



ST MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**THE EFFECT OF DIGITAL BANKING ON CUSTOMER
EXPERIENCE:
THE CASE OF SELECTED COMMERCIAL BANKS IN ADDIS
ABABA CITY**

BY
ESHETE SISAY

JULY, 2021

ADDIS ABABA, ETHIOPIA

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BY

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**A THESIS SUBMITTED TO ST MARY'S UNIVERSITY, SCHOOL OF
GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION**

JULY, 2021

ADDIS ABABA, ETHIOPIA

ST MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

This is to certify that the thesis entitled, **“The Effect of Digital Banking on Customer Experience (The Case of Selected Commercial Banks in Addis Ababa City)”** was carried out by Eshete Sisay under the supervision of Ephrem Assefa (PhD) submitted in partial fulfillment of the requirements for the degree of Master of Business Administration complies with the regulations of the University.

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I, the undersigned, declare that this thesis entitled “**The Effect of Digital Banking on Customer Experience (The Case of Selected Commercial Banks in Addis Ababa City)**” is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not been submitted for a degree in any other universities.

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This is to certify that I have read and evaluated this thesis prepared, under my guidance, by **Eshete Sisay** entitled “**The Effect of Digital Banking on Customer Experience (The Case of Selected Commercial Banks in Addis Ababa City)**” is his original work and is submitted for examination with my approval as a thesis.

Ephrem Assefa (PhD)

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Date

DEDICATION

In the Name of Almighty God, Most Gracious, Most Merciful

First and foremost, I would like to praise Jesus Christ for the immeasurable and untold help that He has been giving to me.

My dear Brother **Abreham** I miss you always, now that you are gone, dear Brother your memory will never fade, I miss you so very much, and my tears I cannot hide yet, within my heart, I feel you are always by my side. Ever since you went away, life has never been the same yet, it comforts me to know that one day we'll meet again. **Rest in peace my dearest brother Abrsh!**

ACKNOWLEDGEMENT

I would like to express my special gratitude to my advisor, Ephrem Assefa (PhD) for his priceless guidance, comments, and support which has sustained my efforts at all stages of the learning process. Secondly, I would like to thank the participants in my survey who have willingly shared their precious time in responding to questionnaires administered.

I would also like to express my gratitude to my whole family for supporting me throughout this thesis through their love and standing there with me in all the way to this point.

My humble appreciation goes to the support of my staff, employees of Bank of Abyssinia for their support in providing me the necessary supportive documents and valuable inputs that contributed for the successful accomplishment of this research.

Thank you all!!!

ABSTRACT

Digital banking through telephone, internet and mobile is becoming important for banks' service marketing, especially with the increase in digital device usage and customer demand for financial services. The changing dynamics of banking means that banks' existence is no longer solely dependent on branch sales. Capturing and retaining customers are vital for banks, and digital banking is becoming the tool of choice. The main objective of this study was to examine the effect of digital banking on customer experience in selected commercial banks (Bank of Abyssinia, Commercial Bank of Ethiopia and United Bank) in Addis Ababa city). The data used in this study was collected through survey questionnaire, distributed to three hundred eighty four customers of three selected commercial Banks in twelve branches. Four branches were chosen from each Banks using simple random sampling technique. In order to test the reliability of the instrument, the Cronbach alpha test was used. Pearson correlation and multiple linear regression analysis were employed to estimate causal relationships between digital banking and customer experience. The findings of this research revealed that the use of digital banking of the selected commercial Banks of Ethiopia has a positive and statistically significant effect on customers experience i.e. $p < 0.05$ and has a positive relationship. Finally, the study recommends selected commercial Banks to invest on enhancement of digital banking that able to deliver outstanding experience to customers.

Keywords: *digital banking, customer experience, customer satisfaction, customer effort, customer loyalty, customer recommendation*

Acronyms

ANOVA: Analysis of Variance
ATM: Automatic Teller Machine
B: Unstandardized Regression Coefficient
BOA: Bank of Abyssinia
CBE: Commercial Bank of Ethiopia
CEM: Customer Experience Management
CX: Customer Experience
DB: Digital Banking
DW: Durbin-Watson
E-Banking: Electronic or Internet Banking
H: Hypotheses
M-Banking: Mobile Banking
NBE: National Bank of Ethiopia
NPS: Net Promoter Score
PhD: Doctor of Philosophy
POS: Point Of Sale
r: Correlation Coefficient
R: Regression Coefficient
R²: Regression Squared Coefficient
SERVQUAL: Service Quality
SMS: Short Message Service
SPC: Service Profit Chain
SPSS: Statistical Packages for Social Science
TAM: Technology Acceptance Model
UD: United Bank
VIF: Variance Inflation Factors
WOM: Word-Of-Mouth
t: Student t Statistic
 α : Cronbach's Coefficient
 β : Standardized Regression Coefficient

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CHAPTER ONE

INTRODUCTION

1.1. Background of the study, the organizations and the banking industry

This era is predominated by the hyper-connected, highly informed, value driven young customers who expect real-time responses and quick services. The concept of going to a physical bank for teller-controlled transactions might seem old and outdated. On the other end of the spectrum are the people who believe in the age-old method of pen-paper banking where everything is written down. Banks, nowadays, have created their own digital system to reinvent branch model and also to remodel the customer engagement. Customers today experience accelerated digital lives, supported by rapid internet penetration, increase in Smartphone adoption and expanded accessibility to wider networks. In this atmosphere, banks face a fundamental challenge on how to sustain and grow their business in the face of digital disruption and emergence of new customer demands.

Researches (Patrick Afomah & Amer Ijaz, 2005; David Cohen Cristopher Gan Hua Hwa Au Yong and Esther Choong, 2006) indicate that most banks across the globe do not have a systematic digital strategy to provide a seamless and positive customer experience which is crucial for both new customer acquisition and retention of existing customer base. Banks need to formulate and fine tune their digital strategies. This study examines the drives of digital banking from the customer perspective, impact of digitalization on customer experience and the correlation between digitalization and components of customer experience which are customer satisfaction, customer effort, customer loyalty and customer recommendation.

Digitalization is essentially worried about what all banks are required to do to improve their customer experiences. Digitization of banking service is now becoming the competitive edge for each bank all over the world. With similar products and little differentiation from other competitors, the only way to capture and acquire a larger share of the market is by providing maximum customer experience. One of the avenues in

which this can be enhanced is through digital banking which includes Internet Banking, Mobile Banking (m-banking), SMS Banking, and ATMs. The digital changes have made the industry more agile, efficient and resilient.

Digitalization is a global phenomenon which enables customers to quickly adopt digital banking and services as the new business paradigm. Existing players in the industry only have to quickly adopt and integrate this new reality or stand the risk of becoming obsolete (Broeders & Khanna, 2015). Banks historically have leveraged on technology to improve their efficiency and service offering to its customers, however rapid development and innovation in payment systems, customer interaction channels and communicate media have resulted in much wider implications on how banks engage customers (Cuesta et. al, 2015).

Most banks in general commenced their digital journey at the turn of the century and have overcome many hurdles in the last couple of decades. However, the advent of technological advancement spur a myriad of challenges for banks as more customers use mobile phones and tablets to perform banking transactions, increase in demand for Omni-channel experience and mobile experience. Requirement for banks to change is further accelerated due to compliance demands; especially post the 2008 financial meltdown (Vater, Cho and Sidebottom, 2012).

Banking is one of the most important industries for any economy. Banks historically have leveraged on technology to improve their efficiency and service offering to their customers. However, rapid development and innovation in payment systems, customer interaction channels and communicate media have resulted in much wider implications on how banks engage customers (Cuesta et. al, 2015). For the last decade, banks and financial institutions in Ethiopia have been growing and leveraging on the economic boom supplemented by some positive aspects of the external environments of the country. This has resulted in an intense competition amongst the major players within the industry which requires banks to constantly look at improvement points to grow their wallets share, revenue and ultimately profitability. This includes both marketing and digitalization strategies. While both strategies are important, banks must also realize that

customer experience is crucial in ensuring sustainability of business and to remain competitive.

The Ethiopian banking history goes as far back as 1905, when the first Bank, the Bank of Abyssinia was established in the country. The second significant event was the nationalization of issuing banking decided by Emperor Haileselassie with the establishment of the Bank of Ethiopia. The third event was Italian colonization in 1936, when, following liquidation of the Bank of Ethiopia, a broad banking network, extended to incorporate all Italian possessions in the Horn of Africa and interconnected with the metropolitan financial system (Mauri, 2010).

NBE's (National bank of Ethiopia) Monetary and Banking proclamation No.83/1994 and the Licensing and Supervision of Banking Business No.84/1994 issued two decades before laid down the legal basis for investment in the banking sector. Consequently shortly after the proclamation of the first private Bank, Awash International Bank was established in 1994 by 486 shareholders and Dashen Bank was established on September 20, 1995 as a share company with an authorized and subscribed capital of Birr 50.0 million.

Annual report of NBE 2018/2019 disclosed that, through time the number of private Banks has increased and currently the number of private Banks reached to sixteen. At present National Bank of Ethiopia has been giving authorization for Banks under formation to open blocked account and to sale share so that if the Banks under formation succeed in sale of share and fulfill the minimum NBE capital requirement to obtain banking business license the number of private Banks is expected to increase in future.

Thus, this thesis explores the extent of the practice of customer experience in financial institutions in the case of selected commercial banks in Addis Ababa City (BoA, CBE and UB). Due to time limitation and cost the study is conducted on three selected commercial banks located in Addis Ababa namely Bank of Abyssinia, Commercial Bank of Ethiopia and United Bank. The reason why the researcher selected the three banks for this study is because they are a best example of among others by using of leading banking technology and in their digitalization advancement as well, and in order to address both the state owned and the private Banking sectors in the country.

1.1.1. Bank of Abyssinia (BoA)

In an era where commercial banking services were in an inchoate stage and striding towards transforming different sectors of the economy, Bank of Abyssinia's founders believed in the need for a bank that gives comprehensive commercial banking services. Thus, the Bank of Abyssinia (BoA) was open for business in 1996 with enthused initiation and determination.

The name Abyssinia resembles bravery and character which is the core attributes of BoA. Its identity is demarcated with a sense of hope, optimism, and belief as it is perfectly displayed in its logo, the Adey Abeba. Adey Abeba brings the promise of a new beginning. BoA brings that very sense to all the customers it engages with. Working with and through BoA brings sustained success with the help of a bank that is a symbol of determination and hard work.

1.1.2. Commercial Bank of Ethiopia (CBE)

The history of the Commercial Bank of Ethiopia (CBE) dates back to the establishment of the State Bank of Ethiopia in 1942. CBE was legally established as a share company in 1963. In 1974, CBE merged with the privately owned Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country. Currently, CBE has more than 22 million account holders and the number of Mobile and Internet Banking users also reached more than 2.5 million as of June 30th 2019. Active ATM card holders reached more than 8 million (Commercial Bank of Ethiopia – combanketh.et).

1.1.3. United Bank (UD)

United Bank was incorporated as a Share Company on 10 September 1998 in accordance with the Commercial Code of Ethiopia of 1960 and the Licensing and Supervision of Banking Business Proclamation No. 84/1994. The bank obtained a banking services license from the National Bank of Ethiopia and is registered with the Trade, Industry and Tourism Bureau of the Addis Ababa City Administration.

Over the years, United Bank built itself into a progressive and modern banking institution, endowed with a strong financial structure and strong management, as well as a large and ever-increasing customers and correspondent base. Today, United Bank is a

full service Bank that offers its customers a wide range of commercial banking services with a network of 339 branches and 9 sub-branches, and a number of additional outlets on the pipeline.

United Bank's priority in the coming years is to strengthen its capital base, maximizing its return on equity and benefiting from the latest technology in order to keep abreast with the latest developments in the local and international financial services industry (<http://www.unitedbank.com.et>).

1.2. Problem Statement

Given the competitive landscape and macroeconomic environment, the Ethiopian banking industry has been growing in key indices such as deposit, loan, revenue, branch expansion and profit (NBE annual report 2018/2019). However, customers are becoming sensitive on preference of Banks, and they are willing to switch constantly searching for better experience (Anil, 2005).

The relevance of digital banking services deployed over digital technology has become widely recognized. Changes in technological interfaces have enabled banks to delight customers with instant services through digital banking (Oliveira & Tam, 2017). The proliferation of ownership of digital devices like mobile phones, personal computers, tablets and laptops has spurred the demand for financial services on these devices. In recognition of the digital technology potential opening up service opportunities, enabling banks to benefit from digital banking for service marketing. This means that banks can efficiently offer services, which customers can access through digital channels. With rapid technological change, banks face the challenge of improving their customer experience.

The customer broad perspective should be taken as a key success factor for a financial institution to differentiate itself from other competitors that, in turn, should allow increasing market share and position itself on best possible customer experience. Rapid development of digital economy is propelling rise of innovation, competitiveness and growth opportunities within the financial industry. Advancement and adoption of digital technologies and integration into business models is key for banks to achieve greater

scale, penetrate new markets swiftly, thorough understanding of customers' needs which leads to higher profitability and scalability (Peppers & Rogers, 2016).

Rogers (2016) argues that we are in the age of the customer, where there is a fundamental need for banks to reinvent their strategies or be forgotten. This requires top management of banks to make bold decisions to overcome the threats and leverage of opportunities brought in by digitalization. Further argument is that digitalization would transform the existing banking ecosystem where existing banking products and services are highly commoditized with digitalization becoming a key differentiator for banks to stay relevant in ensuring customers' financial well-being.

Review of existing research also leads to the fact that most published researches are conducted in developed countries and focus primarily on electronic banking adoption (Chan and Lu, 2004; Jayawardhena and Foley, 2000; Kolodinsky, Hogarth, and Hilgert, 2004; Yiu, Grant, and Edgar, 2007). Thus, the student researcher has noticed that little research or no research is done to investigate the effect of the digital banking on customer experience especially in Ethiopia. Limitation to such empirical study is due to the slowness in the advancement of digital banking technology in this African country. Additionally, the customer's perception and reception towards the transformation of their day to day banking transaction from the conventional means to digital system is another factor on the subject matter.

A wide range of customer demographic, stringent regulation demands and high competition and threats from new entrants could be other underlying factors. However, the primary focus of this study is from the customers' point of view where the use of technology is available, because many existing research on banking focus on internet banking (Natarajan et al., 2010).

1.3. Research Questions

The following are the research questions of the study.

- ✓ What are the key determinants of digital banking adoption from the customers' perspective?

- ✓ What effect does digital banking of selected commercial Banks (Bank of Abyssinia, Commercial Bank of Ethiopia and United Bank) have on customer experience?
- ✓ Is there any correlation between digital banking and customer experience components of customer satisfaction, customer effort, customer loyalty and customer recommendation?
- ✓ Do demographic characteristics of respondents have any significant influence on customer experience of selected commercial Banks?

1.4. Research objective

1.4.1. General Objective

The general objective of the study is to examine the effect of digital banking on customer experience in the case of Selected Commercial Banks in Addis Ababa City.

1.4.2. Specific Objectives

- To test the effect of trust towards use of digital banking platform on customer experience.
- To test the effect of service quality of digital banking platform on customer experience.
- To examine the effect of perceived ease of use of digital banking platforms on customer experience.
- To investigate the effect of perceived usefulness of digital banking on customer experience.
- To test the effect of commitment for digital banking on customer experience.
- To examine the effect of behavioral intention of digital banking on customer experience.

1.5. Significance of the study

The results of the study could play a great role in improving customer experience in the stated banks. The finding of the study help banks to know what and where they should improve their customer service to give customer experience.

The research would find important factors that determine the effectiveness of digital banking in improving the various parameters of customer experience namely customer satisfaction, customer effort, customer loyalty and customer recommendation. It is established that paying attention to factors: trust and security, service quality, perceived ease of use, perceived usefulness, commitment, and behavioral intention can improve customer experience.

The research evidence shows more closeness in the employee and customer views than in the financial reports, as they provided detailed information about the effectiveness of digital banking to deliver value. This provides future direction in research. The importance of digital banking to banks and customers would be highlighted and recommendations to stakeholders, especially in bank branch closures, security concerns and measuring customer experience and economic value-adds. Shortcomings with respect to the design of frameworks for enhancing digital banking experience are identified and recommendations are given, to improve for future further detailed research works.

1.6. Limitations of the study

All the customers of the banks were not taken as the subject of the study. Not only this but also, the fact that the study is only conducted in three commercial banks. The outcome of the study is mainly dependent on the individual responses of the respondents who participate in the study. So the result may not be generalizable beyond the specific population.

1.7. Scope of the study

The scope of the study can be discussed in terms of the issue under investigation, geographical area and the methodology adopted. Theme wise, the study is delimited to test the effect of digital banking on customer experience for the year 2021. In geographical terms, the study is delimited to three selected commercial banks located in Addis Ababa. Besides, the investigation was done on selected three commercial Banks of Ethiopia namely Bank of Abyssinia, Commercial Bank of Ethiopia and United Bank. Furthermore, the study focuses on customers' perceptions. The perspective of employers and employees about the subject matter didn't examine.

The study also confines to only to those customers who have been involved with digital banking operation products. The banks customer usually uses a full-fledged the traditional banking services ranging from domestic banking operations to international banking operations. However, the survey intends to cover only those customers who have been involved with digital banking products. Methodologically the Researcher selected the quantitative research approach that enables the researcher to use statistical tools and uses both descriptive and explanatory research designs.

1.8. Definition of key operational terms

- ✓ **Digital Banking** is an internet based platform in which customers can choose and use variety of banking services ranging from making deposits, transfers, paying bills to making investments (Pikkarainen, Karjaluoto&Pahnila, 2004).
- ✓ **Customer experience** is the internal and individual customer response as a result of any direct or indirect interaction with a business organization (Meyer and Schwager, 2007).
- ✓ **Customer satisfaction** is that a customer is generally satisfied when the product or service purchased is better than expectation and is dissatisfied when performance does not match expectations or when actual experience supersedes expectations (Bolton and Drew, 1991).
- ✓ **Customer loyalty** is a form of favoritism towards a brand that is resultant for consistent purchasing by the customer over a period of time (Engel & Blackwell, 1982).
- ✓ **Customer recommendation** which is also known as advocacy or word-of-mouth (“WOM”) can be either positive or negative with correlation with the customer’s satisfaction (Anderson et al., 1994).
- ✓ **Customer effort** is simplistic term mean how much effort is required from the customer to get an issue resolved or to obtain a product or service that a business has to offer (CEB, 2015).

1.9. Organization of the study

This study is organized in five chapters. Chapter one is introduction to the study. It provides a background of the study, objectives of the study, significance of the study,

scope and limitations of the study, definition of key terms, and organization of the study. Chapter two provides a critical literature review of different aspects of the study. It draws on the literary, theoretical, academic and industry basis of the research. It also presents the implications of digital banking on customer experiences, conceptual framework of the study and research hypotheses. Chapter three introduces the research methodology. Specifically, it includes the research approach and design, data sources, methods of data collection, population, sampling techniques and sample size, reliability and validity of data collection instruments, and data analysis techniques, and ethical considerations. Chapter four is all about data presentation, analysis and interpretation. Chapter five presents the summary, conclusion and recommendation and highlights key findings and contributions to knowledge as well as research theoretical implications, practical suggestions, limitations and potential future directions.

CHAPTER TWO

LITERATURE REVIEW

Customer experience is a way to meet and exceed the expectation of end customer through all channels of interaction. This leads to increased advocacy and referrals for the bank and ultimately profitable revenue growth. The customer continues to expect outstanding service, customized product, anytime-anywhere access to their money and real-time update and alerts of transaction across all channels. The benefits of a holistic end-to-end approach to customer service results by managing customer relationships with real-time information and by providing excellent customer experiences leading to lifetime loyalty from the customer. It requires an organization wide activity to bridge the various channels. Only then the customer interaction across channels can be managed to result in an overall customer experience (Suvarchala, 2018).

Customer experience is the differentiator factor that power of market shifts to customers that are intolerant to poor experience. Customers have memories, and poor experiences are affect customers' likelihood to return back and experience future services deliveries. So that the biggest area for attention has to be given to digitalization of banking services that encounter with customers to deliver an experience that is consistent and on-going. The only difference between competing service giving companies is the service they offer. It's not about product, it's not about price, but it's about customers' experience (Peppers, 2009).

According to Suvarchala & Narasimha (2018), financial institutions differentiate themselves by the effectiveness of their strategic decisions. Fundamental differentiators are powerful and difficult for competitors to compete against. Customer experiences are important differentiators in banking sector as the success of the Banks highly depends on the potential and number of customers they have. Hence, customer experience is the total impact of everything you do, or fail to do, that underpins ongoing interaction with a customer or potential customer.

The digital banking is delivering customized and consistent brand experience across all channels and customer touch points accentuated by analytics and automation that results

in paradigm shift in targeting operating module, service culture and service delivery consequences that are both desired and profitable (Maria et al., 2014). Digitalization of banking services is beneficial to both the financial institution and customers. Banks perceive the digital revolution as a strategy to gain competitive advantage to ultimately increase market share and reduce operating cost (Jayawardhena and Foley, 2000). Digitalization means banks are capable of providing faster, easier, cheaper and more reliable services to customers (Aladwani, 2001).

2.1. Theoretical Review

2.1.1. The concept and definition of customer Experience

Customer experience is the internal and individual customer response as a result of any direct or indirect interaction with a business organization (Meyer and Schwager, 2007). It is the customer's overall experience associated with the brand throughout the life cycle of the product or service offered (Schmitt, 2010). Businesses should adopt customers as continuous business imperative by formulating customer centric strategies across all segments of the organization, embracing technological advancement to increase overall value of its customer base, acquisition of new customers and retention of existing customers (Peppers and Rogers, 2016).

Different theories and models for measuring customer satisfaction and organizational performance have emerged (e.g. NPS (Reichheld, 2003); SERVQUAL (Parasuraman et al., 1988); SPC (Heskett et al., 2008)). The SPC model establishes the relationships between service quality, employee job satisfaction (employee retention and productivity), customer satisfaction and loyalty, and organizational performance (revenue growth and profitability). Kanyurhi and Akonkwa (2016) used the SPC model in Congo banks and found a positive relationship between internal marketing and employee satisfaction, and a positive relationship between internal marketing and perceived organizational performance, but not between employee satisfaction and perceived organizational performance.

The NPS gauges the level of customer satisfaction and loyalty to a firm, using a single question, while SERVQUAL measures service qualities using reliability, tangibles

assurance, responsiveness and empathy, without demonstrating their direct relationship to profitability. In DB, new models are required, as customer priorities in contact services may not be applicable, for example courtesy, friendliness and personal care. Hence, new service quality measures that moderate customer satisfaction in DB have emerged (Jun and Palacios, 2016; Amin, 2016; Dootson et al., 2016). Since this study utilizes some service quality measures (experience, satisfaction and loyalty), it contributed new knowledge on any significant relationships they may have with digital bank marketing and financial performance.

Customer experience encompasses a set of interactions (e.g. rational, emotional, sensorial, physical, and spiritual) between a customer, product and company, the value created through that set of interactions (Meyer and Schwager, 2007; Verhoef et al., 2009; Klaus and Maklan, 2013), and customers' purchasing behavior (Klaus and Maklan, 2013). Customers compare their service expectations and their experiences interacting with firms' offerings during different service contacts.

With regards to customer experience measures, Meyer and Schwager (2007) advocate the use of NPS, which captures the net result of good experience minus bad experience of what customers know about a firm. They conclude that customer satisfaction occurs when the gap between customers' expectations and experiences has been closed. Thus, banks should constantly seek the opinion of customers about their DB to improve their experience. The above mentioned link between customer experience and purchasing behavior suggests that customer experience is mediated by marketing to improve customer satisfaction and loyalty, and their impacts on an organization's financial performance.

Maklan and Klaus (2011) recommend that researchers should explore which dimensions of customer experience are important for organizational performance. This enables bank marketing to maximize financial performance, through customer experience, loyalty and satisfaction, and share of wallet. Most research in customer experience explores consumer perceptions (Holbrook, 2000) and customer experience management (CEM) (Schmitt, 2004). Berry et al. (2002) suggest that the first step in CEM should be defining

all the clues that a firm communicates to customers, to determine whether the company is meeting them.

A. Customer satisfaction

The satisfaction of Customer has been extensively researched many times but often associated with marketing. A customer is generally satisfied when the product or service purchased is better than expectation and is dissatisfied when performance does not match expectations or when actual experience supersedes expectations (Bolton and Drew, 1991). Kotler et al., (2006) states that; the buyer's satisfaction is dependent on the performance of the purchase to the customer's expectations. This expectation is not only limited to the product purchased but comprises service employees' behavior and interaction with touch-point, where a positive engagement exceeds the expectation thus level of customer satisfaction is positive.

B. Customer loyalty

The conventional views on loyalty focuses on repeat purchase behavior and it can be segmented into four categories (Brown, 1953) which are undivided loyalty, divided loyalty, unstable loyalty and no loyalty. Loyalty is the degree of probability for a customer to repurchase a product or service from a company (Lipstein, 1959). Engel & Blackwell (1982) defined loyalty as "the customer's preferential, attitudinal and behavioral response towards a brand in a particular category over a period of time". Loyalty is a form of favoritism towards a brand that is resultant for consistent purchasing by the customer over a period of time. Engel & Blackwell (1982) were further supported by Keller (1993) suggesting that loyalty exists where favorable attitude for a brand is translated via repetitive purchase.

C. Customer recommendation

Customer recommendation which is also known as advocacy or word-of-mouth ("WOM") can be either positive or negative with correlation with the customer's satisfaction (Anderson et al., 1994). Recommendation is a strong influencing factor that can reduce customer alternatives, simplifying customer's choice (Rosen and Olshavsky, 1987) which in a banking environment can be revenue generation and cost reduction

especially in customer acquisition. WOM has a dominant effect in customer adoption or switching of new product (Brown and Reingen, 1987). A study by Keaveney (1995) found that recommendation influenced new purchase decision in almost 50% of the case studies. According to Anderson et al (1994), satisfied customers are most likely to have positive recommendation about an organization's product or services. Another factor that could influence recommendation is the reputation of the organization, where the higher reputation could result in better recommendation.

D. Customer effort

Effort is one of the elements considered to influence behavioral commitment in purchase decision making (Cardozo and Bramel, 1969). Woodside and Parish (1972) examined the amount of effort required for customers to search for information during the pre-purchase phase and concluded that effort may not be directly linked to satisfaction resulting from the product or service. Customer effort is simplistic term mean how much effort is required from the customer to get an issue resolved or to obtain a product or service that a business has to offer, it has direct correlation to predicting future customer behavior (CEB, 2015). According to CEB, 81% of customers who claimed of high effort are likely to speak negatively about the company to others. Less effort would increase likeliness of customers to return, increase amount spend and have positive Word of Mouth (WOM), thus, increased loyalty.

2.1.2. Digital Banking

A. The Development of Digital Banking

Digital banking created opportunities for banks to offer multi-channel services through telephone, internet and mobile. A firm is adopting a multi-channel strategy when its products get to market through two or more distribution channels (Payne et al., 2017; Coelho & Easingwood, 2008). Lee and Chung (2009, p.385) note: "The internet revolution, [...], fundamentally changed the banking business sector in terms of the variety of financial services and how they are provided. [...] mobile banking has become accepted as part of daily life." Within the last decades, the availability of digital devices (e.g. computers, mobile phones, tablets and iPad) and their connectivity to the internet has resulted in customers looking to carry out financial services, rather than just e-mail,

web browsing and making calls. This service offering via digital devices is increasing and competing with bank branches, however research in digital banking experience is limited.

The advent of digital technologies is making banks shift towards digital banking, which has simplified remote service access (Yousafzai, 2012). Research on e-banking uptake argues that it has had a major impact on the growth of banking services (Martins et al., 2014; Akinci et al., 2003). Similarly, Hoehle et al.'s (2012) study suggests that the proliferation of digital banking has impacted the way banks serve customers. Nevertheless, these studies are mainly on digital banking acceptance rather than the experience of it, which is a limitation. Self-service technologies have enabled banks to pursue an electronically mediated multi-channel strategy. Therefore, moving customers to e-channels is an important means of reducing operational costs. This is happening across e-commerce and internet related businesses (Piyathasanan, Mathies, Wetzels, Patterson & Ruyter, 2015), where many companies have grown quickly through marketing their products online rather than through traditional channels (e.g. advertising and word-of-mouth). For them, a digital channel offers a world marketing presence, however the service attributes that attract customers to banks need to be investigated.

Digital banking satisfies customers' economic, personal and social needs (e.g. in social media), which predict overall perceived value (Dootson et al., 2016). It is changing service patterns and how customers interact with their banks, as different customer demographics have varying service expectations (Harrison, Onyia & Tagg, 2014).

Nowadays, customers expect similar levels of interaction in digital banking and social media. Banks can develop products, which customers can access conveniently from their devices. This convenience has precipitated the demand for services through digital devices. It also means that many customers are shifting towards digital banking channels.

Research claims that more than six hundred bank branches have closed across the UK over the past year, with rural areas worst affected (BBC, 2016). The demand for branches is falling, as more people switch to e-banking, making some branches unprofitable. This scenario shows a glimpse of digital banking effect on existing bank models and customers. It coincides with Dootson et al.'s (2016) finding that perceived value draws customers towards services, which needs replicating in UK banks. Researchers suggest

that banks should focus on digital banking to improve customer experience, save money and enhance financial performance. The development means that new bank models and ways of serving and maintaining customer relationships are required.

B. Characteristics of Digital Banking Channels

Digital banking is affected by service quality and functional characteristics (Jun &Palacios, 2016; Amin, 2016), which make it appealing to banks and customers. It enables multiple services to be introduced simultaneously, and customers to benefit from banking and other services. For instance, customers can browse the internet, chat and carry out banking concurrently. Internet banking enables banks to deliver services, offering different benefits due to more accessibility and user-friendliness of the technology from any location (Martins et al., 2014; Yiu, Grant & Edgar, 2007). It enables customers to carry out most services in the convenience of their homes (Mols, 2001). Telephone banking allows customers to conduct transactions through telephones (Sundarraaj& Wu, 2005), while mobile banking allows management of financial services through mobile devices (Oliveira & Tam, 2017). Mobile banking is growing due to customers' ability to carry out activities remotely. These digital channels offer different customer interfaces (e.g. dial and browse methods)with telephone banking being offered first.

Digital banking studies have been fragmented, with researchers studying individual channels, which is a limitation. Amin (2016) and Raza et al. (2015) study e-banking service quality and its relationship with customer satisfaction and loyalty, while Jun and Palacios (2016) find m-banking service quality to affect customer satisfaction and loyalty in USA banks. Saleem, Zahra, Ahmad and Ismail (2016) note that social influence, market orientation and service quality relate to customer loyalty, with satisfaction as an antecedent. These studies offer advantages in certain contexts, however a comprehensive study is required to understand different views of digitalbanking for proper bank service marketing and theory building. Arguably, among the common things that should make digital banking appealing for customers are convenience, accessibility, service quality and value derived from them.

The internet banking channel is classified as e-banking (Sarokolaei, Rahimipoor, Nadimi&Taheri, 2012), mobile banking as m-banking (Hanafizadeh et al., 2014; Lin, 2011) and telephone banking as t-banking (Sundarraaj& Wu, 2005). These digital channels share many characteristics with other services, with the main difference being the transmission medium, which can either be mobile or internet digital networks in digital banking. Moreover, digital services are consumed as they are produced, intangible and cannot be kept in an inventory (Hatch, 1997). The interaction between banks and customers within the service delivery process can cause variations due to service quality (Amin, 2016). Undoubtedly, customers have different service expectations and how well service providers meet those expectations determines their satisfaction. Therefore, studies into what affects customer service expectations in digital banking concerning customer experience, satisfaction and loyalty are urgently required. With digital innovation, banks can develop new services for customers. This can prevent customers from queuing in branches and travelling to perform banking transactions. For banks, this can bring operational efficiency, as some are already reducing branch numbers. These characteristics and changes in banks have made research into its uptake very compelling (Hanafizadeh et al., 2014; Alsajjan & Dennis, 2010; Yoon, 2010). There are also studies aimed at increasing customers' and banks' economic values (Klaus & Maklan, 2013; Yee et al., 2010), which have not investigated digital banking.

Digital banking enables customers to perform transactions like paying bills, transferring funds and balance inquiries. It plays a central role in electronic payments to support e-commerce. Early digital banking was dominated by e-banking, but m-banking is beginning to challenge this dominance. In recent years, the proliferation of mobile phones has encouraged banks to provide m-banking applications (Jun &Palacios, 2016; Hoehle et al., 2012; Barnes & Corbitt, 2003), helping ensure their competitive survival. These characteristics of digital banking make it a strong alternative to bank branches, making it useful to study, thereby helping banks improve their understanding and capabilities. It can help banks to serve customers better, improve their experience, maintain relationships with customers and promote mutual benefit. The characteristics of digital banking make it pervasive, however customer experience could depend on the service

and functional qualities (Monferrer-Tirado et al., 2016), and convenience (Keisidou et al., 2013), which need further investigation in UK banks.

Digital banking is an internet based platform in which customers can choose and use variety of banking services ranging from making deposits, transfers, paying bills to making investments (Pikkarainen, Karjaluoto & Pahnla, 2004). Banks today leverage on electronic channels and platforms to manage operations related to maintenance of customers' accounts. Banks utilize electronic channels as key interaction avenue with customers to sell their products and services. This form of banking is referred to as electronic banking (Azouzi, 2009).

The use of technology such as digital banking (DB) in service innovation to meet client needs is best understood through its relationship to the service users and how they perceive the service (Baba, 2012). A theory in marketing studies is a logically self-consistent model that explains how related phenomena behave (Lee and Greenley, 2008). Marketing theory and models explore how some intrinsic and extrinsic factors shape customers' service perceptions and firms' profitability (Grönroos, 1982); for example, Service Profit Chain (SPC) model (Heskett et al., 2008) and NPS (Reichheld, 2003) indicate that improving customer service attributes can improve profitability. Davis et al. (1989) postulate that perceived ease of use and usefulness factors influence customers' behavior in using new technology. In Jordanian banks, perceived usefulness, trust, and self-efficacy are predictors of customers' use of telebanking (Alalwan et al., 2016), but generally in DB experience contexts, different factors may be applicable, which need to be explored

DB enables banks to develop services for customers, cut costs associated with sending statements by post and face*to*face transactions with customers in branches. Nowadays, customers expect to have similar levels of interactions in DB and social media (Dootson et al., 2016). As customers increasingly accept DB, more than six hundred UK bank branches have closed, with rural areas worst affected (BBC, 2016; French et al., 2013).

C. Determinants of digital banking

a. Trust and security

Service is essentially an intangible offering from one part to another which does not result in the ownership of anything. Due to this dimension of intangibility, trust plays an important role in any service as consumers are not sure of what to expect until they consume the service and hence might perceive the service as risky. Subsequently, requirement for trust emerges as it is the management of risk, instability and powerlessness and incorporates unwavering quality, genuineness, consistency, commonality, desire where a partner is similarly dedicated. Trust and security got extraordinary consideration in the showcasing writing because of the prominent impact that it has on the fulfillment of enduring and beneficial connections (Morgan, 1994). Customers perceive trust as one of the greatest challenge to adopting digital banking methods as it contains exchange of sensitive information. It is a complex and includes multiple dimensions like trusting beliefs, familiarity, and disposition of trust, institutional based trust, goodwill, competence and integrity.

b. Service Quality

Service quality is the distinction between client desires for the service experience and the view of the services received (Oliver, 1980). Service quality can likewise be characterized as “the consumer’s by and large impression of the relative mediocrity/prevalence of the association and its services” (Bitner, 1990). Accordingly, service quality is characterized as how well a conveyed service level matches client desires. Clients see the quality of services of internet managing an account in view of the execution of online delivery frameworks and not on the forms in which the conveyed service is created and delivered.

c. Perceived Ease of Use

The Internet offers an opportunity with innovative new virtual environment that stimulates and enhances the learning of the bankers and the customers and the operative process. The intent to adopt digital banking is primarily determined by the ease of using the new technologies. An important factor in studying informational acceptance has been

the perceived ease of use of the said technology. Perceived ease of use can be defined as the degree to which an innovation is perceived not to be difficult to understand, learn or operate (Rogers, 1983). Further, Rogers (1983) stated that perceived ease of use is the degree to which consumers perceive a new product or service as much better than its substitutes. In the case of digital banking, perceived ease of use refers to the ease of using the digital services and is an indication of how intuitive the service and offering is. System adoption and information systems success can be measured by ease of use. In applying this construct in online banking setting, banks should concentrate on website and relevant capacities to provide to the needs of their clients with the goal that an application seen less demanding to use by clients than another is more liable to be acknowledged by them and improves their goal or ability to utilize the innovation. On the off chance that the arrangement of utilizing an online channel for banking transactions does not exceed client deprivation occasioned by components, for example, indifferent correspondence, specialized troubles and learning endeavors, the client may basically switch its support back to customary channel. In this way, it is evident that a channel which is anything but difficult to utilize can assume an essential part in consumer loyalty with online banking services.

d. Perceived Usefulness

Information technology quickly changes the textures of modern development and advancement nowadays and along these lines online banking has turned out to be increasingly enhanced and complex. There are a few factors that foreordain the consumer attitude towards online banking, for example, demographic background, motivation and conduct towards various banking innovations and individual inclinations and desires from the new technology (Abdullah, 2011). Consumer attitudes towards online banking are impacted by the related knowledge of computers and new technology (Laforet, 2005) and other environmental components (Davis, 1989). In the context of digital banking, customers have to worry about password integrity, privacy, data encryption, hacking and the protection of personal information. If the perceived usefulness of the service is not greater than the concerns, then it cannot lead to large adoption or customer satisfaction with the services. Perceived usefulness might increase other dimensions such as loyalty, commitment and recommendation to others. The greater the level of perceived

usefulness, the greater will be the adoption of these newer delivery channels through digital banking.

e. Commitment

Commitment, just like trust, is one of the most important factors that explain the strength of a marketing relationship. In the context of banking industry, marketing relationship refers to the building of long term relationships between the bank and the customers so that they regularly make transactions with the respective banks. One of the important constructs of digital banking is relationship banking. Customers not only get the product or service they have paid for, but they also feel valued which in turns increases the loyalty towards the company.

f. Behavioral Intention

Behavioral intention is often predicted on the basis of multi-attribute models (Fishbein and Ajzen 1975). Such models focus on users' beliefs about multiple attributes of a technology. The TAM (Davis 1989) is a multi-attribute model that predicts users' intentions to use a technology based on their perceptions of the user-friendliness and usefulness of the system. The TAM includes five concepts: perceived ease of use, perceived usefulness, attitudes toward use, intention to use, and actual use. Davis (1989:320) defines perceived ease of use (user-friendliness) as "the degree to which a person believes that using a particular system would be free of efforts". Davis (1989:320) also defines perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance". Furthermore, Fishbein and Ajzen (1975:216) define attitude toward use as "an individual's positive or negative feelings (evaluative affect) about performing the target behavior". Intention to use is based on Fishbein and Ajzen's (1975:288) definition of behavioral intention: "the strength of one's intention to perform a specified behavior". Although the TAM is applied mainly to explain intention to use technology in organizations, the constructs of the model are fairly general (Doll, Hendrickson, and Deng 1998), and constructs such as ease of use and attitude toward use are also deployed in models that explain use of self-service technology in the context of everyday life (Dabholkar and Bagozzi 2002). In the TAM, user-friendliness is treated primarily as an antecedent for perceived usefulness and

attitude toward use, where perceived usefulness is postulated to have a direct effect on intention to use as well as on attitude toward use. In accordance with TAM, we also propose that attitude influences behavioral intention and that behavioral intention influences actual behavior.

2.2. Empirical Review

The review of empirical literature gives an evidence-based and factual analysis of related works done in the country or outside and in the same area of study or related.

Several studies have been conducted in relation to digital banking and customer satisfaction in Ethiopia and elsewhere. Worku, Tilahun and Tafa (2016) have conducted a study to test the impact of Electronic Banking on Customers' Satisfaction in Ethiopian Banking Industry: The Case of Customers of Dashen and Wogagen Banks in Gondar City. This study presents what impact electronic banking has on customer satisfaction in comparing with traditional brick and mortar banking service, its relationship with that of age, occupation and education, its impact on branch visits, the level of customer understanding about e-banking and the opportunities and challenges of e-banking. The study was based on questionnaire survey gathered from 402 e-banking customers and interview with four branches of the two commercial banks which have started e-banking service in Gondar city when this study was conducted. There is a relationship between demographic characteristics and customer satisfaction in e-banking than ordinary banking. The banks are currently providing e-banking service for ordinary saving account holders and current account holders and in the city there are only two e-banking delivery channels of which ATM the most widely used and POS service is not well known among customers like that of ATM even this channels provide limited in comparison to bank hall service given by the banks' employees. E-banking service highly reduced the visits of bank hall, waiting time for service, their customers who do not know the existence of fee charged for being e-banking users though they have been being charged and there also customers who do not know what e-banking means and the banks except providing the card have not given any organized training for customers in order to create awareness about e-banking. E-banking has improved customer satisfaction than ordinary banking, enabled customers to control their account better than the ordinary banking, there is high

opportunity in expanding the service and the banks have not taken any empirical study or customer survey to measure customer satisfaction in the technology. Customers' knowledge about e-banking, availability of the service 24/7 and improvement of customers in controlling their account are more sensitive variable which determine customer satisfaction in e-banking. To put it in a net shell e-banking has impact in improving customer satisfaction, impact in reducing waiting time for customers to get bank service and impact in improving customers to control their account movements.

Kevin Ogonji Harris Muluka (2015) examined the influence of Digital Banking on Customer Satisfaction in the case of National Bank of Kenya Bungoma County. The study concluded that mobile money was mostly used as a digital channel. Further digital banking was considered fast and reliable and the speed was considered satisfactory. Not using internet to carry out transaction might be a limiting factor for the bank customer to experience speedy transactions. Customers were moreover confident that digital banking offers immeasurable speed of processing transactions which could not be compared to traditional banking. The study concludes that speed of transactions has an influence of customer's satisfaction as the speed of transacting increases customers become satisfied. On affordability of digital channels, the study concludes that digital banking channels are affordable. Affordability while transacting using digital banking is important however there are other considerations to be put in place apart from affordability. The negative minimal correlation implied that that affordability did not influence on customers satisfaction. It is therefore concluded affordability is not one of the key factors that is looked at while carrying a digital banking transactions. Customers transact using any other channel that is fast, accessible and easily adaptable

Mojoodi, Najafizadeh and Ghasemi (2013) conducted a study to examine the effect of service quality dimensions in technology based banking on customer satisfaction and loyalty. The study was based on 560 respondents whose input was analyzed from the following perspectives: easiness, assurance, security, customization, comprehensiveness, convenience, and support service and employee knowledge. The researchers concluded that service quality of digital banking positively affected customer satisfaction and customer loyalty.

Sarokolaei et al., (2016) researched the relationship among service quality, customer satisfaction and customer loyalty focusing on mobile shopping apps in Taiwan. 211 respondents were involved in this study. Seven dimensions (efficiency, fulfillment, privacy/security, responsiveness, personalization, tangibility, and reliability) were analyzed and in summary four of the seven (Privacy/security, personalization, reliability and tangibility) had positive impact on customer satisfaction and three positively affected on customer loyalty.

Djajanto et al., (2014) investigated the effect of self-service technology, service quality and relationship marketing on customer satisfaction and loyalty in Indonesia. The study was based on 201 respondents. By using Partial Least Square analysis, they concluded that all three elements significantly affected customer satisfaction.

Competitive pressures are forcing banks to minimize costs and innovate, making digital banking an alternative way to provide services and prompting academics to explore its uptake. Similarly, customers are becoming more demanding, forcing firms to focus on service quality to enhance business performance (Pekovic & Rolland, 2016). There were early studies of the potential benefits and security aspects of digital banking, especially e-banking (Daniel, 1999; Black, Lockett, Winklhofer & McKechnie, 2002). Furthermore, Waite and Harrison (2002) study e-banking quality, focusing on identifying consumer expectations of websites. Howcroft, Hamilton and Hewer (2002) investigated the motives for and barriers to using e-banking and t-banking, and concluded that customers are continued to use bank branches, but eventually digital banking will replace them. Whilst digital banking has become challenge to bank branches (Stone & Laughlin, 2016), it has not completely replaced them, and recent research has refocused on digital banking qualities (Alalwan et al., 2016).

E-banking knowledge is improving, however understanding customers, organizational flexibility, security, brand name, integrated marketing and good customer services are critical for banks (Shaha & Siddiqui, 2006). Martins et al. (2014) and Lee (2009) also argue that limited research has been done to find e-banking's positive and resistance factors, even though it is a cost-efficient way of banking, while Maenpaa, Kale, Kuusela and Mesiranta (2008) advocate a shift in research towards e-banking experience.

Subsequently, Piyathasanan et al. (2015) argue that few guidelines exist on how to improve customers' internet experience, showing that further research is required.

Sarokolaei et al.'s (2012) examined the barriers to e-banking and argues that reliability, security and customer satisfaction affect uptake, while recent research shows that brand in Israeli (Levy & Hino, 2016) and service quality in Saudi Arabian (Amin, 2016) banks, affect customer satisfaction and loyalty. This is not surprising as customer satisfaction has a financial effect on banks (Nagar & Rajan, 2005). The literature implies that further research attention should be focused towards customer experience. This gap in research needs closing. As part of new knowledge, this research investigates security issues, brand, customer experience, and satisfaction and employee perceptions of digital banking.

Some customers are reluctant to use e-banking due to perceived risk and trust (Martins et al., 2014; Kim, Tao, Shin & Kim, 2010). Featherman and Pavlou (2003) define perceived risk as the potential for loss in the pursuit of a desired outcome of using an e-service. They identify seven types of risk associated with e-banking: performance, financial, time, psychological, social, privacy and overall risks. Jun and Palacios's (2016) recent study also finds security to be an issue for customers, while Wu (2011) investigates the location convenience effect on customer satisfaction. Thus, this research investigates perceived risks and trust further, and explores other digital banking risks to see if they affect customer experience.

Other research suggests that managers need to plan and utilize digital banking efficiently, to meet changing customer service expectations (Hanafizadeh et al., 2014; Gerrard & Cunningham, 2003). Although current evidence shows that banks are accepting digital banking, improving customer experience is key to meeting their expectations, as investigated in the research. The suggestion also means that customers' and managers' opinions are important in digital banking uptake. Privacy and security were major barriers to early digital banking acceptance (Dimitriadis & Kyrezis, 2010; Howcroft et al., 2002), but research by Darwish and Hassan (2012) has identified how security can be improved. Nevertheless, privacy may still be an issue, as recent research shows that perceived usefulness, trust, and self-efficacy are predicting factors to use telebanking in

Jordanian banks (Alalwan et al., 2016). This evidence shows that digital banking has evolved, however further research is required to give clear direction. Research should address the experience factors, which make customers choose one bank's digital banking services over another, hence this research.

Howcroft, Hamilton and Hewer (2002) investigated the motives for and barriers to using e-banking and t-banking, and concluded that customers are continued to use bank branches, but eventually digital banking will replace them. Whilst digital banking has become challenge to bank branches (Stone & Laughlin, 2016), it has not completely replaced them, and recent research has refocused on digital banking qualities (Alalwan et al., 2016). E-banking knowledge is improving, however understanding customers, organizational flexibility, security, brand name, integrated marketing and good customer services are critical for banks (Shah a& Siddiqu, 2006). Martins et al. (2014) and Lee (2009) also argue that limited research has been done to find e-banking positive and resistance factors, even though it is a cost-efficient way of banking, while Maenpaa, Kale, Kuuselaand Mesiranta (2008) advocate a shift in research towards e-banking experience. Subsequently, Piyathasanan et al. (2015) argue that few guidelines exist on how to improve customers' internet experience, showing that further research is required.

Githuku Wanjiku Margaret (2018) Digital Banking and Customer Relationship in Banking Industry in Kenya. International Academic Journal of Human Resource and Business Administration. This prompted the research to find out the effects of digital banking on customer relationship in banking industry in Kenya. The specific objectives of this study were to determine the effect of digital banking perceived benefits like convenience of online transactions, decision support systems, online customer care support systems and interactivity on bank-customer relationship in banking industry in Kenya. The research investigated 120 customers randomly selected from 6 commercial banks based in Nairobi with two banks randomly selected from each tier.

2.3. Conceptual framework of the study

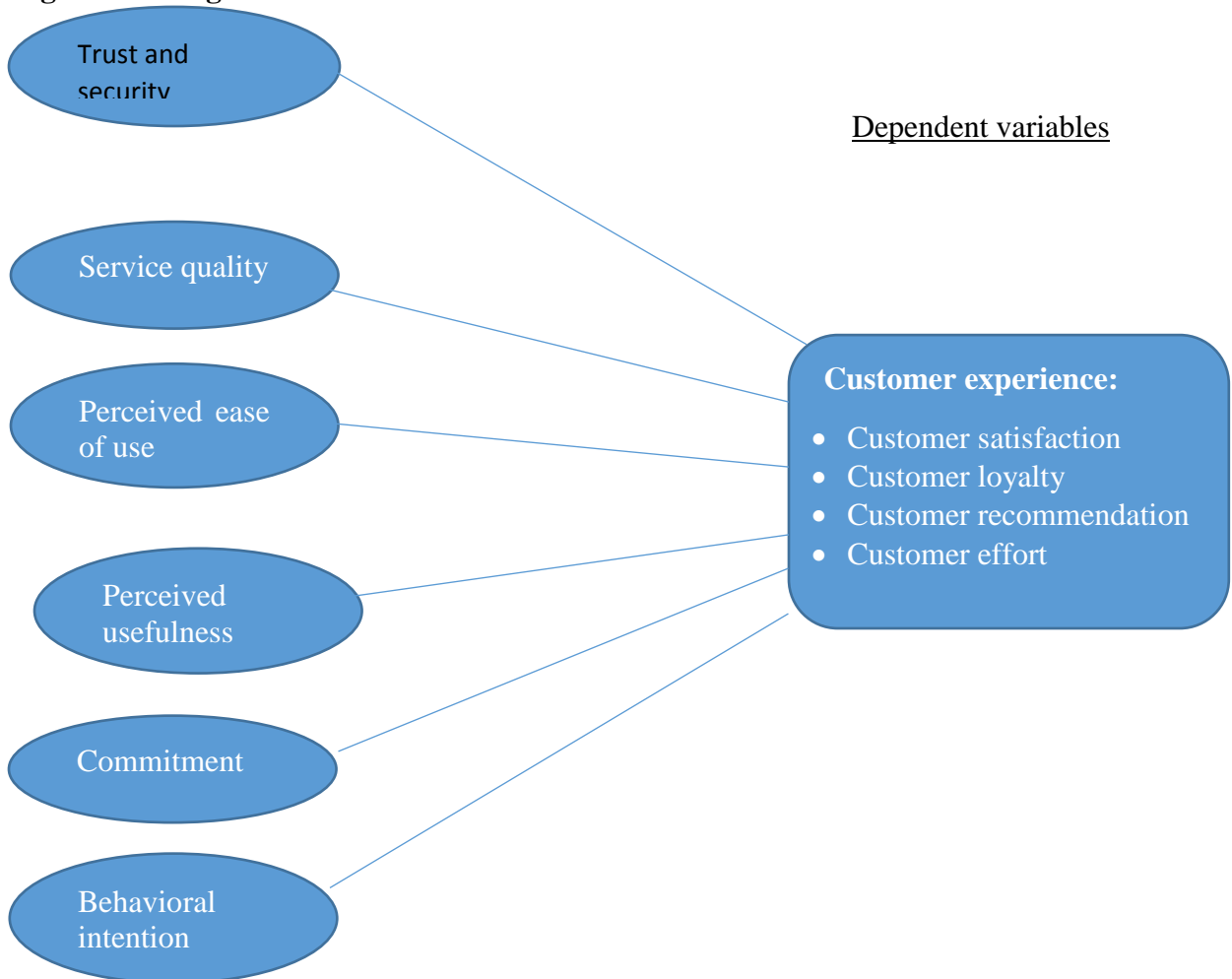
The difficulty in conceptualizing digital banking has made researchers combine different theoretical perspectives (Alalwan et al., 2016; Patsiotis et al., 2012), as it involves customer behavior, service quality, digital technology and banking. These theories

contribute differently to building digital banking frameworks. As shown in figure 2.1, digital banking (the independent variable) has six dimensions (perceived trust, service quality, perceived ease of use, perceived usefulness, commitment, behavioral intention) while customer experience (the dependent variable) has four dimensions (customer satisfaction, customer loyalty, customer recommendation, and customer effort). After a thorough review of various theories and models, this research came up with a conceptual framework which is formulated to help achieved the desired result and aim of this research.

Figure 2. 1 Conceptual framework of the study

Independent variables

Digital Banking:



2.4. Research Hypotheses

Repurchase intent of the customer is highly affected by their level of satisfaction with the product or service they are using. It is argued that satisfaction works as an indicator for customer's commitment. This should indicate that if customers of the bank are satisfied with the offerings from the bank, which includes the digital services, they would use the products and services from the same bank instead of switching to another and be committed to the bank. Along these lines, it is sensible to anticipate that clients who are happy with the digital banking make more prominent reuse of the same. The dependent and independent variables will be analyzed based on the following hypotheses.

- H1a: Trust towards use of digital banking platform positively affects customer experience.
- H1b: Service quality of digital banking platform positively affects customer experience.
- H1c: Perceived ease of use of digital banking platforms positively affects customer experience.
- H1d: Perceived usefulness of digital banking positively affects customer experience.
- H1e: Commitment to use digital banking platform positively influences customer experience.
- H1f: Behavioral intention towards digital banking positively affects customer experience.

CHAPTER THREE

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem as well as understood as a science of studying how research is done scientifically (Kotari, 2004). This chapter presents the methodology used in gathering the data, the population of the study, sample size and sampling procedure. It also discusses the research design, sources and types of data to be collected, and methods of data analysis.

3.1. Research Approach

Qualitative and quantitative research is the types of research approaches used to analyze research problems. Quantitative research approach involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion (Kotari, 2004). This study used quantitative research approach to investigate and infer the causal relationships of digital banking and customer experience in the selected commercial banks of Ethiopia.

3.2. Research Design

Research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kotari, 2004). Research designs are categorized as exploratory research, descriptive research and causal research. This study is both descriptive (as it attempts to describe the status of digital banking) and explanatory as it tries to test the effect of digital banking on customer experience in the case of commercial Banks in Ethiopia.

3.3. Data Sources and Collection Method

Data for this study was collected from both primary and secondary sources. The primary data was collected from corporate and retail customers of digital banking users including online banking users, ATM users and mobile banking users through random sampling. Secondary data has been collected from journals such as Journal of Internet Research, Journal of Internet Banking and Commerce. Six independent and four dependent variables with forty seven constructs would use to analyze data collected from 384

respondents. This research is only based on commercial banks' customers within the Ethiopian perspective.

3.4. Population, sample size and sampling procedure

Sample size estimation is mathematical procedure for deciding how many samples should be included in the investigation from the population. It must be carried out before collecting the data. Inappropriate sample size cannot produce a useful result and expose the participants to unnecessary risk. The determination of optimum sample size or minimum required sample size is extremely important not only for ethical and economic purposes but also to achieve sound results (Macfarlane, 2003; Sandhya, Alpana & Deshraj, 2015).

For populations that are large, Cochran (1963, as cited in Polonia, 2013) developed the equation to yield a representative sample for proportions.

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where

n_0 = desired sample size

Z = standard normal deviate; usually set at 1.96 which corresponds to 95% confidence level

p = proportion in the target population. If there is no reasonable estimate, use 50% (i.e. 0.5)

$q = 1-p$ (proportion in the target population)

e = precision level (degree of accuracy required usually set at 0.05 level)

$$\frac{(1.96 * 1.96)(0.5)(0.5)}{(0.05 * 0.05)} = 384$$

Using the above formula, the student researcher determined the sample size of 384 customers from the total customers of selected commercial banks branches delivering service in Addis Ababa and distributed 384 questionnaires equally among customers of

the chosen twelve branches in the banks. 32 questionnaires were given to customers of each branch to gather data required for the research, given time and monetary constraints.

3.5. Methods of data analysis

The data gathered from sample customers of the randomly selected twelve branches of three commercial Banks in Ethiopia. The Statistical Package for the Societal Sciences (“SPSS) version 2.0 was used to process quantitative data. In this study, the two most commonly used quantitative data analysis methods are descriptive statistics and inferential statistics. Descriptive statistics is used to describe the state of affairs in the selected banks in relation to digital banking and customer experience by using frequency, percentage, mean and standard deviation. Moreover, multiple linear regression analysis was used to test the effect of digital banking on customer experience.

3.7. Reliability and validity of data collection instruments

A test is seen as being reliable when it can be used by a number of different researchers under stable conditions, with consistent results and the results not varying. Reliability reflects consistency and replicability over time. Furthermore, reliability is seen as the degree to which a test is free from measurement errors, since the more measurement errors occur the less reliable the test. It is a very important factor in assessment, and is presented as an aspect contributing to validity and not opposed to validity. In quantitative research, reliability refers to the consistency, stability and repeatability of results, that is, the result of a researcher is considered reliable if consistent results have been obtained in identical situations but different circumstances (Mohajan, 2017).

Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. In other words, validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested (Kotari, 2004). The data collection instruments for the effect of Digital Banking on Customer Experience are checked in terms of Reliability and validity concepts and principles.

The items applied to measure customer experience were taken from validated sources of literature (Viknesh Venkathaialam, 2017).

Furthermore, Cronbach's alpha statistical instrument is used to ensure the inner consistency of a questionnaire. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale where alpha value is "> .9, Excellent, > .8 Good, > .7, Acceptable, > .6 Questionable, > .5 Poor, and < .5 Unacceptable" (Joseph & Rosemary R., 2003).

The alpha value for each question of the study instrument is computed and summarized in table 3.1

Table 3.1 Cronbach's alpha

Variables	Number of item	Cronbach's Alpha
Trust	8	0.901
Service Quality	5	0.869
Perceived ease of use	5	0.806
Perceived usefulness	4	0.882
Commitment	4	0.808
Behavioral Intention	4	0.868
Customer Experience	17	0.916
Overall	47	0.864

Source: Own survey data 2021

Cronbach's alpha value in table 3.1 is 0.864 which alludes that the data set from this study has good reliability in terms of internal consistency. The dependent variable which is customer experience has 17 items which are all above 0.90. Trust is 0.901 and all other independent variables and the underlying 30 items where the alpha value is above 0.80.

3.8. Ethical considerations

Participants of the study were requested for their willingness to participate before they were provided with the questionnaire. The researcher has clearly informed the respondents that the study was conducted for academic purpose. A guarantee was given to the customers (respondents) of the selected commercial Banks that their names will not be exposed in the research report. Finally, all the materials that are used for this research are duly acknowledge.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. Response Rate

This chapter focused on presentation, analysis and interpretation of data collected through questionnaires. Out of the 384 questionnaires distributed to twelve branches of selected commercial banks, 372 were used for analysis with response rate of 97%. Data collected were processed through SPSS version 20 and analyzed via descriptive analysis, correlation analysis, and regression analysis was made using.

4.2. Demographic characteristics of Respondents

The demographic information of the respondents includes gender, age, educational level and year of banking relation. As indicated in the table, the majority of survey respondents were male (60.5%) and the remaining were female (39.5%). In the ratio of the respondents, male respondents took the highest proportion.

Table 4. 1 Gender of Respondents

Gender	Frequency	Percent	Cumulative percent
Male	225	60.5	60.5
Female	147	39.5	100.0
Total	372	100.0	

Source: Own survey data (2021)

The following table illustrates the age distribution of sample respondents. The majority of respondents (50.8%) were between 31 and 40 years old. The second largest age group (28.5%) falls in between 18 and 30 years followed by respondents whose age ranges between 41 and 50 years (14.5%). The proportion of smallest group of respondents is 6.2% having age above 50 years old.

Table 4.2 Age of Respondents

Age	Frequency	Percentage	Cumulative percentage
18-30	106	28.5	28.5
31-40	189	50.8	79.3
41-50	54	14.5	93.8
Above 50	23	6.2	100.0
Total	372	100.0	

Source: Own survey data (2021)

The educational level of respondents is illustrated in table 4.3. Diploma holders took highest share (24.7%) followed by secondary education (22.0%). Respondents with First Degree have proportion of 21.5% while Second Degree and above respondents have 19.9% and the number of primary school respondents is the smallest of all groups accounted for 11.8%.

Table 4.3 Educational level of Respondents

Education	Frequency	Percent	Cumulative Percent
Primary Education	44	11.8	11.8
Secondary Education	82	22.0	33.9
Diploma	92	24.7	58.6
First Degree	80	21.5	80.1
Second Degree and above	74	19.9	100.0
Total	372	100.0	

Source: Own survey data, 2021

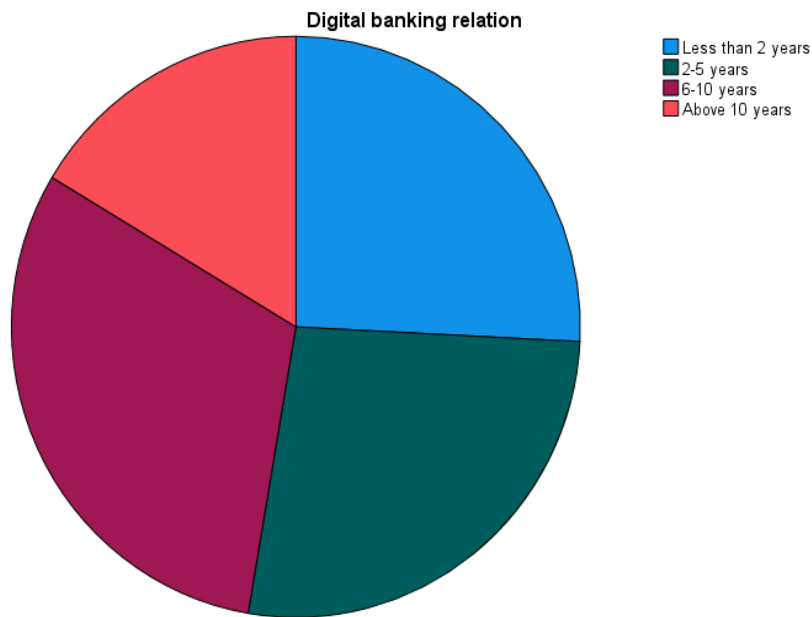
With regard to the year of banking relation, 30.9 % of customers have six to ten years of relation with the commercial Banks; whereas 26.9% of customers have two to five years of banking relation. The proportion of new customers having banking relation of less than two years is 25.8% and customers that stay with the Banks for more than ten years have the least proportion of 16.4%. Hence, majority of respondents have more than two years of banking relation with the commercial banks (74.2%) so that the survey response was gathered from customers that have reach experience. The breakdown of respondents relation with commercial Banks is Table 4.4 and in figure 4.1 illustrated

Table 4.4 Banking Relation of Respondents

Year of Banking Relation	Frequency	Percent	Cumulative Percent
Less than 2 years	96	25.8	25.8
2-5 years	100	26.9	52.7
6-10 years	115	30.9	83.6
Above 10 years	61	16.4	100.0
Total	372	100.0	

Source: Own survey data (2021)

Figure 4. 1 Respondents year of banking relation



Source: Own survey data (2021)

4.3. Descriptive statistics for digital banking

One of the objectives of the study was to examine the perception of customers towards Digital Banking of selected commercial Banks of Ethiopia. Digital banking was measured using six dimensions namely trust, service quality, perceived ease of use, perceived usefulness, commitment, behavioral intention, and overall level of DB.

The mean score of each variable as shown in table 4.5 indicate that perceived usefulness has highest mean score of 4.48 followed by behavioral intention with mean score of 4.34. The score in the digital banking variables of trust and commitment showed mean value of 4.29 and 4.20, respectively. The mean value of digital banking variables of ‘perceived ease of use’ and ‘service quality’ score were 4.12 and 4.00, respectively. Thus, the overall level of digital banking was 4.24 as perceived by the customers of the selected commercial Banks.

Table 4.5 Mean score of digital banking

Digital Banking Variables	Minimum	Maximum	Mean
Trust	1	5	4.29
Service Quality	1	5	4.00
Perceived Ease of Use	1	5	4.12
Perceived Usefulness	1	5	4.48
Commitment	1	5	4.20
Behavioral Intention	1	5	4.34
Overall			4.24

Source: Own survey data (2021)

4.4. Correlation analysis

Correlation analysis is useful to determine the relationship between different variables. It explains how significant or how strong the association between variables. The correlation coefficient (r) shows both magnitude and direction of either positive or negative from -1 to +1. A correlation coefficient of zero indicates that no association exists between measured variables. The closer the r coefficient approaches to one the stronger is the existing association and the positive correlation r indicate direct relationship between variables and the negative correlation r implies the inverse relationship (Taylor, 1990).

Table 4.6 indicates the relationship between the six dimensions of digital banking and customer experience. As indicated in table 4.6, the six variables are positively related with customer experience behavioral intention has the highest $r = .691$ followed by Trust $r = .684$ and the rest variables have almost approximately similar r values except perceived ease of use the lowest $r = .510$. From this, we can conclude that the digital

banking of the selected commercial Banks has direct and strong relation with customer experiences.

Table 4.6 Pearson Correlation

		Trust	Service Quality	Perceived Ease of Use	Perceived Usefulness	Commitment	Behavioral Intention	Customer Experience
Trust	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	372						
Service Quality	Pearson Correlation	.667**	1					
	Sig. (2-tailed)	<.001						
	N	372	372					
Perceived Ease of Use	Pearson Correlation	.337*	.542**	1				
	Sig. (2-tailed)	<.001	<.001					
	N	372	372	372				
Perceived Usefulness	Pearson Correlation	.215*	.206**	.507**	1			
	Sig. (2-tailed)	<.001	<.001	<.001				
	N	372	372	372	372			

Commitment	Pearson Correlation	.407*	.526**	.530**	.501**	1		
	Sig. (2-tailed)	<.001	<.001	<.001	<.001			
	N	372	372	372	372	372		
Behavioral Intention	Pearson Correlation	.431*	.447**	.563**	.704**	.657**	1	
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		
	N	372	372	372	372	372	372	
Customer Experience	Pearson Correlation	.684*	.639**	.510**	.522**	.638**	.691**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	
	N	372	372	372	372	372	372	372

** . Correlation is significant at the 0.01 level (2-tailed).

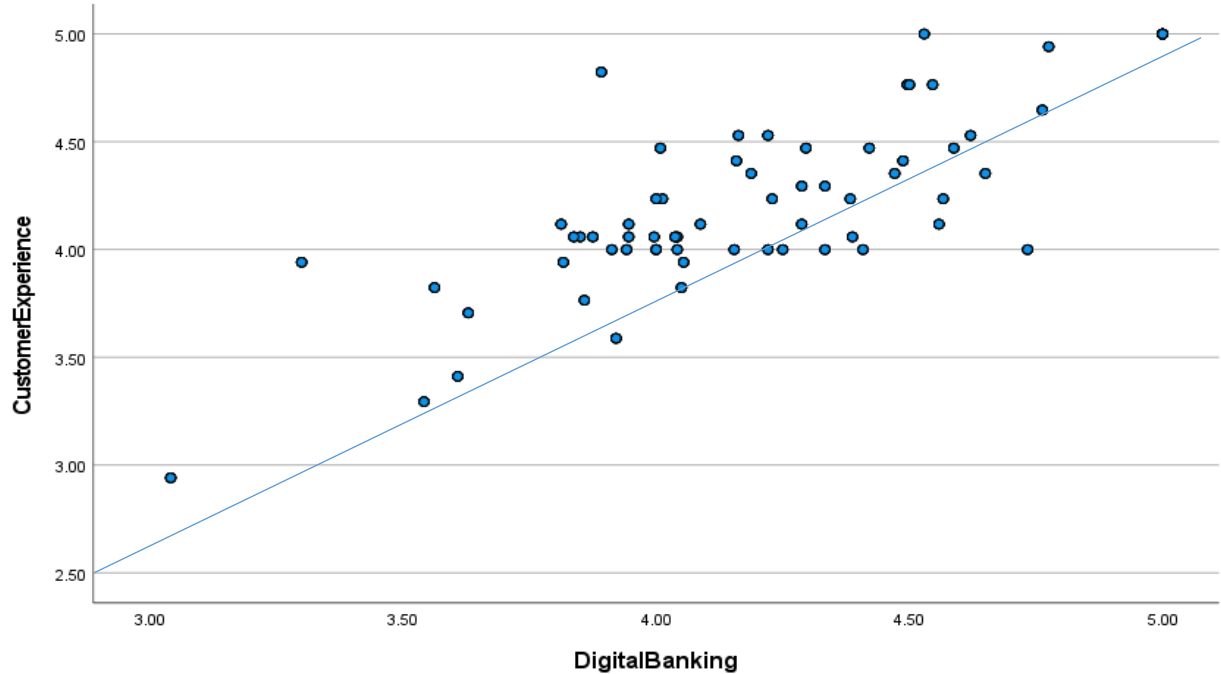
Source: Own survey data (2021)

4.5. Basic assumptions of regression analysis

4.5.1. Linearity

Multiple regressions can only accurately estimate the relationship between dependent and independent variables if the relationships are linear in nature. The linearity relationship between the independent variables and the dependent variable can be detected by examination of scatter plots characterized by a straight line (Jason W. & Elaine W.2002). Figure 4.2 shows scatter plots of customer experience the dependent variable and digital banking the independent variable that indicate linear relationships.

Figure 4. 2 Scatter plot with fit line

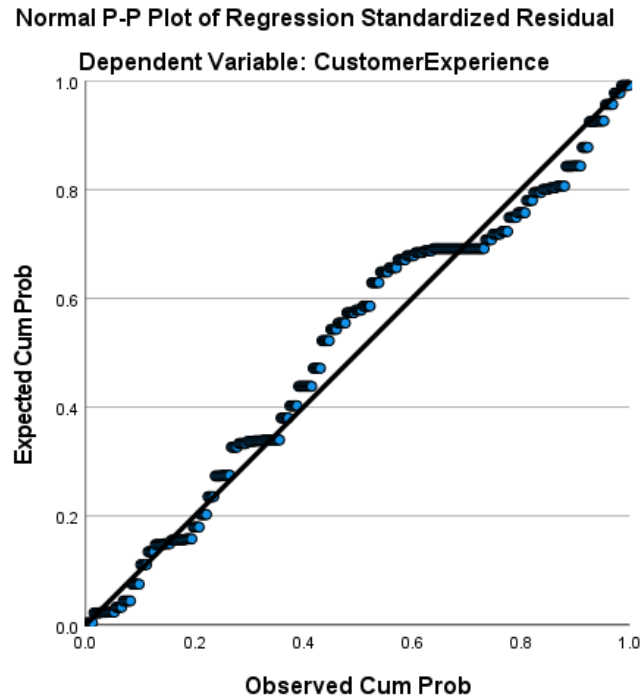


Source: Own survey data (2021)

4.5.2. Normality

A P-P plot (probability–probability plot or percent–percent plot) is a probability plot for assessing how closely two data sets agree, which plots the two cumulative distribution functions against each other. From this plot, we get idea about outlier, skewness, and kurtosis and for this reason it has become a very popular tool for testing the normality assumption. A P-P plot compares the empirical cumulative distribution function of a data set with a specified theoretical cumulative distribution function. If it looks like straight line or there is no curve then it contains no outliers and the assumption thought to be fulfilled (Keya & Rahmatullah, 2016). Normal P-P plot of survey data presented in Figures 4.3 shows a normality pattern that the assumption of normality test is fulfilled.

Figure 4.3 p-p plots of standardized residuals



Source: Own survey data (2021)

4.5.3. Autocorrelation

Demographic variable coefficients in table 4.7 describe the level of influence of demographic variables on the experience of customers. The P-value of each demographic variables demonstrate a large insignificance value that changes in the predictor are not associated with changes in the response therefore none of them are considered to influence the result. On educational background it was established that there was a negative minimal correlation between educational level and CX. This relationship however was significant as indicated by ($r = -0.193$, $p < 0.01$) which implied that educational level did not influence on CX.

Table 4.7 demographic variable of coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.549	.102		44.514	<.001
Gender	-.068	.045	-.077	-1.504	.133
Age	-.018	.029	-.035	-.640	.523
Educational level	-.064	.017	-.193	-3.753	<.001
Digital banking relation	.011	.023	.027	.504	.614

a. Dependent Variable: Customer Experience

Source: Own survey data (2021)

The Durbin-Watson test produces a test statistic of autocorrelation that ranges from 0 to 4. Values close to 2 (the middle of the range) suggest less autocorrelation, and values closer to 0 or 4 indicate greater positive or negative autocorrelation respectively. For this assumption to be met, the DW value needs to be close to 2. Values below 1 and above 3 are problematic and causes for concern. Table 4.7 below indicates that autocorrelation is not a concern with DW of 2.114. The adjusted R square value of table 4.8 tells us how much of the variation in the dependent variable customer experience is explained by the model. In the below table, the model summary shows that the adjusted R square value is .706 which means that 70.6% of the variance in customer experience of the selected commercial Bank customers is explained by the six variables of digital banking.

Table 4.8 Durbin-Watson Statistics

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.843 ^a	.711	.706	.23341	2.114

a. Predictors: (Constant), Behavioral Intention, Trust, Perceived Ease of Use, Commitment, Perceived Usefulness, Service Quality

b. Dependent Variable: Customer Experience

Source: Own survey data, 2021

4.5.4. Multicollinearity

Multicollinearity appears when two or more independent variables in the regression model are correlated. When correlation exists among predictor's the standard error of predictors coefficients will increase and consequently the variances of predictor's coefficients are inflated. The VIF is a tool to measure and quantify how much the variance is inflated. VIFs calculated using SPSS appear in VIF column as part of the output. Interpretation of the value of VIF indicate that VIF = 1 Not correlated; $1 < VIF < 5$ moderately correlated $VIF > 5$ highly correlated .If any of the VIF values exceeds 5 or 10, it implies that the associated regression coefficients are poorly estimated because of multicollinearity (Jamal, 2017). The table 4.9 below indicates that there is no multicollinearity symptom.

Table 4.9 Collinearity Test

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.648	.131		4.960	.001		
Trust	.275	.029	.368	9.460	.001	.522	1.914
Service Quality	.120	.031	.172	3.849	.001	.395	2.533
Perceived Ease of Use	.221	.054	.250	4.060	.001	.517	1.934
Perceived Usefulness	.142	.037	.163	3.871	.001	.445	2.246
Commitment	.124	.030	.165	4.075	.001	.485	2.061
Behavioral Intention	.195	.039	.239	4.965	.001	.342	2.921

a. Dependent Variable: Customer Experience

Source: Own survey data (2021)

Table 4.10 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	48.931	6	8.155	149.686	.000 ^b
Residual	19.886	365	.054		
Total	68.817	371			

a. Dependent Variable: Customer Experience

b. Predictors: (Constant), Behavioral Intention, Trust, Perceived Ease of Use, Commitment, Perceived Usefulness, Service Quality

Source: Own survey data, 2021

The above table indicate that the six Predictors variables of digital banking (Behavioral Intention, Trust, Perceived Ease of Use, Commitment, Perceived Usefulness, service Quality) significantly Predict dependent variable (Customer Experience) with $F=149.686$ and $sig=0.000$ that indicates the variation explained by the model is not simply by chance.

4.5.5 Direct effect of digital banking

Table 4.11 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.648	.131		4.960	.001
Trust	.275	.029	.368	9.460	.001
Service Quality	.120	.031	.172	3.849	.001
Perceived Ease of Use	.221	.054	.250	4.060	.001
Perceived Usefulness	.142	.037	.163	3.871	.001
Commitment	.124	.030	.165	4.075	.001
Behavioral Intention	.195	.039	.239	4.965	.001

a. Dependent Variable: Customer Experience

Source: Own survey data(2021)

As shown in table 4.11, the six variables of digital banking (Trust, Service Quality, Perceived Ease of Use, Perceived Usefulness, Commitment and Behavioral Intention) had statistically significant effect/influence in predicting the criterion variable, Customer experience (With standardized $\beta = 0.368$, $p = 0.001$, $\beta = 0.172$, $p = 0.001$, $\beta = 0.250$, $p = 0.001$, $\beta = 0.163$, $p = 0.001$, $\beta = 0.165$, $p = 0.001$, $\beta = 0.239$, $p = 0.001$, respectively).

Therefore, the study supports the hypothesis and increasing the digital banking will improve the experience of customers.

4.6. Discussion

In this study, there is significant direct effect of digital banking and its dimensions on customer experience. Therefore, the hypotheses proposed were supported.

Table 4. 12 Summary of hypothesis testing

No	Hypothesis statement	Result	Decision
H1a	Trust towards use of digital banking platform positively affects customer experience	P=0.001 $\beta =0.368$	Accept
H1b	Service quality of digital banking platform positively affects customer experience	P =0.001 $\beta =0.172$	Accept
H1c	Perceived ease of use of digital banking platforms positively affects customer experience	P=0.001 B =0.250	Accept
H1d	Perceived usefulness of digital banking positively affects customer experience	P=0.001 $\beta =0.163$	Accept
H1e	Commitment to use digital banking platform positively influences customer experience	P=0.001 $\beta =0.165$	Accept
H1f	Behavioral intention towards digital banking positively affects customer experience	P=0.001 $\beta =0.239$	Accept

Source: Own survey data (2021)

The study succeeded in confirming digital banking has direct bearing on the customer experience. The findings of the study clearly demonstrate that there is a direct relationship between customer experience and trust, Service quality, Perceived ease of use, Perceived usefulness, Commitment and Behavioral intention towards digital banking. This calls for the selected Ethiopian commercial Banks to optimally invest development of digital banking to maximize the experience of customers.

Furthermore, the results of this study clearly indicate that the overall feature of digital banking is moderate as perceived by the customers of these Banks. Thus, the mean score result of the study affirms that the observational gap stated in the problem statement of the study is in conformity with customers' perception.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes findings, concludes and forwards applicable recommendations based on the objective of the study mentioned in Chapter One. Further, limitations of the study and areas of future study are also indicated in this chapter.

5.1 Summary of Findings

This study was conducted to examine the effect of digital banking on customer experience. To this end, data were from 384 samples from twelve branches of selected three commercial banks of Ethiopia. The reliability and validity of the instrument was tested using Cronbach alpha. To test the research hypotheses, multiple regression analysis has been applied and the findings are summarized. Moreover, the demographic profile of respondents is examined using descriptive analysis.

The independent variables (trust, Service Quality, Perceived Ease of Use, Perceived Usefulness, Commitment and Behavioral Intention) have positive and statistically significant effect/influence in predicting the criterion variable, Customer experience (With standardized $\beta = 0.368$, $p = 0.001$, $\beta = 0.172$, $p = 0.001$, $\beta = 0.250$, $p = 0.001$, $\beta = 0.163$, $p = 0.001$, $\beta = 0.165$, $p = 0.001$, $\beta = 0.239$, $p = 0.001$, respectively). As a result proposed hypothesis is accepted.

The correlation between variables were examined and it was confirmed that there is positive relationship between digital banking six independent variables (trust, Service Quality, Perceived Ease of Use, Perceived Usefulness, Commitment and Behavioral Intention) and Customer experience the dependent variable with $r = 0.684$, $r = 0.639$, $r = 0.510$, $r = 0.522$, $r = 0.638$, $r = 0.691$ respectively. The results indicate that relationship between the independent variables and dependent variable is strong relationship.

5.2 Conclusions

The study examined the effects of digital banking on customer experience. Based on the result of findings the following conclusions are made:

- The correlation analysis showed that there is a positive association between digital banking and customer experience. And the digital banking significantly and positively affects the experience of customers. Furthermore, the findings of regression analysis and result of the hypothesis testing show to the same result. So, it can be concluded that digital banking has great effect on customer experience.
- Demographic variables of the respondents such as gender, age, and years of banking relation were found to be statistically insignificant and not affect relationship of digital banking and customer experience. Hence, the experience of customers does not vary by change in demographic variables. On educational background it was established that there was a negative minimal correlation between educational level and CX. This relationship however was significant as indicated by ($r = -0.193$, $p < 0.01$) which implied that educational level did not influence on CX.
- The mean score of the overall digital banking moderate (4.24) as perceived by the customers of these Banks. This indicates that observational gap stated in the problem statement of the study is in conformity with customers' perception.
- Research finding emphasizes the importance of digital banking in influencing the experience of customers that ultimately impact the end results of the selected commercial Banks.

5.3 Recommendations

Based on the findings of the study and the above conclusions, the following recommendations are forwarded:

- The selected commercial Banks (Bank of Abyssinia, Commercial Bank of Ethiopia and United Bank) should strategically follow the experience of customers and monitor their needs and emotions through a dedicated customer experience department and embrace customer centric business culture through digital technology.
- The selected commercial Banks should acknowledge the effects of digital banking and use feedback of customers as a tool to determine the experience gaps and monitor the experience of customers on continuous basis.
- Through the thesis, banks will be more equipped with clear requirements in digital banking utilization to provide services and survive 21st Century competition.

Therefore, banks can innovate in digital channels to offer a better, value-added and efficient service to maintain competitive advantage.

- Customers want trust and easy to use digital banking, hence making perceived usefulness, Service Quality and other factors identified in the research important.
- It has highlighted information on how banks can work with customers to bring good experience, satisfaction and loyalty through digitalization.
- The thesis will help create awareness and knowledge sharing within banks and government agencies about digital banking, and how it can be utilized more effectively.
- Lastly, the selected commercial Banks therefore need to look digitalization as valuable assets, invest on it that is able to deliver outstanding experience to customers resulting in loyal and life time clients leading to the achievement of organizational goals.

5.4 Research Limitations and Future Research Prospects

Despite Ethiopia is the home of all kinds of financial institutions, the study is limited to the selected commercial Banks of Ethiopia in the city of Addis Ababa. Hence, future study can be conducted by incorporating the different sectors of financial service giving industries such as insurance companies and microfinance including towns and the country sides of Ethiopia. Finally, since the study didn't consider the perspective of employees and employers, the effects of digital banking can be studied from the perspective of employees and employers in future research.

References

- Abdullah, R. S. (2011). Customer perspectives on business value: Case study on internet banking. *Journal of Internet Banking and Commerce*, 1-13.
- Abor, J., (2004). Technological innovations and banking in Ghana: An evaluation of customers' perceptions: *American Academy of Financial Management*, 1. [Online] Available: <http://www.financialcertified.com/armstrong.html>. Accessed on May 6, 2015
- Ahmad, A.E.M. K. and Al-Zubi, H. A. (2011).E-banking Functionality and Outcomes of Customer Satisfaction: An Empirical Investigation" *International Journal of Marketing Studies*, 3(1): 50-65.
- Anish Kumar et al (2016) Internet Banking - Benefits and Challenges. Vol-1 Issue-12016 IJARIE-ISSN (O)-2395-4396.
- Aladwani, A.M., (2001). Online banking: a field study of drivers, development challenges, and expectations. *International Journal of Information Management*, 21(3), pp.213- 225.
- Azouzi, D., (1970). The adoption of electronic banking in Tunisia: An exploratory study. *The Journal of Internet Banking and Commerce*, 14(3), pp.1-11.
- A Global Overview of Digital Wallet Technologies (2011). University of Toronto. Available at: <http://propid.ischool.utoronto.ca/digitalwallet-overview>. Retrieved 27/03/2015.
- Bello, D. A. (2005) „The Impact of E-banking on Customer Satisfaction in Nigeria“, *Munich Personal RePEc Archive*, MPRA Paper No. 23200, pp. 1-13
- Bitner, M. B. (1990). The service consequences of satisfaction decisions. *Journal of Marketing*, 71-84.
- Bolton, R.N. and Drew, J.H., (1991). A longitudinal analysis of the impact of service changes on customer attitudes. *The Journal of Marketing*, pp.1-9.
- Bakon, K.A. and Hassan, Z., (2013). Perceived value of smartphone and its impact on deviant behaviour: An investigation on higher education students in Malaysia. *International*

- Broeders, H. and Khanna, S., (2015). Strategic choices for banks in the digital age. McKinsey & Company
- Burnham, B. (1996). The Internet's Impact on Retail Banking: Booz-Allen Hamilton, pp. 1-10
- Chan, S.C. and Lu, M.T., (2004). Understanding Internet banking adoption and user behavior: A Hong Kong perspective.
- Cheung, M.I. and Liao, Z. (2002). Internet-based e-banking and consumer attitudes: an empirical study. *Information and Management* 39(4): 283 – 295.
- Cross. N. (2014). What's Your Definition of 'Digital' in Banking?. The Financial Brand. Available at: https://thefinancialbrand.com/wp-content/uploads/2015/08/EN-Observatorio-Banca-Digital_vf3.pdf .
- Cuesta, C., Macarena., David T., and Pablo U., (2015) "The digital transformation of the banking industry." BBVA Research (available at https://www.bbva.com/wp-content/uploads/2015/08/EN-Observatorio-Banca-Digital_vf3.pdf).
- Capgemini. (2016). Capgemini Financial Services Analysis. Bank for International Settlements Red Book.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 319-340.
- DeLaCastro, S, Ashwin K, Swarraj K. & Makarand, P. (2014). Digital banking: Enhancing Customer satisfaction; Generating Long-Term Loyalty. Cognizant.
- Djajanto et al., (2014) investigated the effect of self-service technology, service quality and relationship marketing on customer satisfaction and loyalty in Indonesia
- Disend. E. (2013). Digital Banking: The Importance of Customer Satisfaction in the Digital Era. Retrieved from <http://www.capco.com/insights/capco-blog/digital-banking-part-1-customer-experience>. Accessed on 03 February 2015.
- Dr. Geeta Sharma, M. S. (March 2014). Internet Banking Service Quality and Its Impact On Customer. *Business and Management Invention*, 3(3).
- Essinger, J. (1999). The virtual banking revolution: the customer, the bank and the future 1sted. London, UK: International Thomson Business Press.

- Githuku Wanjiku Margaret(2018) DIGITAL BANKING AND CUSTOMERRELATIONSHIP IN BANKING INDUSTRY IN KENYA. International AcademicJournal of Human Resource and Business Administration | Volume 3, Issue 2, pp. 14-32.
- Gurau, C. (2002). Online banking in transition economies: the implementation and development of online banking systems in Romania, International Journal of Bank Marketing , Vol. 20, No. 6.
- Ikechukwu, G. (2000). Enhancing the Performance of Banking Operations through Appropriate Information Technology in Nigeria Banking Industry, Ibadan: Spectrum Books. Ibadan- Nigeria
- Jain, S. K., & Gupta, G. (2004). Measuring service quality:SERVQUAL vs. SERVPERF scales. Vikalpa, 29(2), 25-38.
- Jamal, A. (2004). Retail banking and customer behaviour: Astudy of self-concept, satisfaction and technology usage. TheInternational Review of
- J., M. (2014). Despite Digital Banking Growth, Traditional Channels Survive. Retrieved from The Financial Brand: <http://thefinancialbrand.com/45577/online-mobile-digital-banking-channel-usage-research/>
- Karen Furst, W. W. (2002). Internet Banking: Development and prospects. Harvard University.
- Kevin Ogonji Harris Muluka (2015) examined the influence of Digital Banking on Customer Satisfaction in the case of National Bank of Kenya Bungoma County.
- Kolodinsky, J.M., Hogarth, J.M. and Hilgert, M.A., (2004). The adoption of electronic banking technologies by US consumers. International Journal of Bank Marketing, 22(4), pp.238-259.
- Kumar, V. M. (2014). Retail banking: Delivering a Meaningful Digital Customer Experience. Available at: www.cognizant.com/InsightsWhitepapers/Retail-BankingDelivering-a-Meaningful-Digital-Customer-Experience-codex1036. [Accessed on 26/11/2014].

- Kumbhar, V. M. (2011). Factors affecting the customer satisfaction in e-banking: some evidences from Indian banks. *Journal of basic scientific research*, 3(4), 1-14.
- Kuo, Y.F., Wu, C.M. and Deng, W.J., (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in human behavior*, 25(4), pp.887-896.
- Laforet, S. a. (2005). Consumer's attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 362-380.
- Luke, G. J. (2007). An assessment of the service quality expectations and perceptions of the patients of Awali Hospital in the Kingdom of Bahrain .
- Mahmadi (2016). Computer Security Issues in Online Banking: An Assessment from the Context of Usable Security. *International Engineering research and Innovations symposium. Computer Security Issues in Online Banking: An Assessment from the Context of Usable Security.*
- Marcu, Stefan, James Deighton, Torsten Eistert, Fergus Gordon, and Mathias Ulrich (2013), *Banking in a Digital World*. Available at: http://www.atkearney.dk/digital-business/ideasinsights/featured-article/-/asset_publisher/featuredarticle/content/banking-in-a-digitalworld/. Accessed on 02 Dec. 2014.
- Maria Correia Loureiro, S., Rüdiger Kaufmann, H. and Rabino, S., 2014. Intentions to use and recommend to others: An empirical study of online banking practices in Portugal and Austria. *Online Information Review*, 38(2), pp.186-208.
- Marous. J. (2014). Despite Digital Banking Growth, Traditional Channels Survive. *The Financial Brand*. Available at: <http://thefinancialbrand.com/45577/online-mobile-digital-banking-channel-usage-research/> (Accessed on 07/12/2014).
- Meuter, M. L., Ostrom, A. L., Roundtree, R. I., & Bitner, M. J. (2000). Self-service technologies: understanding customer satisfaction with technology-based service encounters. *Journal of marketing*, 64(3), 50-64.
- Mirabi, V. R. (2008). Investigating the degree of customer satisfaction of electronic banking services using the revised Cose model. *Journal of commerce surveys*, 31.

- Mohana sujana(2018) DIGITALIZATION IN BANKING SECTOR. © 2018 IJRARA August 2018, Volume 5, Issue 3 www.ijrar.org (E-ISSN 2348-1269, P-ISSN 2349 5138).
- Moreno J. P. (2014). Everyday Bank: A Journey to Digital Transformation with Accenture. Available at: <http://www.slideshare.net/backbase/everyday-bank-a-journey-to-digitaltransformation>.(Accessed on 30/11/2014).
- Mojoodi, Najafizadeh and Ghasemi (2013) conducted a study to examine the effect of service quality dimensions in technology based banking on customer satisfaction and loyalty. Journal home page: <http://www.aensiweb.com/aeb.html>
- MDA, (2017). [online] Available at: <http://www.malaysiandigitalassociation.org.my/wp-content/uploads/2016/08/Malaysia-Digital-Landscape-August-2016.pdf> [Accessed 21 Aug. 2017].
- N., C. (2014). What's Your Definition of 'Digital' in Banking? Retrieved from The Financial Brand: <https://thefinancialbrand.com/defining-digital-in-banking-next-bank-face-book>
- Natarajan, T., Balasubramanian, S.A. and Manickavasagam, S., (2010). Customer's choice amongst self-service technology (SST) channels in retail banking: A study using analytical hierarchy process (AHP). *Journal of Internet Banking and Commerce*, 15(2), pp.1-16.
- Nupur, J. M. (2010). .E-Banking and Customers' Satisfaction in Bangladesh: An Analysis. *International Review of*.
- Ogden. J. (2014). 2014 Digital Banking Trends: A synopsis of 4 Surveys. Available at: www.moneysummit.com/the-summit/2014/8/1/the-state-of-digital-banking-a-look-at-4-surveys. Accessed on 12 Dec 2014.
- Oliver, R. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 460-470.
- Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57(3), 25-48. PWC. (n.d.). Searching for new frontiers of growth. TechSci Research.

- Peppers, D. and Rogers, M., (2016). *Managing Customer Experience and Relationships: A Strategic Framework*. John Wiley & Sons.
- Rogers, D.L., (2016). *The Digital Transformation Playbook: Rethink Your Business for the Digital Age*. Columbia University Press.
- Sarokolaei et al., (2016) researched the relationship among service quality, customer satisfaction and customer loyalty focusing on mobile shopping apps in Taiwan.
- Villers. (2012). Banking will mean digital banking in 2015. Retrieved from PWC: <http://www.pwc.lu/en/pressarticles/2012/banking-will-mean-digital-banking-in-2015.jhtml>
- Vater, D., Cho, Y. and Sidebottom, P., (2012). The digital challenge to retail banks. Bain & Company, Inc.
- Vuong. L. (2015). What's Driving Digital Banking in 2015? Available at: <http://www.businessspectator.com.au/article/2015/1/13/technology/whats-driving-digital-banking-2015>. Accessed on 01 March 15.
- Williamson, L. S. (2006). Understanding consumer adoption of internet banking: An interpretive study in the Australian Banking context. *Journal of Electronic Commerce Research*, 50-66.
- Wind, J. (2001): *Digital Marketing*, Wiley Publication . New York
- Worku G , Tilahun A and Tafa (2016)the Impact of Electronic Banking on Customers' Satisfaction in Ethiopian Banking Industry: The Case of Customers of Dashen and Wogagen Banks in Gondar City.

Appendix A: Questionnaire
ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

DEPARTEMENT OF MASTERS OF BUSINESS ADMINISTRATION

Questionnaire to be filled by bank customers

Dear survey respondents,

My name is Eshete Sisay, MBA student at St. Mary's University. I am conducting a research project entitled **the Effect of Digital Banking on Customer Experience**. Your involvement is regarded as a great input to the quality of the research results. The soundness and the validity of the findings highly depend on your genuine responses. Hence, your honest and thoughtful response is invaluable. I would like to assure you that the information you provide will be used only for academic purpose and kept confidential.

Instructions:-

- ✓ No need of writing your name.
- ✓ Put the (✓) mark in the box for your answer.
- ✓ Kindly, request to return back on time.

For any problem and suggestion contact the researcher through the following addresses:

Phone: +251913567584

Thank you for your participation and for taking the time to assist me in my educational endeavors

Part I: General Information

1. Gender

a) Male

b) Female

2. Age:

a) 18-30

c) 41-50

b) 31-40

d) Above 50

3. Educational level:

a) Primary Education

d) First Degree

b) Secondary Education

e) Second Degree and above

c) Diploma

4. How long have you been since you started digital banking relation with the bank?

a) Less than 2 years

c) 6-10 years

b) 2-5 years

d) Above 10 years

Part II. Attitude towards digital banking

This part of survey is aimed to measure your attitude towards digital banking using five points likert scale (**1=strongly disagree, 5=strongly agree**). Please indicate your level of agreement by using tick mark on the choice of your interest.

1=strongly disagree, 2= disagree, 3 = neutral, 4=agree, 5=strongly agree

No.	Trust	1	2	3	4	5
1	You feel secure in doing transaction online with your bank.					
2	You feel confident while using e-banking method to access money.					
3	Your privacy is protected on your bank's website.					
4	Your bank website does not allow any third party to access your personal					

	information.					
5	Your bank's website offers all relevant information about all schemes.					
6	Your bank website works in your best interest.					
7	The login process of your online bank is secure.					
8	Overall your trust your bank while doing online services.					
Service Quality						
1	Administrators of your online bank inform you promptly for the completion of transactions.					
2	Administrators of your online bank have all knowledge to answer your queries online.					
3	Call centers of your online bank have operating hours convenient to its customers.					
4	Online services delivered by your bank are free from deficiencies.					
5	Your online bank performs the service right first time.					
Perceived Ease of Use						
1	It was very simple to do banking on computer system.					
2	It was easy to find information you needed regarding your banking transactions.					
3	The information presented on your online bank's website is clear and understandable.					

4	The user menus are clearly categorized and are well laid out in the screen.					
5	Your online bank is error free.					
Perceived Usefulness						
1	Online banking enhances your effectiveness in doing banking.					
2	Online banking saves your time.					
3	Online bank increases your productivity.					
4	Overall, an online bank is useful for me to utilize banking services.					
Commitment						
1	You will not stop using your bank website in the future.					
2	You feel emotionally attached to your online bank.					
3	You are committed to your online bank because the links are problem free, accurate and the pages download easily.					
4	You are committed because your bank's website is available in the language you can understand.					
Behavioral Intention						
1	You use the online banking for your banking needs.					
2	You intend to continue doing online banking with your bank.					
3	You will strongly recommend others to use online banking.					
4	Your favorable intention would be to use online banking rather than traditional banking for your banking transactions.					

Part III: Customer experience

No.	Customer Satisfaction	1	2	3	4	5
1	You are completely happy with your bank providing online services.					
2	You are satisfied with the customer support provided on your bank's website.					
3	You are satisfied with the payment and money transfer system provided on the bank's website.					
4	Your bank website is user friendly					
5	Your bank's website provides clear transaction price information.					
	Customer Loyalty					
1	You say positive things about digital banking to other people					
2	You will recommend digital banking service to someone who seeks your advice					
3	You consider digital banking is the first choice to buy – services					
4	You use online banking more in the next few years					
	Customer Recommendation					
1	You will mention to others that you do business using digital banking					
2	You are the one who speak positive about online banking service and product to others.					
3	You will strongly recommend your family members to use online					

	banking.					
4	You will strongly recommend your close personal friends to use online banking.					
Customer Effort						
1	The bank’s website experience has been fantastic for me					
2	The digital banking service has resulted in me saving money for my business in a facile manner					
3	The online banking has been able to clear all my doubts about the bank ‘services and products with minimal effort on my side					
4	Less effort is request to handle your issue or to get your issue resolved					

Appendix B: Empirical review summary

S. No.	Name(s) of the author(s)	Year of publication	Research title	Objective of the study	Research methodology:	Major research findings
					<ul style="list-style-type: none"> • Research Approach (qualitative, quantitative or mixed?) • Research Design (exploratory, descriptive or explanatory?) • Sample size and sampling technique • Research respondents • Data collection tools • Method(s) of data analyses 	
1	Mojoodi, Najafizadeh and Ghaseemi	2013	The service quality dimensions in technology based banking's impact on customers	to provide a model which is able to assess the quality of any kind of banking technologies (whether the technologies that are already in use)	<ul style="list-style-type: none"> • from the all students of Islamic Azad University (census study) • Descriptive • 700 questionnaires 	Service quality of digital banking positively impacts customer satisfaction and customer loyalty
2	Sarokolaie	2016	Relationships among	TO analyze consumers'	<ul style="list-style-type: none"> • Quantitatively analyzed 	Seven dimensions were analyzed and in

	et al.		Service Quality, Customer Satisfaction and Customer Loyalty: A Case Study on Mobile Shopping APPs	awareness of the mobile shopping APP service quality, and to explore how mobile shopping APP service quality may influence customer satisfaction and customer loyalty	<ul style="list-style-type: none"> • Convenience sampling • questionnaire survey • A total of 211 questionnaire respondents 	summary four of the seven had positive impact on customer satisfaction and three positively affected on customer loyalty
3	Djajanto et al.	2014	The effect of self-service technology, service quality and relationship marketing on customer satisfaction and loyalty	To hypothesis the effect of self-service technology, service quality and relationship marketing on customer satisfaction and loyalty	<ul style="list-style-type: none"> • random sampling method • Total number of questionnaires distributed was 225 • Explanatory • Partial Least Square analysis 	Self-service technology, service quality and relationship marketing significantly effected on customer satisfaction. Furthermore, relationship marketing significantly
4	Githuku Wanjiku Marga	2018	The effects of digital banking on customer relationship	To determine the effect of digital banking perceived benefits like convenience of	<ul style="list-style-type: none"> • The research investigated 120 customers • Random Sampling 	The commercial banks locally and globally immensely implementing digital banking minimize

	ret		in banking industry in Kenya	online transactions, decision support systems, online customer care support systems and interactivity on bank-customer relationship in banking industry in Kenya	method <ul style="list-style-type: none"> • Semi structured questionnaires • Descriptive statistics analysis • Linear regression model 	the costs related to the traditional brick and motor banks and also to stay competitive and retain market share in digital oriented market
5	Worku G, Tilahun A and Tafa	2016	The Impact of Electronic Banking on Customers' Satisfaction in Ethiopian Banking Industry: The Case of Customers of Dashen and Wogagen Banks in Gondar City	To assess and examine the impact of e-banking on customers' satisfaction in Ethiopian banking industry with particular emphasis in Gondar city in comparison with the ordinary mortar and brick banking system	<ul style="list-style-type: none"> • Questionnaires and interview • simple random sampling techniques • descriptive and inferential statistics • 402 respondents 	There was a relationship between demographic characteristics and customer satisfaction in e-banking than ordinary banking
6	Kevin	2015	The	To determine	<ul style="list-style-type: none"> • sample size of 	The study concluded

	Ogonji Harris Muluk a		influence of Digital Banking on Customer Satisfaction in the case of National Bank of Kenya Bungoma County	the influences of speed of transactions, to assess influences of accessibility, to determine influences of adaptability of digital banking and to establish how affordability of digital banking influences Customer Satisfaction case of National Bank of Kenya, Bungoma County	417 <ul style="list-style-type: none"> • 42 respondents • Descriptive survey design • questionnaires, interview schedules and document reviews • both descriptive and correlation analysis 	that mobile money was mostly used as a digital channel
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