AUTOMATED BANKING SERVICES, SERVICE QUALITY AND CUSTOMER LOYALTY IN KENYA

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DECLARATION

I declare that this is my original work and has not been presented for a degree in any other university.

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Lucy Wanja Mwangi

D61/79468/2015

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

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DEDICATION

This project is dedicated to my mother Mary, Sister Irene and Grandfather Joshua for their sacrifice and support throughout my studies to make it a success.

ACKNOWLEDGEMENT

I thank the Almighty for giving me strength, good health and determination to complete this project.

My sincere gratitude goes to everyone who contributed in one way or the other to the completion of this project. To all respondents thank you very much

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May the Almighty God bless you all.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

ASQ	Automated Service Quality
ATM	Automated Teller Machine
ATS	Automatic Transfer Service
CBA	Commercial Bank of Africa
CBK	Central Bank of Kenya
CMA	Capital Markets Authority
CRBs	Credit Reference Bureaus
EFT	Electronic Funds Transfer
GSM	Global System for Mobile Communication
ICT	Information and Communication Technology
IT	Information Technology
KCB	Kenya Commercial Bank
KYC	Know Your Customer
MFBs	Microfinance Banks
NSE	Nairobi Securities Exchange
PC	Personal Computer
ROI	Return on Investment
SERVPERF	Service Performance
SERVQUAL	Service Quality
SIM	Subscriber Identity Module
SMS	Short Message Service

SQ	Service Quality
TAM	Technology Acceptance Modell
TBSSB	Technology Based Self -Service Banking
TRA	Theory of Reason Action
UAE	United Arabs Emirates
WAP	Wireless Application Protocol

ABSTRACT

Banks have changed on how they deliver their products and services to their customers. Physical delivery of banking services has been replaced by virtual delivery. This has been enhance by a number of factors such as low cost of communications, rapid internet technological evolution, globalization, deregulation, consolidation of financial markets and change in both competitive and regulatory forces. This research focused on finding out the effects of automated banking services to service quality and customer loyalty. To satisfy the objectives of the study, a descriptive cross sectional survey was used as the research methodology. The SERVQUAL and the SERVPERF models were used in determining the service quality dimensions within automated banking services to help in explaining the relationship of automated banking services, service quality and customer loyalty. The data collection method used was administration of questionnaires to a sample of four hundred customers. Data was analyzed and summarized through descriptive statistics which included calculation of mean and percentages. Explorative data analysis techniques, confirmatory data analysis technique and regression analysis were the main analysis techniques used to explain the relationship between the three constructs. The findings revealed that automation of banking services leads to automated service quality which in turn results to customer loyalty. Security dimension as a measure of service quality greatly influences customer loyalty while personalization had the least influence. Personalization, accessibility and efficiency had a positive effect on customer loyalty while security, ease of use and reliability had a negative effect on customer loyalty. The study recommends that, personalization, accessibility and efficiency be improved and allocated more resources since they positively affect customer loyalty. In addition to this, more emphasis should be placed on the service quality dimensions that were more important to the customers, they included, security, efficiency, accessibility and ease of use.

CHAPTER ONE

INTRODUCTION

1.1Background of the Study

Prior to automation of banking services, banks conveyed their products and services to their clients through physical bank branches (Sarlak & Asghar, 2010). However, this has changed over the years as physical delivery of banking services is being replaced by virtual delivery (Freedman, 2006). This transformation has been enhanced by low costs of communications, rapid internet technological evolution, globalization, deregulation, consolidation of financial markets and change in competitive and regulatory forces (Sarlak & Asghar, 2010). According to Consumer Focus (2012), most of the banking technologies adopted initially consisted of accounting and mechanical innovations of a "back office" nature which had little direct impact on customer loyalty.

According to Skinner (2015), Europe leads in banking innovativeness as evidenced by Poland, Spain, Turkey and German regularly appearing as finalists in global banking innovation awards. In east and central Africa, Kenya leads in automating of banking services, as exhibited by growth of mobile money (Gubbins, 2015). This has greatly been enhanced by the high mobile usage amongst Kenyans (Crandall, et al., 2012).

The Commercial Bank of Africa (CBA) and Kenya Commercial Bank (KCB) in partnership with Safaricom launched M-Shwari and KCB-Mpesa which enable financial transactions on Mpesa platform. In addition, Equity Bank Ltd launched Equitel SIM card which allows electronic financial transactions without relying on M-Pesa network (Gubbins, 2015).

Customers are well informed of the market dynamism due to availability of information. They therefore look for smarter and simpler ways of transacting hence choose those channels and interactions that help them meet their needs fast and efficiently. Bloemer, Ruyter, and Peeters (1998) state that customers have expectations before transacting with any bank and develop perceptions during service delivery process. They compare their perceptions to the expectations in evaluation of the service outcome.

Perceived quality is a powerful competitive weapon which has strategic benefit to organizations in terms of market share, return on investment (ROI), lowered costs and improved productivity (Parasuraman, Zeithaml, & Berry, 1985). Automation enables banks to serve and assist their customers anywhere, brings in speed and improved quality. Good customer service delivery and meeting customers' specified service quality are widely recognized as key influences in the formation of customers' purchase intentions to ascertain customer retention and acquisition.

The SERVQUAL and SERVPERF models were used in determining the service quality dimensions within automated banking services and help in explaining the relationship between automated banking services, service quality and customer loyalty within the banking sector.

1.1.1Automated Banking Services

Competitiveness in the financial market has dramatically changed the banking industry over the years (Daniel, 2000). Part of this change has resulted to the development and utilization of alternative delivery channels which use technology resulting to automation.

Chovanorá (2006) identified different modes of automated banking services based on: telephone connections, personal computers, payment systems and self-service zones. Electronic banking using a telephone connection enables customers perform financial transactions over the phone without visiting a bank branch. This includes phone banking (Automatic Transfer Service (ATS) and client advisors) and Mobile banking comprising of Short Message Service (SMS) banking, Global System for Mobile Communication (GSM), Subscriber Identity Module (SIM) toolkit and Wireless Application Protocol (WAP).

Automated banking using personal computers allows customers to perform bank transactions from a personal computer (PC). This class is divided into home banking, internet banking, video banking and mail banking. Payment systems go hand in hand with the self-service zones (Drigă & Isac, 2014). They include payment cards like ATM cards, credit cards, debit cards and electronic wallets.

A self-service zone (Automated self-banking center) on the other hand, is a fully automated alternative work place of a bank with terminals and devices that clients use to get various banking services (Chovanorá, 2006). This multi-media banking delivery channel is made up of an information counter, ATMs, telebanking and banking booths and is usually situated in high pedestrian traffic areas like shopping malls and office complexes.

1.1.2 Service Quality

The service industry plays an important role in every economy and thus must be given great priority in decision making for it to survive and remain successful in global competitive environment.

Services are fundamentally different from physical goods; they are intangible, involve customers in their production and involve simultaneous production and consumption making evaluation of service quality a difficult task (Grover, Cheon, & Teng, 1996).

It is a difficult task to evaluate service quality, hence differed definitions from quality gurus. Crosby (1984) defines quality as conformance to requirements while, Juran (1992) defines quality as fitness to use. Grönroos (1984), in his study found that perceived quality of a service is an outcome of an evaluation between expected service levels and perception of the service quality received

Customers know exactly what they want to receive and compare quality delivered to their expectations. They also are aware of service alternatives on offer, provider organizations and the rising standards for services. It is therefore, essential for service providers to carefully deliver services and frequently assess their service quality to identify problems, help in improving their service and assess customer satisfaction. Mosahab, Mahamad, & Ramayah (2010), noted thatquality is a multi-dimensional concept and it is impossible to achieve it without distinguishing its important aspects.

Parasuraman *et al.* (2005), identified five service quality dimensions; reliability, responsiveness, assurance, empathy, and tangibles. These dimensions have become the basis for SERVQUAL model (Johnston, 1995). Grönroos & Gummesson (1986) noted recovery as the sixth service quality dimension. According to Lau, Cheung, Lam and Chu (2013), tangibility in banks represents physical facilities for customer use and sufficient personnel. Responsiveness means employees having the willingness to assist and provide customers with prompt services (Buttle, 1996; Saleh & Ryan, 1991).

Reliability is the ability to perform the promised services dependably and accurately (Buttle, 1996; Lau *et al.,* 2013; Saleh & Ryan (1991). Customers transact in a particular bank due to its reliability which increases their confidence and trust.

Assurance is the knowledge and courtesy of employees and their ability to inspire trust and confidence (Buttle, 1996; Lau *et al.,* 2013). It represents the provision of caring and individualized attention to customers which is a success factor for service industry. For instance, customers feel appreciated in a bank offering good customer service.

A customer may experience either a routine or a recovery encounter when purchasing a service (Lau *et al.,* 2013). A routine encounter means that all the customers' expectations have been met the first time the service is being delivered. On the other hand, a recovery encounter means that the organization responds to the customers' complaints (Lau *et al.,* 2013).

Different studies done in the banking industry consider different aspects in service quality. For instance, Ibrahim *et al.* (2006) identified convinience, accessibility, reliability, good queue management, personalization and responsive customer service as the factors of e-service quality.

Sindwani and Goel (2015) identified two broad dimensions of service quality: the outcome aspect whose main focus is the tangible component with dimensions like timeliness, accuracy and conviniece. The relational aspect whose main focus is the intangible component and describes how the customer is treated.

1.1.3 Customer Loyalty

Retaining customer is crucial in organizations for them to remain successful in highly competitive markets (Dowling & Uncles, 1997). According to Bell, Auh, and Smalley (2005), customer loyalty is a representation of a customer's commitment to purchase more and varied products from an organization.

It is less expensive to have current customers repeat a purchase than acquiring new one (Dowling & Uncles, 1997; Daly, 2002; Gillen, 2005). They noted that serving a new customer involves startup costs such as prospecting, credit checks and costs of entering the customer's account details on a database.

Customer loyalty is both an attitudinal and behavioral tendency to favor one brand over others. Behavioral loyalty involves continuous purchase of services from the same service provider, increased scale or scope of a relationship between the customer and the service provider and the act of recommending others. On the other hand, as an attitude, a customer desires and feels the need to continue in a relationship with a service provider because they believe that the services they are offered are the best (Hallowell, 1996).

Loyal customers do not look out for competitors and if approached by these competitors, they show no interest in what is being offered. According to Yang & Peterson (2004), loyal customers minimize time spent on searching, locating and evaluating purchase alternatives. This helps them avoid the learning process that consumes the time and effort needed to get accustomed to a new service provider.

A dissatisfied customer either discontinues a relationship or voices their dissatisfaction incase of a negative service experience (Ruyter & Wetzels, 1998). Customers who let their complaints known allow for service recovery which help build a relationship on past successes and overcome any weaknesses. This means consistency and continuous purchase even when there may be a problem.

1.1.4 Commercial Banks in Kenya

Commercial banks in Kenya are regulated by Central Bank of Kenya Act (CBK, 2015). Capital Markets Authority (CMA) oversees banks listed in Nairobi Securities Exchange.

Kenya has 43 commercial banks of which 42 are commercial banks and 1 mortgage finance company. According to Nairobi Securities Exchange (NSE) (2016), 11 banks are listed with NSE and are publicly owned.Out of the 43 banking institutions, 40 are privately owned while 3 institutions are owned by government. Out of the 40 privately owned banking institutions, 25 are locally controlled while 15 are foreign owned. The 25 locally owned institutions comprises of 24 commercial banks and 1 mortgages financier. Out of the 14 foreign owned institutions, 10 are local subsidiaries of foreign banks while 5 are branches of foreign banks. All licensed microfinance banks, Credit Reference Bureau (CRB), forex bureaus and money remittance providers are privately owned (CBK, 2015).

These commercial banks are categorized into three tiers based on a weighted composite index comprising of net assets, customer deposits, capital and reserves, number of deposit and loan accounts (CBK, 2015). Tier I has 5% and above, tier II between 1% and 5%, and tier III less than 1% (CBK, 2015).

1.2 Problem Statement

Almost all commercial banks offer automated banking services to remain competitive, achieve customer satisfaction and customer loyalty (Sindwani & Goel, 2015). This is apparent in Kenya from increased adoption of alternative delivery channels that enhance efficiency (CBK, 2015). Perceived service quality is an important aspect in competition (Mosahab, Mahamad, & Ramayah, 2010). It affects customer satisfaction which influences customer loyalty and in turn affects an organization's performance (Hallowell, 1996).

There is extensive adoption of technology by commercial banks in Kenya which has been necessitated by technological advancements and innovations that make it easy for customers to transact. Technologies like mobile phones, cash dispensing machines, payments systems and computers have greatly enhanced growth in the Kenyan banking institutions. These technologies have assisted in preventing customers from using paper, digitizing workflows and supporting decision making.

However, customers are always complaining regarding different issues pertaining the systems, these complaints involve; systems failure, inaccurate account balances, failed transactions, delayed transactions, rejection and retraction of valid cards, double deductions in withdrawals and complicated prompted instructions to follow.

Various studies have been conducted in the area of electronic banking, service quality and customer loyalty; Njuguna, Ritho, Olweny, & Wanderi (2012), in their study, Internet banking adoption in Kenya: The case of Nairobi county, observed that internet banking adoption in Kenya is very low despite high level of internet access.

Okibo & Wario (2014), in their study, Effects of e-banking on growth of customer base in Kenyan banks, concluded that electronic funds transfer has greatly influenced the customer base for the banking institutions in Kenya through enhancing banking services accessibility to a larger population in the country.

In the study, Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia, Munusamy, Chelliah, & Mun (2010), concluded that customers are key in every business.

According to Sindwani and Goel (2015), in their study, The impact of Technology based self-service banking (TBSSB) dimensions on customer satisafction, concluded that TBSSB service quality has a weak influence on customer satisfaction. Al-Hawari (2011), in his study, the role of Bank automated services in gaining customer trust: A practical study in UAE, concluded that automated service quality factors positively influence customer trust.

Although a number of studies have been done on the three constructs, none has focused on all the three at the same time. In addition, the study that closely relates to this study was done in the United Arab Emirates which is a different environment from Kenya. The research therefore, focused on finding out the effects of automated banking services to service quality and customer loyalty by answering the following key question. What is the relationship between automation of banking services and service quality and how does delivering of high automated quality banking service help banks sustain a strong relationship with their customers?

1.3 Objectives of the Study

1.3.1 General Objective

To establish the effect of automated banking services on service quality and customer loyalty.

1.3.2 Specific Objectives

i) To establish the range of automated banking services used in Kenya.

ii) To establish the critical service quality dimensions in customers mind when using automated banking services in Kenya.

iii) To examine the relationship between automation of banking services, quality and customer loyalty.

1.4 Value of the Study

Entrepreneurs within the banking industry will be able to understand the importance of service quality in maintaining customer loyalty, attracting more customers and improving performance.

Business strategists will be able to identify the service quality dimensions that customers value most while using automated banking services so that they can put more emphasis on them so as to meet the needs of their customers and help them formulate strategies that will place their businesses at a point of competitiveness.

Researchers will be able to get more literature and understand theories that explain adoption of technologies by customers within the banking sector. In addition to this they will understand more on service quality models and how service quality dimensions are determined through the use of these models.

The government and other institutions (like CBK) as policy makers in the banking industry will be able to standardize charges within the banking sector to avoid over charging of the customers while using the automated service from different service providers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the literature on theoretical foundation, automated banking services, service quality and customer loyalty.

2.2 Theoretical Review of Automation Adoption

A number of theories have been used to explain why and how individuals and organizations adopt information systems. This project focused on Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA) because the two explain technology adoption at individual levels (Oliveira & Martins, 2011).

2.2.1 Technology acceptance Model (TAM)

The model was developed from the theory of reasoned action and it explains and predicts how users accept and use a technology (Davis, 1986). According to Park (2009), the model provides a basis with which one traces how external variables influences believes, attitudes and usage.

The major determinant of whether an individual uses a system or not is his/her attitude which in turn is directly influenced by an external stimulus consisting of the system's features and capabilities (Davis, 1986). The model is based on two constructs; perceived utility and perceived facility. These help in understanding the relationship between the external variables of users' acceptance and the real use of any technology adopted as well as understanding the behavior of the users (Park, 2009).

This model is crucial in this study such that it helps in understanding the relationship between external stimulus like systems' capabilities and features and system usage and how positive attitude towards the functionality of a technology leads to continuous usage of a new technology

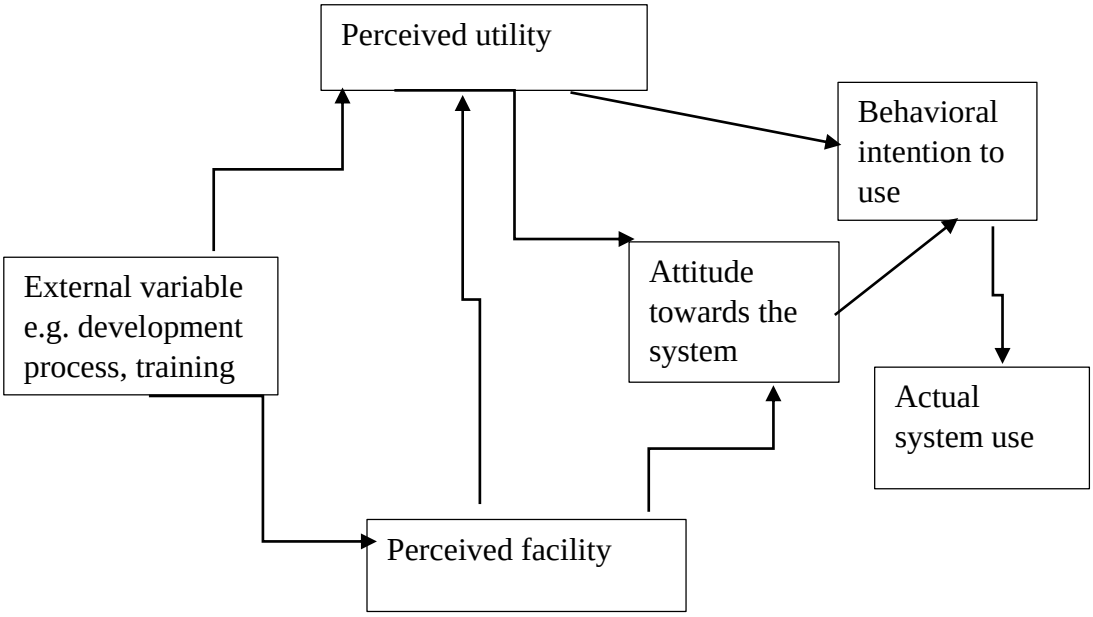

Figure 2.1: Revised TAM model (Source: Park, 2009)

2.2.2 Theory of Reasoned Action (TRA)

The theory originates from social psychology and searches to identify the determinant factors of the consciously intentional behavior (Silva & Dias, 2007). According to this model, an individual's behavior of using or rejecting technology is determined by their intention to perform the behavior jointly influenced by individual's attitude and subjective norm i.e. the perception of how people important to the decision maker think (Silva & Dias, 2007).

This theory is helpful in understanding why and how customers adopt automated banking services. It is important in understanding the relationship between customers' attitudes, subjective norm of how others perceive the service and their intentions to use an automated banking service.

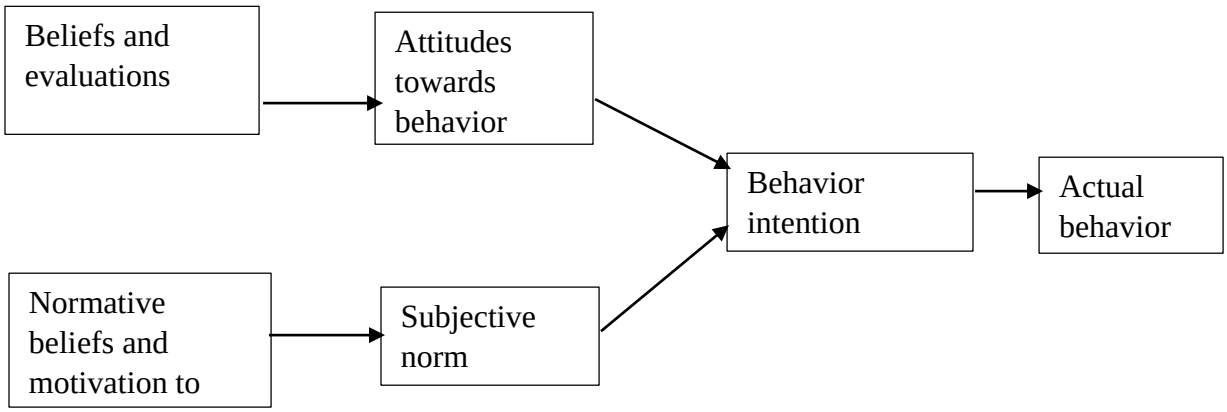

Figure 2.2: Theory of Reason Action (adopted from Silva and Dias, 2007)

2.3 Automated Banking

Different researchers have used different terminologies to refer to automated banking. These include, electronic banking (Daniel, 1999 & 2000), Virtual banking (Information resources management association, international conference, 1998), remote electronic banking (Drigă & Isac, 2014) and technology based self-service banking (TBSSB) (Sindwani & Goel, 2015). These names will be used interchangeably in this research proposal.

Automated banking has been defined differently by different researchers; Daniel (1999, 2000) defines it as the distribution of information or services by banks to customers via computers. It is further defined by Drigă and Isac (2014) in terms of automated delivery of banking products and services by use of interactive communication channels.

Sindwani and Goel (2015) defines TBSSB as the banking service availed to customers in self-service mode using various electronic bank channels without any interactions with the bank employees.

According to Information resources management association, International Conference (1998), a virtual bank makes use of a multi-media technology to create a realistic computer image of a branch characterized with reduced physical appearance in the brick and mortar institutions. Automated banking therefore, refers to the delivery of all kind of banking services through use of different delivery channels that can use advanced information systems.

Laukkanen and Lauronen (2005) noted that development of electronic banking through multiple electronic channels adds value to customers in the banking sector. Lower fees, better service quality, consistent service availability, time saving, accessibility of the services, ease of use of the systems, speed of service delivery, convenience, compatibility with lifestyle and security are the key value considerations while choosing the automated service delivery channel.

Banks reach out to their customers and provide them with both general information and the opportunity of performing interactive retail banking through the use of telecommunication systems (Yousafzai *et al.*, 2003). For survival, they have to earn customer loyalty through product features and service excellence and continuous improvement of services offered (Daniel, 2000).

2.3.1 Trends in Automation of Banking Services

The advancement in technology is moving faster and provides new ways to aggregate and analyze information, improving connectivity and reducing the marginal costs of accessing information and participating in financial services (World Economic Forum, 2015; Okibo & Wario, 2014).

Marous (2015) noted that banks and other financial institutions are investing heavily on innovation labs to pursue research and development so as to bring more design capabilities in-house. This will help in advancing their management tools to meet future customer needs and improve how they compile and report data.

Security, privacy and trust are concepts that keep on changing as transactions expand from the physical world to the electronic world (Yousafzai, Pallister, & Foxall, 2005). Knowing your customer (KYC), privacy and identity protection are becoming more important due to higher risks of cyber-attacks. Banks are continually strengthening their internal systems and incorporating increased security measures like multi-layered authentication and internal control processes. This renewed focus and interest around authentication and digital identity has seen increased adoption of biometrics and tokenization within banks (Capgemini, 2016).

2.4 Service Quality

Information technology is core focus of many commercial banks in Kenya for operations and strategic direction (Awuondo, 2007). Its acceptance has brought a dramatic change in retail banking in building and maintaining close relationships with their customers (Al-Hawari, Hartley, & Ward, 2005).

According to Hanzaee & Sadeghi (2010), customers have different perceptions of what service quality is, due to differences in cultural and environmental factors. If banks are not aware of these variances in terms of economic development, political ideologies and cultural factors, they may fail to meet the service standards.

It is therefore important for banks to analyze markets based on customers' perceptions and design service delivery systems that meets customers' needs to enhance service performance to gain competitiveness (Al-Hawari *et al.,* 2005; Al-Hawari, 2011). Service quality in an electronic commerce environment is known as automated service quality (ASQ) and it is the key determinant of the success or failure of e-commerce (Al-Hawari *et al., 2005;* Al-Hawari, 2011).

Researchers like Parasuraman, Zeithaml, & Malhotra (2005) limit the definition of automated service quality to the use of the web and internet banking, ignoring attributes of the other automated service delivery channels. Santos (2003) defines it as the customers' overall evaluation of the excellence of the provision of services through electronic networks.

Different models have been developed to give an elaborate picture of what service quality is. Grönroos (1984) developed a model that measured perceived service quality on the basis of qualitatitive methods, Parasuraman *et al.* (1985) developed the GAP model and later developed the SERVQUAL model, Haywood-Farmer (1988) developed a service quality model made up of three basic attributes; physical facilities, processes and people while Cronin & Taylor (1992) developed the SERVPERF model.

This research project considered the SERVQUAL and SERVPERF models which are the two most prominent scales used in service quality (Adil, Ghawyneh, & Albkour, 2013). The service quality (SERVQUAL) employs expectancy-disconfirmation paradigm while the Service performance (SERVPERF) approach is a performance only scale. (Al-Hawari *et al*., 2005).

The SERVQUAL approach uses existing service quality theory to develop a generally accepted model to measure automated service quality hence does not allow past conceptualization of service quality be discarded It recognizes only one channel of service delivery at a time and therefore, recommended when the main objective is to pinpoint service quality failure for possible intervention by management of any organization.

The SERVPERF approach is a superior method and should be used when overall service quality is to be assessed because it takes into account more service delivery channels in a holistic manner though, it lacks diagnostic power to identify areas of managerial interventions in case of service failure. Although each channel has its own attributes, it is necessary to measure the quality of each channel separately to get a more accurate picture of customers' perception of the automated service quality (Al-Hawari et al., 2005).

Different studies describe different service quality dimensions of automation within the banking sector. For instance, Al-Hawari *et al.*(2005) state that reliability, ease of use, personalization, accessibility, security and efficiency are common ASQ dimensions that both SERVQUAL and SERVPERF share.

Ibrahim, Joseph, & Ibeh (2006) identified six electronic banking quality dimensions, i.e. efficiency, convenience/accuracy, accessibility/reliability, queue management, personalization/customization, and feedback/complaint management/friendly responsive customer service.

This research used the service quality dimensions by Al-Hawari*et al.* (2005) which is shared by both the SERVQUAL and the SERVPERF model. These dimensions are; reliability, ease of use, personalization, accessibility, security and efficiency.

2.5Customer Loyalty

Customer loyalty is about commitment of clients to buy various products/services offered by an organization for its success Bell *et al.* (2005). According to Bloemer *et al.* (1998); Onditi, Oginda, Ochieng, and Oso, (2012) initial research on brand loyalty could not be generalized to service loyalty due to its dependence on the development of interpersonal relationships. This is because the customer has the intention to stay with the organization and become commited to increase the breadth in terms of products or services purchased and the depth in terms of inreasing the number of transactions (Zeithaml, Parasuraman, & Berry, 1996).

Cutomer loyalty is important in service marketing due to its effect on customers' repeated purchases. Bloemer *et al.* (1998) identifies two dimensions of customer loyalty which include; relative attitude and repeat patronage. The relationship between these two dimensions leads to creation of four categories of loyalty: True Loyalty, Latent Loyalty, spurious loyalty and no loyalty (Rai & Srivastava, 2012). Dick and Basu (1994) state that this relationship is mediated by social norms and situational factors.

The cognitive, affective and conative antecedents of relative attitude contribute to loyalty together with motivational, perpetual and behavioural consequences. Establishment of a true relationship with customers creates long-term customer loyalty from where organizations understand its key drivers and put in place lasting strategies.

Bose & Rao (2011) noted that customer satisfaction as a result of service quality is the deciding factor in building and maintaining loyalty among customers because it positively impacts purchase intentions as well as behavior. Customers remain loyal when they feel that the organization gives better services/products which meet and exceed their needs (Bose & Rao, 2011).

Today's business world is constantly changing with new marketing and strategy trends, the competitive edge that was initially achieved by organizations due to product differentiation no longer holds due to emergence of similar products and services making it difficult for customers to distinguish them (Bose & Rao, 2011).

Technological advancements have opened up a world of opportunities for a newly empowered customer thus they have the freedom to choose the service provider. This calls for companies to realign their priorities and generate customer loyalty rather than expect it.

Customers have high expectations and when these expectations are not met, they move their business to a competitor. Customers need to feel comfortable and their service experience should make them feel secure. They need to trust that, they will always get a positive experience every time. Earning this trust makes them come back.

2.6 Conceptual Framework

From the literature review, there is a significant relationship between automation, service quality and customer loyalty. The automation process results to availability of services, consistency, queue management and efficiency which define quality. Quality results to satisfaction hence loyalty although not guaranteed loyalty. From this relationship a conceptual framework is developed as shown below.

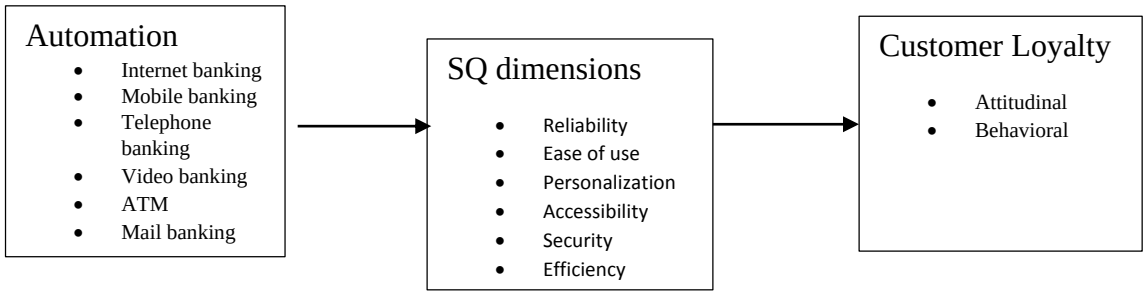

Figure 2.3: The conceptual framework (Source: own elaboration).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section describes the strategies used in the research to collect measure and analyse data. It includes the following subsections; Research design, the population, data collection and data analysis.

3.2 Research Design

A descriptive research design was adopted because, it gives a clear description of the state of affairs as it exists at present (Kumar, 2008; Kothari, 2004). This created a better understanding and clarity on all aspects of quality and loyalty.

A cross- sectional survey was also used when conducting the research to get a broader view and enable generalization to determine the frequency of an attribute in a defined population at a particular point in time which is effective in assessing practices, attitudes, knowledge and beliefs of a population

3.3 Population and Sampling

The study population cut across customers of the 43 different banks within the country. According to Soko Directory team (2016) Kenyan banks have an estimated customer base of 25 million customers.

The sample size was calculated using the Yamane's formula as shown below allowing a confidence level of 95% and a margin error of 5%.

$n= N/1+N (e^2)$

Where; n is the sample size,

N is the population

E is the sampling error

Therefore, $n= 25000000/1+25000000(0.05^2)$

= 400 customers (Rounded)

The number of respondents was divided proportionately among all the 43 banks. The Simple random sampling technique was used in the research to reduce biasness and allow every item in the population have an equal chance of inclusion in the study.

3.4 Data Collection

The study involved collection of primary data. The primary data was collected using questionnaires which had both structured and unstructured questions. Use of questionnaires was considered because it is less expensive and allows a bigger number of respondents to be reached.

3.5 Data Analysis

This included the process of compiling the collected information, putting it in order and structuring the findings in a way that can easily and effectively be communicated. Data was analyzed and summarized through descriptive statistics which included calculation of mean and percentages.

Range of automated banking services and critical service quality dimensions determination was done through computation of means and standard deviation of each automated banking service and service quality dimension. The mean of each item is then compared with the others.

There exists a relationship between the three constructs. Automation brings in the aspect of service quality which in turn results to loyalty. Regression analysis was used to test this relationship. The mathematical expression for the regression model is given below;

$$Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + u$$

Where Y is the customer loyalty, β_0, β_1, β_2, β_3, β_4, and $\beta 5$ and β_6 are coefficients of the independent variable while X_1, X_2, X_3, X_4, X_5 and X_6 are reliability, ease of use, personalization, accessibility, security, and efficiency respectively and u is the error term.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents and explains results obtained during data collection. The findings were analyzed on the basis of the objectives of the study. A sample of 400 customers was used in the study. However, out of the 400 customers only 220 responded representing a response rate of 55% which according to Mugenda and Mugenda (2003), was sufficient for analysis and reporting.

4.2 General Information

This section consists of general information about the respondents and included information such as; respondents' gender, age, academic qualification, their main bank, alternative banks and the period they have been with their main bank.

4.2.1 Distribution of the Respondents by Gender

Table 4.1 shows that 56.4 % of the respondents were female while 43.6% were male.

Table 4.1: Distribution of the Respondents by Gender

Gender	Frequency	Percent
Female	124	56.4
Male	96	43.6
Total	220	100.0

Source: Research data (2016)

4.2.2 Distribution of Respondents by Age

Table 4.2 shows that majority of the respondents were between age 31-45 years at 42.7% while the least number of respondents were between age 18-20 years at 4.5%.

Table 4.2: Distribution of Respondents by Age

Age bracket in years	Frequency	Percent
18-20	10	4.5
21-30	84	38.2
31-45	94	42.7
Above 45	32	14.5
Total	220	100.0

Source: Research data (2016)

4.2.3 Distribution of Respondents by Highest Academic Qualification

Table 4.3 shows that almost all respondents were literate as they were holders of at least a certificate. Majority of the respondents had achieved an undergraduate certificate represented by 30.9 %. This was closely followed by 28.2% of the respondents who had a certificate while diploma and post graduate academic qualifications had 23% and 14.5% respectively.

Table 4.3: Distribution of Respondents by Highest Academic Qualification

Academic qualification	Frequency	Percent
Certificate	62	28.2
Diploma	52	23.6
Undergraduate	68	30.9
Post Graduate	32	14.5
Missing	6	2.7
Total	220	100.0

Source: Research data (2016)

4.2.4 Distribution of Respondents by Banking Period

This section identifies the length of time the customer had banked with their main bank. Majority of the respondents had banked with their main bank for over 5 years. This is represented by 39.5%. The lowest percentage of 13.6% represents those customers that had been with their main bank for a period not exceeding one year.

Table 4.4: Distribution of Respondents by Banking Period

Number of years	Frequency	Percent
0-1	30	13.6
2-3	60	27.3
4-5	43	19.5
Above 5	87	39.5
Total	220	100.0

Source: Research data (2016)

4.2.5 Distribution of respondents by Alternative Banking

Table 4.5 shows that 65.9 % of the respondents had an alternative bank to transact from while 30.5% of the respondents were loyal to their main bank as they did not have any alternative bank to bank with.

Table 4.5: Distribution of respondents by Alternative Banking

Alternative banking	Frequency	Percent
Yes	145	65.9
No	67	30.5
Missing	8	3.6
Total	220	100.0

Source: Research data (2016)

4.3 Range of Automated Banking Services

Different banks have introduced different technologies to automate their services. This section analyses the types of automated services adopted by customers in Kenyan banks.

4.3.1 Usage of automated banking services

Table 4.6 shows that 90% of the respondents use an automated banking service, 9.1% did not use any automated banking service while 0.9% did not indicate if they use automated banking services or not. Majority of the respondents being users of the automated banking services indicates that adoption of technology amongst customers within Kenyan banks is very high.

Table 4.6: Usage of automated banking services

Use of automated banking services	Frequency	Percent
Yes	198	90.0
No	20	9.1
Missing	2	0.9
Total	220	100.0

Source: Research data (2016)

4.3.2 Types of Automated Banking Services used in Kenya

Using a scale of 1 to 5 (1-no extent to 5-very large extent) respondents were requested to indicate the extent to which they use automated banking services adopted in Kenyan banks. Table 4.7 shows that Automated Teller Machines (ATMs) are commonly used in Kenya with a mean of 3.82 out of 5. Mobile banking follows at second place in usage at a mean of 2.92. Telephone banking, Mail banking, internet banking and video banking are the least used automated banking services in Kenya with a mean of 1.77, 1.44, 1.75 and 1.22 respectively.

Table 4.7: Types of Automated Banking Services used in Kenya

Automated banking services	No extent	Slight extent	Average extent	Large extent	Very large extent	N	Mean	Std. Deviation
ATM	20	4	50	46	82	202	3.82	1.265
Internet banking	117	32	34	10	8	201	1.75	1.105
Video banking	177	15	7	0	0	199	1.29	2.161
Mobile banking	66	16	38	32	48	200	2.92	1.572
Telephone banking	130	26	20	14	10	200	1.77	1.195
Mail banking	168	20	6	4	4	202	1.44	2.232

Source: Research data (2016)

4.3.3 Usage of automated banking services from Alternative Banks

The research study wanted to establish if customers use automated banking services from alternative banks. Majority of the respondents represented by 53.2% use automated banking services from other banks while 42.7% remained loyal to what was offered by their main bank.

Table 4.8: Usage of Automated Services from Alternative Banks

Use of automated banking services from other banks	Frequency	Percent
Yes	117	53.2
No	94	42.7
Missing	8	3.6
Total	220	100.0

Source: Research data (2016)

4.4 Critical Service Quality Dimensions

This section identifies if the respondents understood what quality is all about as well as identify the most important and the least important service quality dimensions amongst customers of the Kenyan banks.

4.4.1 Importance of the Service Quality Dimensions

Using a scale of 1 to 5 (1-not at all to 5-very important) respondents were requested to indicate how important they considered each of the six automated service quality dimensions.

Table 4.9: Importance of Service Quality Dimensions

Service quality dimensions	Very important	Important	Neutral	Low level important	Not at all	N	Mean	Std. Deviation
Reliability	158	44	7	0	0	209	4.72	0.741
Ease of use	147	43	13	1	3	207	4.59	0.712
Personalization	113	56	27	0	2	198	4.40	0.834
Accessibility	166	27	6	2	2	203	3.51	0.695
Security	172	20	4	4	2	202	4.90	0.899
Efficiency	156	38	4	0	2	200	4.73	0.728

Source: Research data (2016)

From information in Table 4.9, it was established that security had the highest mean of 4.90. This shows that, it is the most important automated service quality dimension among Kenyan banking customers. Efficiency follows with a mean of 4.73 while reliability, ease of use and personalization are approximately equal in terms of their importance with a mean of 4.72, 4.59 and 4.40 respectively. Accessibility is least important with a mean of 3.51 out of 5.

4.5 The relationship between Automated Banking Services, Service Quality and Customer Loyalty

This sections analyses the relationship between the three constructs; automation, service quality and customer loyalty.

4.5.1 Rating of Automated Banking Services Offered by Main Bank

Automated banking services offered within banks are accurate, secure and adopt easy to use technology for customers. This is indicated by the high mean of the three dimensions of 4.12, 4.02 and 4.12 out of 5 respectively. System availability had the least mean of 3.50 an indication that banks need to improve on availing their systems to their customers.

Table 4.10: Rating of Automated Banking Services offered by Main Bank

	Very poor	poor	Average	Good	Excellent	N	Mean	Std. Deviation
Dependable automated banking services	4	2	49	105	48	208	3.91	0.824
Accuracy of data in the automated systems	2	9	26	90	73	200	4.12	0.854
Easy to use technology	2	0	42	86	72	202	4.12	0.802
Timely delivery of service	2	5	57	81	57	200	3.92	0.853
Availability of the system when needed	2	20	56	70	28	206	3.50	0.882
Accessibility of the system	0	26	62	88	30	206	3.59	0.888
Service customized to customers' needs	0	8	87	74	32	201	3.64	0.795
Secure automated services	0	1	59	77	61	198	4.02	0.780
Helpful, respectful and courteous customer care	0	14	48	84	56	202	3.91	0.896
Cost of automated service	2	15	86	74	22	199	3.90	4.279

Source: Research data (2016)

4.5.2 Response of whether or not customers faced challenges

Table 4.11 shows that 45% of the respondents experienced challenges while using automated banking services while 44.5% did not experience any challenge.

Table 4.11: Response of whether or not customers faced challenges

Face challenge	Frequency	Percent
Yes	99	45.0
No	98	44.5
Missing	23	10.5
Total	220	100

Source: Research data (2016)

4.5.3 Extent to which Service Quality Dimensions Lead to Loyalty

Table 4.12 shows that service quality dimensions influences customer loyalty. Security as a measure of service quality greatly influences customer loyalty as it had the highest mean of 4.14, followed closely by efficiency, accessibility, ease of use, reliability and personalization which had a mean of 4.10, 3.99, 3.91, 3.80 and 3.61 respectively.

Table 4.12: Extent to which Service Quality Dimensions Lead to Loyalty

Service quality dimensions	No extent	Slight extent	Average extent	Large extent	Very large extent	N	Mean	Std. Deviation
Reliability	2	7	73	59	55	196	3.80	0.928
Ease of use	1	6	50	98	43	198	3.91	0.769
Personalization	7	18	62	65	44	196	3.61	1.054
Accessibility	1	12	47	73	67	200	3.99	0.902
Security	0	4	43	79	74	200	4.14	0.812
Efficiency	0	2	46	82	68	198	4.10	0.784

Source: Research data (2016)

4.5.4 Customer Loyalty to use of automated banking services

Table 4.13 indicates that 82.3% of the respondents still use automated banking services offered by their main banks despite facing challenges. This is a good indication of resilience amongst the customers hence customer loyalty.

Table 4.13: Customer loyalty to use of automated banking services

Loyal customers	Frequency	Percent
Yes	181	82.3
No	23	10.5
Missing	16	7.3
Total	220	100.0

Source: Research data (2016)

4.5.5 Automated Service Quality Dimensions and Customer Loyalty Relationship

The relationship between the three constructs was determined through regression analysis. The linear correlation coefficient shows the strength and the direction of a linear relationship, thus (R= 0.333) explains a weak positive relationship among the three constructs. The study also shows that 11.1% of customer loyalty can be explained by the independent variables (reliability, ease of use of system, personalization, accessibility, security and efficiency) while the other 88.9% remains unexplained.

Table 4.14: Model Summary

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	.333[a]	.111	.080	.258

Source: Research Data (2016)

The model was statistically significant as ($p<0.05$). The F-ratio ($F=3.602$) indicated that the overall model was significant.

Table 4.15: ANOVA (Analysis of Variance)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.434	6	.239	3.602	.002[b]
Residual	11.477	173	.066		
Total	12.911	179			

Source: Research Data (2016)

The research study wanted to establish the relationship between automated service quality dimensions and customer loyalty. Positive effects were reported on personalization, accessibility and efficiency dimensions ($\beta_3=0.006$, $\beta_4=0.003$, $\beta_6=0.055$) respectively while a negative effect was reported for Reliability, Ease of use and security dimensions ($\beta_1= -0.082$, $\beta_2= -0.012$, $\beta_5= -0.073$) respectively.

From the findings, the equation for the regression model can be expressed as below;

$$Y= \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + u$$

$Y=0.446-0.082X_1-0.073X_5$ as the other variable become insignificant in the model.

Table 4.16: Coefficients of the Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.446	.121		3.694	.000
	Reliability	-.082	.029	-.281	-2.856	.005
	Ease of use	-.004	.033	-.012	-.125	.901
	Personalization	.006	.022	.022	.251	.802
	Accessibility	.003	.027	.009	.100	.920
	Security	-.073	.035	-.219	-2.090	.038
	Efficiency	.055	.037	.162	1.503	.135

4.6 Discussion of the Findings

Based on the literature review, different types of automated banking services have come up as also indicated in our findings. 90% of the respondents used one or more of the automated banking services adopted by Kenyan banks. ATMs are the most commonly used automated banking services, followed by mobile banking enhanced by introduction of mobile money such as M-pesa and airtel money in the country. Internet, video, and mail banking have not picked well in the Kenyan market. Internet and video banking not doing so well could be as a result of high charges in internet connection a necessity while using the two banking services.

Adding to the automated banking services identified in the chapter two, respondents identified two more automated banking services used in Kenyan banks, these included; Agency banking which has been popularized due to its accessibility and the use of electronic funds transfer (EFT) such as money gram, western union and RIA made popular by majority of Kenyan in the Diaspora. Loyalty cannot be achieved at 100%, this is because 53.2% of the respondents had an alternative bank from which they their automated banking services. Quality is the key determinant of customers adopting different technologies by alternative banks.

Though their definition of service quality differed, they revolved around service quality dimensions stated earlier on in chapter 2 which include; accessibility, convenience, queue and time management, low cost, speed in transaction, accuracy of services offered, quick response and feedback, Easy to use technology, reliability, security, availability and efficiency. Other than the mentioned service quality dimensions in chapter 2, respondents considered other quality dimensions such as; confidentiality, good customer service, cost effectiveness, feedback, user friendly technologies, accuracy of data, speed in transactions and system availability on different platforms, queue management and convenience.

Automated banking services offered within banks are accurate, secure and adopt easy to use technology for customers. To improve banking experiences for customers, banks need to avail systems, work on accessibility of the same to their customers and try as much as possible to create technologies according to what the customers specify allowing customization of the services.

Majority of the customers experience challenges as they use automated banking services. The major challenges included; system failure, delay in feedback especially when mail and telephone banking have been used, network problems while using mobile banking, challenges related to internet especially high cost, accessibility problems, a lot of prompt instructions to follow, increased cost of transaction when there is integration with technologies from alternative banks.

In addition, long queues at the ATM machines due to their small numbers, prompted frequent pin changes, limiting customers on amount to withdraw, system failure, accuracy shortcomings and introduction of banking applications and technologies which customers are not conversant with yet there is no training though they are expected to know how to use them were also identified as challenges.

There was a weak positive relationship between customer loyalty and automated service quality dimensions represented by (R= 0.333) as indicated in table 16.4. 11.1% of customer loyalty however, was explained by automated service quality dimensions (reliability, ease of use of system, personalization, accessibility, security and efficiency) while the other 88.9% remain unexplained. Personalization, accessibility and efficiency have a positive effect on customer loyalty while reliability, ease of use and security has negative effect on customer loyalty.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings from chapter four, conclusion and recommendations based on the study objectives. Limitations of the study are given and areas of further research suggested.

5.2 Summary of Findings

Using a cross sectional survey, the study aimed at finding out the effects of automated banking services to service quality and customer loyalty. The study involved 400 customers proportionately divided amongst the 43 Kenyan banks.

5.2.1 Range of Automated Banking Service in Kenya

Customers within Kenyan banks use a range of automated banking services. These automated banking services are; ATMs, internet banking, mobile banking, telephone banking, video banking, mail banking, agency banking and electronic funds transfer (EFT). Both the ATM and mobile banking are commonly used due to their accessibility and availability of mobile money platforms respectively.

5.2.2 Critical Service Quality Dimensions while using Automated Banking Services

The study found that automated banking services offered within banks are accurate, secure and adopt easy to use technology for customers. To improve banking experiences for customers, banks need to avail systems, work on accessibility of the same to their customers and try as much as possible to create technologies according to what the customers specify allowing customization of the services.

5.2.3 The Relationship between Automated Banking Services, Service Quality and Customer Loyalty

According to Al-Hawari*et al.,* 2005; Al-Hawari 2011) service quality in an electronic environment is known as automated service quality thus it is efficient to combine automation and service quality to get a single construct. This study deduced that there is a weak positive relationship between automated service quality dimensions and customer loyalty. Personalization, accessibility and efficiency positively impact customer loyalty. Reliability, ease of use and security on the other hand had a negative effect on loyalty.

5.3 Conclusion

Mobile banking and use of automated teller machines is so popular amongst Kenyan bank customers. Though all automated service quality dimensions are important in determining customer loyalty, some dimensions were found to be more important than others hence they do not have the same priority among different customers.

In deciding what automated banking service a customer wants to use, reliability, accessibility, security and efficiency are key consideration. Personalization and ease of use are also considered but not as much important.

Though there was a positive relationship between automated service quality dimensions and customer loyalty. Reliability, security and ease of use had a negative effect on customer loyalty. This is because customers felt that the three do not have much effect on the decision to being loyal hence a call for banks to improve on the three dimensions.

5.4 Recommendations

The study recommends that all automated service quality dimensions be enhanced to help increase customer loyalty. For instance, personalization, accessibility and efficiency which had a positive effect on customer loyalty need to be enhanced further to achieve high level of customer loyalty hence profitability of banks.

As banks continue with their innovations and introducing them to customers, customers need to be trained on how to use these technologies to improve their banking experiences and make sure that these technologies adopt security as a key aspect.

5.5 Limitations of the Study

This study was not without limitations. One of the limitations was that some questionnaires were brought back incomplete. Some of the respondents had low literacy level in automated banking services hence the blanks on the questionnaires.

The study was to cover all regions within Kenya, but due to time and financial constraints, it only concentrated on a few regions within Kenya.

5.6 Suggestion for Further Studies

The researcher recommends that a similar study be carried out investigating the effects of automation on service quality and loyalty but from the bank perspective. The researcher further recommends that future researchers to investigate individually on each automated service quality and how it leads to customer loyalty.

REFERENCES

Adil, M., Ghawyneh, O. F., & Albkour, A. M. (2013). SERVQUAL &SERVPERF: A review of measures in servicees marketing research. *Global journal of management and business research marketing, 13*(6).

Ajzen, I. (1985). *From intentions to actions: A theory of planned behaviour*. Berlin: Springer.

Al-Hawari, A. M. (2011). The role of bank automated services in gaining customers' trust: A practical study in UAE. *jurnal pengurusan, 33*, 45-52.

Al-Hawari, M. A., Hartley, N., & Ward, T. (2005). Measuring banks automated service quality: A confirmatory factor analysis approach. *MArketin Bulletin, 16*(1), 1-19.

Awuondo, I. (2007). e-banking in Kenya: Practical lessons to be drawn from commercial bank of Africa. In F. K. Nyandiere (Ed.), *The seventh annual Strathmore university ICT conference*. Nairobi: Strathmore university press.

Bell, S. J., Auh, S., & Smalley, K. (2005). Customer relationship dynamics: Service quality,and customer loyalty in the context of varrying levels of customer expertise and switching costs. *journal of the academy of marketing science*, 169-183.

Bloemer, J., Ruyter, K. D., & Peeters, P. (1998). Investigating drivers of bank loyalty: The complex relationship between image, service quality and satisfaction. *international journal of bank marketing*, 276-286.

Bloemer, J., Ruyter, K. d., & Wetzels, M. (1998). Linking perceived service quality and service loyalty: A multi dimensional perspective. *European Journal of Marketing*, 1082-1106.

Bose, S., & Rao, G. V. (2011). Perceived benefits of customer loyalty programs: Validating the scale in the indian context. *managemnt and marketing challenges for the knowledge society*, 543-560.

Buttle, F. (1996). Servqual: Review, critique, research agenda. *European journal of marketing*, 8-32.

capgemini. (2016, August 25). *capgemini*. Retrieved from https://www.capgemini.com/resource-file-access/resource/pdf/banking_top_10_trends_2016.pdf

Central Bank of Kenya (CBK). (2015). *Banks supervison annual report 2015*. Nairobi: Central Bank of Kenya.

Chovanorá, I. A. (2006). Forms of electronic banking. *BIATEC, 14*(6), 22-25.

Consumer Focus. (2012). *Banking Services and the Consumer*. United Kingdom: Routledge Library.

Crandall, A., Otieno, A., Mutuku, L., Colaco, J., Grosskurth, J., & otieno, P. (2012, November). Retrieved from https://blogs.worldbank.org/ic4d/files/ic4d/mobile_phone_usage_kenyan_base_pyramid.pdf

Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of marketing, 56*(3), 55-68.

Crosby, P. B. (1984). *Quality without tears.* New York: Mc Graw-Hill.

Cytonn investments. (2015). *Kenya listed commercial banks analysis.* Nairobi: cytonn investments.

Daly, J. L. (2002). *Pricing for profitability: Activity based pricing for competitive advantage.* New York: John Wiley & Sons, Inc.

Daniel, E. (1999). Provision of electronic banking in the UK and the republic of Ireland. *International journal of bank marketing, 17*(2), 72-82.

Daniel, E. (2000). The provision of electronic banking in the UK and the Republic of Ireland. *Journal of financial services marketing, 4*(4), 319-330.

Davis, F. D. (1986, August 20). *A technology acceptancemodel for empirically testing new end user information systems: Theory and results.* Retrieved from Research gate: https://www.researchgate.net/profile/Fred_Davis2/publication/35465050_A_technology_acceptance_model_for_empirically_testing_new_enduser_information_systems__theory_and_results_/links/0c960519fbaddf3ba7000000.pdf

Dick, A., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *journal of the academy of marketing science, 22*(2), 99-113.

Dowling, G. R., & Uncles, M. (1997). Do customer loyalty programs really work? *Sloan management review*, 71-82.

Drigă, I., & Isac, C. (2014). E-banking services-features, challenges and benefits. *Annals of the University of petroşani, Economics, 14*(1), 49-58.

Fishbein, M., & Ajzen, I. (1980). *Understanding attitudes and predicting social behaviour.* New Jersey: Prentice hall.

Freedman, R. (2006). *Introduction to financial technology.* Cambridge: Academic press.

Gillen, T. (2005). *Winning new business in construction.* England: Gower publishing, ltd.

Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 36-44.

Grönroos, C., & Gummesson, E. (1986). Service orientation in industrial marketing. *creativity in service marketing*, 23-26.

Grover, V., Cheon, M. J., & Teng, J. T. (1996). The effects of service quality and partnership on the outsourcing of information syatems functions. *journal of management information systems*, 89-116.

Gubbins, P. (2015, September 1). *An overview of developments in Kenya's retail financial landscape.* Retrieved from FSD Kenya: http://fsdkenya.org/an-overview-of-developmens-and-trends-in-kenyas-retail-financial-landscape/

Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty and profitability: An empirical study. *international journal of service industry management, 7*(4), 27-42.

Hanzaee, K. H., & Sadeghi, T. (2010). Measuring banks' automated service quality: A re-examination and extension in an islamic country. *world applied sciences journal, 8*(7), 874-880.

Haywood-Farmer, J. (1988). A concepptual model of service quality. *International journal of operations & production management, 8*(6), 19-29.

Ibrahim, E., Joseph, M., & Ibeh, K. (2006). Customers' perception of electronic service delivery in the UK. *international journal of bank marketing, 24*(7), 475-493.

Information resources management association, international conference. (1998). *Effective utilization and management of emerging information technologies.* Boston, MA, USA: Idea Group Inc (IGI) .

Johnston, R. (1995). The determinants of service quality: Satisfiers and dissatisfiers. *International journal of Service industry management, 6*(5), 53-71.

Juran, J. (1992). *Juran on quality by design: The new steps for planning quality into goods and services.* New York: Simon & Schuster.

Kothari, C. R. (2004). *Research Methodology: Methods and Techniques.* New Delhi: New age international.

Kumar, C. R. (2008). *Research methodology.* New delhi: APH Publishing corporation.

Lau, M. M., Cheung, R., Lam, A. Y., & Chu, Y. T. (2013). Measuring service quality in the banking industry: A Hong Kong based study. *contemporary management research* , 263-282.

Laukkanen, T., & Lauronen, J. (2005). Consumer value creation in mobile banking services. *Intenationa journal mobile communications*, 325-338.

Marous, J. (2015, December 21). *The financial brand*. Retrieved from The financial brand: https://thefinancialbrand.com/55952/2016-top-banking-trends-predictions-forecast-digital-fintech/4/

Mosahab, R., Mahamad, O., & Ramayah, T. (2010). Service quality, customer satisfaction and loyalty: A test of Mediation. *International business research*, 72-80.

Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: African Centre for Technology Studies.

Munusamy, J., Chelliah, S., & Mun, H. W. (2010). Service quality delivery and its iimpact on customer satisfaction in the banking sector in Malaysia. *International journal of innovation, management and technology, 1*(4), 398-404.

Njuguna, P. K., Ritho, C., Olweny, T., & Wanderi, M. P. (2012). Internet banking adoption in Kenya: The case of Nairobi county. *International journal of business and social science, 3*(18), 246-252.

Okibo, B. W., & Wario, A. Y. (2014). Effects of e-banking on growth of customer base in Kenyan banks. *International journal of research in management & business studies, 1*(1), 78-84.

Oliveira, T., & Martins, M. F. (2011). Literature review of information technology adoption models at firm levels. *The electronic journal information systems evaluation, 14*(1), 110-121.

Onditi, A. A., Oginda, M. N., Ochieng, I., & Oso, W. (2012). Implications of service quality on customer loyalty in the banking sector: A survey of banks in Homabay county Kenya. *international journal of business and social science, 3*(21), 223-233.

Parasuraman, A., Zeithaml, V. A., & Berry, L. l. (1985). a conceptual model of service quality and its implication for future research (SERVQUAL). *Journal of Marketing*, 41-50.

Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A multiple item scale for assessing electronic service quality. *journal of service research, 7*(3), 213-234.

Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Educational technology &society, 12*(3), 150-162.

Rai, A. K., & Srivastava, M. (2012). Customer loyalty attributes: A perspective. *NMIMS management review, 22*(November), 49-76.

Rexha, N., Kingshott, R. P., & Aw, A. S. (2003). The impact of the relational plan on adoption of electronic banking. *Journal of services markrting*, 53-67.

Rogers, E. M. (1995). *Diffusion of innovations* (Fourth edition ed.). New Yok: Free press.

Ruyter, K. d., & Wetzels, M. (1998). On the relationship between perceived service quality, service loyalty and switching costs. *International journal of service industry management, 9*(5), 436-453.

Saleh, F., & Ryan, C. (1991). nalysing serice quality in the hospitality industry using the servqual model. *The service industries journal*, 324-343.

Santos, J. (2003). E-service quality: A model of virtual service quality dimensions. *Managing service quality: An international journal, 13*(3), 233-246.

Sarlak, M., & Asghar, A. H. (2010). *E-banking and emerging multidisciplinary processes: social, economical and organizational moddels.* USA: Idea Group Inc.

Silva, P. M., & Dias, G. A. (2007). Theories about technology acceptance: Why the user accepts or rejects the information technoogy? *Brazilian journal of information science, 1*(2), 69-86.

Sindwani, R., & Goel, M. (2015). The impact of technology based self service banking dimensions on customer satisfaction. *International journal of business information systems strategies, 4*(1/2), 1-13.

Skinner, C. (2015). *The most innovative banks of 2015*. Retrieved September 15, 2016, from Banknxt: http://banknxt.com/53649/innovative-banks-2015/

Soko Directory team. (2016, April 5). *The state of banking in Kenya: A story of numbers*. Retrieved from Soko directory: www.sokodirectory .com

Tornatzky, L. G., Fleischer, M., & Chakrabarti, A. K. (1990). *The process of technological innovation.* Maryland: Lexington Books.

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS quarterly, 36*(1), 157-178.

World economic forum. (2015, August 20). *World economic forum.* Retrieved from https://www3.weforum.org/docs/WEF_The_future_financial_services.pdf

Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction and loyalty: The role of switching costs. *Psychology & marketing, 2*(10), 799-822.

Yousafzai, S. Y., Pallister, J. G., & Foxall, G. R. (2005). Strategy for building and communiacting trust in electronic banking: A field experiment. *Psycholoogy and Marketing* , 847-860.

Zeithaml, V., Parasuraman, A., & Berry, L. L. (1996). The behavioural consequences of service quality. *Journal of marketing, 60*(April), 31-46.

APPENDICES

APPENDIX I: Research questionnaire

This questionnaire seeks to obtain information to guide the researcher in identifying the relationship between automation of banking services, service quality and customer loyalty in Kenya. The information provided will only be used towards achieving the objectives of the research and will be treated with utmost confidentiality. Kindly fill it to the best of your capability.

PART ONE: GENERAL INFORMATION
Complete this section by filling in the spaces.

1. Kindly indicate your gender (*Tick as appropriate*).

Male ☐ Female ☐

2. Kindly indicate your age category (*Tick as appropriate*).

18-20 years ☐ 21-30 years ☐ 31-45 years ☐ above 45 years ☐

3. Kindly indicate your highest academic qualification (*Tick as appropriate*).

Certificate ☐ Diploma ☐ Undergraduate ☐

Postgraduate ☐ Others ☐

(If others please specify)

……

4. Kindly indicate your main bank

……

5. For how long have you been with your bank? (*Tick as appropriate*).

0-1year ☐ 2-3years ☐ 4-5 years ☐ above 5 years ☐

6. Do you bank with any other bank(s)? Yes ☐ No ☐

PART TWO: RANGE OF AUTOMATED BANKING SERVICES.

7. Do you use automated banking services offered by your main bank?
   Yes ☐ No ☐

If yes to Q7, indicate the extent to which you use the following automated banking services

	No extent	slight extent	Average extent	Large extent	Very large extent
ATM					
Internet banking					
Video banking					
Mobile banking					
Telephone banking					
Mail banking					

8. Do you know of any other automated banking service(s)?
   Yes ☐ No ☐
   If yes, kindly list them
   ……....
9. Do you use other /similar automated banking services from your other bank(s)?

   Yes ☐ No ☐

10. Kindly indicate why you use automated banking services from different banks

……

PART THREE: CRITICAL SERVICE QUALITY DIMENSIONS

1. What is your definition of quality banking services?

……
……

2. In relation to automated banking services, rate the importance of each of the following service quality dimensions.

Service quality dimensions	Very Important	Important	Neutral	Low level important	Not at all
Reliability					
Ease of use					
Personalization					
Accessibility					
Security					
Efficiency					

3. Other than the above mentioned quality dimensions, do you consider any other service quality dimensions? Yes ☐ No ☐

If yes, kindly list them.

……

PART FOUR: THE RELATIONSHIP BETWEEN AUTOMATED BANKING SERVICE, SERVICE QUALITY AND CUSTOMER LOYALTY.

1. In a scale of 1 (Very Poor) to 5 (Excellent) how do you rate your main bank in terms of automated services offered.

Description	Very poor	Poor	Average	Good	Excellent
Dependable automated services					
Accuracy of data in the automated systems					
Easy to use technology					
Timely delivery of service					
Availability of the systems when needed					
Accessibility of the systems. For instance location of their ATM					
Services customized to customers' needs					
Secure automated service					
Helpful, respectful and courteous customer care					
Cost of automated service					

2. In a scale of 1 (No extent) to 5 (Very Large extent), to what extent do these service quality dimensions lead to you being loyal to your main bank?

	No extent	slight extent	Average extent	Large extent	Very large extent
Reliability					
Ease of use					
Personalization					
Accessibility					
Security					
Efficiency					

3. Do you encounter any challenges while using your preferred automated banking service? Yes ☐ No ☐

   If yes, kindly list the challenges.

   ……

4. Do you still use the automated banking services offered by your bank?

   Yes ☐ No ☐

If yes, please indicate what has led to this loyalty.

……

FINAL COMMENTS

What is the general impact of automated banking services to;

a) Quality

……
……

b) Banking experience

……
……

What suggestion do you have to improve the services provided by your bank through automation?

……
……

END

THANK YOU FOR YOUR TIME.

APPENDIX II: List of Commercial Banks in Kenya

1. ABC Bank (Kenya)
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank of Kenya
6. CfC Stanbic Holdings
7. Chase Bank Kenya (In Receivership)
8. Citibank
9. Commercial Bank of Africa
10. Consolidated Bank of Kenya
11. Cooperative Bank of Kenya
12. Credit Bank
13. Development Bank of Kenya
14. Diamond Trust Bank
15. Ecobank Kenya
16. Equity Bank
17. Family Bank
18. Fidelity Commercial Bank Limited
19. First Community Bank
20. Giro Commercial Bank
21. Guaranty Trust Bank Kenya
22. Guardian Bank
23. Gulf African Bank
24. Habib Bank
25. Habib Bank AG Zurich
26. Housing Finance Company of Kenya
27. I&M Bank
28. Imperial Bank Kenya (In receivership)
29. Jamii Bora Bank
30. Kenya Commercial Bank
31. Middle East Bank Kenya
32. National Bank of Kenya
33. NIC Bank
34. Oriental Commercial Bank
35. Paramount Universal Bank
36. Prime Bank (Kenya)
37. Sidian Bank
38. Spire Bank
39. Standard Chartered Kenya
40. Trans National Bank Kenya
41. United Bank for Africa
42. Victoria Commercial Bank

Source: Central Bank (2015)

APPENDIX III: List of Quoted Banks in NSE as at November 2016

Barclays Bank Ltd
CFC Stanbic Holdings Ltd
I&M Holdings Ltd
Diamond Trust Bank Kenya Ltd
HF Group Ltd
KCB Group Ltd
National Bank of Kenya Ltd
NIC Bank Ltd
Standard Chartered Bank Ltd
Equity Group Holdings
The Co-operative Bank of Kenya Ltd