

To a very low extent [ ] To a low extent [ ]

To a moderate extent [ ] To a great extent [ ]

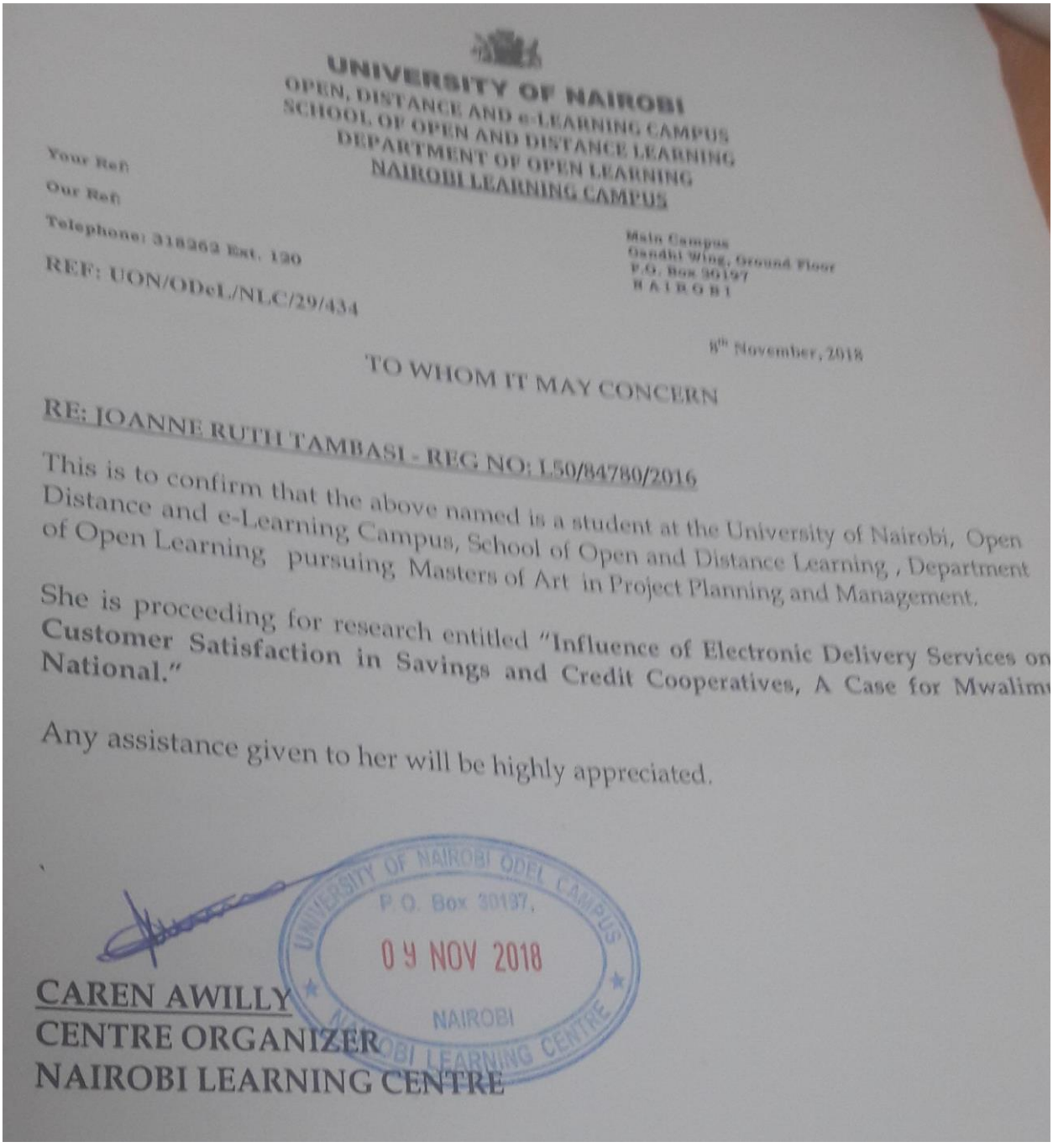
To a very great extent [ ]

SECTION D: Overall Satisfaction with electronic services

11. To what extent are you satisfied with the available electronic services in Mwalimu National Sacco?

	Very Satisfied	Satisfied	Ok	Dissatisfied	Very Dissatisfied
Automated Teller Machine Service	◯	◯	◯	◯	◯
Mobile Banking Service	◯	◯	◯	◯	◯
Internet Banking Service	◯	◯	◯	◯	◯

Appendix iii: Research Authorization letter



UNIVERSITY OF NAIROBI
OPEN, DISTANCE AND e-LEARNING CAMPUS
SCHOOL OF OPEN AND DISTANCE LEARNING
DEPARTMENT OF OPEN LEARNING
NAIROBI LEARNING CAMPUS

Your Ref:
Our Ref:
Telephone: 318262 Ext. 120

Main Campus
Ouaki Wing, Ground Floor
P.O. Box 30197
NAIROBI

REF: UON/ODeL/NLC/29/434

8th November, 2018

TO WHOM IT MAY CONCERN

RE: JOANNE RUTH TAMBASI - REG NO: L50/84780/2016

This is to confirm that the above named is a student at the University of Nairobi, Open Distance and e-Learning Campus, School of Open and Distance Learning, Department of Open Learning pursuing Masters of Art in Project Planning and Management.

She is proceeding for research entitled "**Influence of Electronic Delivery Services on Customer Satisfaction in Savings and Credit Cooperatives, A Case for Mwalimu National.**"

Any assistance given to her will be highly appreciated.

UNIVERSITY OF NAIROBI ODEL CAMPUS
P.O. Box 30197,
09 NOV 2018
NAIROBI
NAIROBI LEARNING CENTRE

CAREN AWILLY
CENTRE ORGANIZER
NAIROBI LEARNING CENTRE

Appendix iv: Research Permit

THIS IS TO CERTIFY THAT:
MS. JOANNE RUTH TAMBASI
of UNIVERSITY OF NAIROBI, 62641-200 Nairobi,has been permitted to conduct research in *Nairobi County*

on the topic: *INFLUENCE OF ELECTRONIC DELIVERY SERVICES IN COOPERATIVE SOCIETIES A CASE OF MWALIMU NATIONAL SACCO*

for the period ending:
6th December,2019

Permit No : NACOSTI/P/18/35562/26932
Date Of Issue : 6th December,2018
Fee Recieved :Ksh 1000

.....
Applicant's Signature

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