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EFFECT OF BANKING INNOVATION ON CUSTOMER RETENTION: THE CASE OF COMMERCIAL BANK OF ETHIOPIA

By: Rahel Dessie

GSD/4995/10

**A Thesis Submitted to the School of Graduate Studies of Addis Ababa University School of
Commerce in Partial Fulfillment of the Requirements for the Degree of Master of Arts in
Marketing Management**

Advisor: Mulugeta G/Medihm (PhD)

June 2020

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Approval Sheet

Addis Ababa University
College of Business and Economics, School of Commerce
Graduate Studies Program
Department of Marketing Management

A Thesis on Effect of Banking Innovation on Customer Retention: The Case of Commercial Bank of Ethiopia

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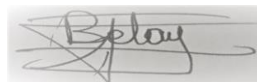
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Declaration

I, the undersigned, hereby declare that this research paper titled “*Effect of Banking Innovation on Customer Retention: The Case of Commercial Bank of Ethiopia*” submitted at Addis Ababa University School of Commerce for the Degree of Masters of arts in Marketing Management is my original work and all sources of information used in this paper have been duly acknowledged and this senior essay is not presented by me or any other party for any purpose.

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Statement of certification

This is to certify that Rahel Dessie has carried out her research work on the topic entitled: *Effect of Banking Innovation on Customer Retention: The Case of Commercial Bank of Ethiopia*. This thesis is her original work and is suitable for submission of Masters Degree in Marketing Management.

Advisor: Dr. Mulugeta G/Medihn

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Acronyms

CBE – Commercial Bank of Ethiopia

NBE – National Bank of Ethiopia

TAM – Technology Acceptance Model

DOI -Diffusion of Innovation Theory

IBD – International Banking Department

ATM – Automated Teller Machine

POS – Point of Sale

PU – Perceived Usefulness

PEoU – Perceived Ease of Use

PR – Perceived Risk

C – Compatibility

RA – Relative Advantage

ABSTRACT

The purpose of this study is to examine the effect of banking innovation on customer retention in the case of Commercial Bank of Ethiopia. A quantitative method was chosen in this research. 397 respondents who use at least one of banking innovation in the selected branches in Addis Ababa are taken as a population. The SPSS window was used to process the primary data collected through questionnaire. This study observes the relationship between perceived usefulness, perceived ease of use, perceived risk, compatibility and relative advantage to customer retention in Commercial Bank of Ethiopia. Multiple regression analysis was employed to test the hypotheses. The major findings of the study are: perceived usefulness and relative advantage has a positive and significant effect on customer retention in Commercial Bank of Ethiopia while Perceived risk has negative and significant effect on customer retention. The study recommends CBE to work on usefulness, relative advantage and minimizing risk of innovations. This study is important to branch managers and staffs of Strategy and Innovation Department in Commercial Bank of Ethiopia and other researchers who focus on banking innovations demonstrated as perceived usefulness, perceived ease of use, perceived risk, compatibility and relative advantage which are among the five variables having effect on customer retention.

Keywords: *perceived usefulness, perceived ease of use, perceived risk, reliability, compatibility, relative advantage, customer retention, banking innovation*

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Bank is an institution which collects deposits and channels the money into lending for customers. Rose (1999) defines banks as any financial institutions which offer a wide collection of financial services, including the provision of credit, deposits and payment systems and employ an extensive variety of financial intermediation functions in any business economy. The banking industry is experiencing a revolution based on changes in consumer needs, behavior, knowledge and competitive innovation following globalization, liberalization and technological factors. Therefore, there is need for banks to adopt a culture of continuous way of customer attraction, customer research, learning, and business innovation. Banks should not forget these factors if they want to work at their optimum level. As markets and customer demands are changing, competitors activities are changing too and therefore to survive in this era of innovation, banks have to change their strategies. This is the reason why the banking industry has been trying to make their systems efficient and effective through different innovations.

1.1.1 Customer-Based Banking Innovation

Due to various worldwide technological innovations, competition between banks has increased with the aim of attracting their customers in a numerous ways through condition of fitting, accessible and acceptable services and products to its customers (Holden and Karsh 2010). And according to Njenga (2010), poor customer service using the innovative technology available typically results in fewer customers, which translates into lower sales and profits for the bank.

In Ethiopia due to the coming out of new private banks with different competing strategies, the government owned bank CBE is forced to introduce innovative products in order to compete with the existing and upcoming banks on customer attraction and retention. For example in 2015 GC CBE agreed with Addis Ababa housing agency to monopoly collect the savings of new condominiums built for inhabitant in Addis Ababa city and get thousands of customers and collect deposit which surely remain for more than decades until the housing payment is settled.

The banks also developed new method of advancing loans to their customers especially for Ethiopians who live in abroad. This is done by entering into agreement with customers to facilitate the funding of loans to invest or buy houses in Ethiopia by saving money in selected foreign currency. This method helps CBE to retain customers while they are also living in some other country and collect foreign currency and make secure the service given by its international banking department (IBD).

Based on the objective to increase competitive advantage among the existing banks and since customer is a back bone of banking industry, Commercial Bank of Ethiopia decided to restructure its system of operations by introducing different Banking Innovations. Those innovations offer consumers and businesses the opportunity to undertake a lot of banking functions at home instead of been physically present in the banking hall. The customer is able to do home banking through the service called CBE birr using internet and telephones that provide customers with a lot of convenient banking services. Customers are able to transfer funds from one account to another, monitor the loan payments, pay bills of electricity and water, check accounts balances, buy and sell products and services, and perform other services.

Also Mobile banking users has advantages like; it eliminates the expenses of the banks, financial institutions that uses the mobile banking for service delivery removes or minimizes the need to build more branches to serve clients efficiently. Mobile banking has the idea of suitable banking to the customer which able to manage personal accounts and to perform other services such as paying bills on-line and transfer money without the help of bankers at any time and place. This help to reduce long queues, long waiting hours and inaccessibility to banking services outside banking hours and weekends.

Additionally, CBE introduces services like having interest free banking (IFB) services for Muslim customers, offering ATM card with sufficient ATM machines throughout the country for withdrawal, allow payments using ATM on POS machine, introduce women's account with advanced interest rate, introduce Diaspora account and facilitate credit service for diasporas etc which can be a means to attract customers.

The other most recent banking function that adopted in 2019 G.C and given in Ethiopia by only Commercial Bank of Ethiopia is ability to deposit cash using ATM machine in all 7 days 24 hours; therefore, the users are not expected to face time taking contour services but they can

simply use ATM machines at any place and when they put their money the machine gives them deposit slip.

1.1.2 Banking in Ethiopia

The first Ethiopian bank called Bank of Abyssinia was introduced in Addis Ababa under the regime of Menelik II in 1905. After 25 years in the 1930's the Bank was bought by the state and the state bank of Ethiopia was established by proclamation issued in August 1942. The bank was later disintegrated into two different banks to form The National Bank of Ethiopia and Commercial Bank of Ethiopia. (NBE 2002-2012)

In a new era of the banking sector private banks started to flourish and in 1994 the first private bank established calling Awash International Bank S.C following the proclamation no.84/1994 which allows Ethiopian nations to engage in banking and insurance business. Currently according to the NBE annual report of 2017/18 there are 2 Government and 16 Private owned Banks operating in the country. Based on the above discussion of various literatures, this study focuses on the effect of banking innovation and customer attraction in Commercial Bank of Ethiopia.

1.2 Statement of the Problem

Due to various technological innovations worldwide, competition between banks has increased with the aim of attracting their customers in a myriad of ways through provision of convenient, accessible and acceptable services and products to its customers (Holden and Karsh 2010).

The traditional commercial banking is declining in terms of competition and it is difficult to stay by performing in the same way on the banking industry without modification of services that is why banks work aggressively on banking innovations to be competent in the market. Banks today operate in a fast changing environment, the changes derived by rapid innovation in financial instruments, products and services, changing consumer demands, rising competition and the volatile growth in information technology. Banks that survive in the competition will be the one that aggressively work on effective and relevant banking innovations. Banking innovations will have their own effect on the program of retaining the existing customer by

giving the reason for why customers to use their bank. On the other hand, banks have to consider not only what customers want, but also when and how customers access the innovations also should be answered.

According to Njenga (2010), using the innovative technology with poor customer service results in fewer customers, which translates into lower sales and profits for the bank. This technological innovation within the commercial banks are however lying face down to failure like the ATMs and also there is an increase of the number of frauds from individuals in the country which affects the image and loyalty of customer negatively. This leads to negative word of mouth from the customers, lowers purchasing behavior, changes customers attitude, affects the customer behavior and even causes reduction of customer repurchasing the banks products and services. Moreover, a breakdown of an ATM may result in huge costs to the firm in terms of lost transactions.

Here in Ethiopia also various studies have been conducted by various authors and researchers on effect of different banking innovations separately with customer loyalty, customer adoption and customer satisfaction, for instance; Tilahun Dejene (2018) in his study of an assessment of customers' satisfaction with new product innovation in Awash Bank, try to assess product innovation in terms of service quality using the three variables; Customer centric new product, Attractive & Innovative new product and Price of new product and conclude saying that the more qualified respondents of the study were less satisfied than others. Yoseph Degu (2017) on his study on factors affecting customer's adoption of internet banking conclude the most internet banking users are under age of 30-39 years, males are the dominant users and also degree and diploma holders.

Therefore, banks in Ethiopia should have a product development strategy that include the implementation and evaluation of the effect of innovative products, aimed at maintaining existing customers and attracting new ones, such innovations must also improve efficiency and profitability of the banks. From banks in Ethiopia, Commercial Bank of Ethiopia is elder of the existing banks and the leading one in introducing most of new banking innovations. This is the reason why CBE is selected for the study.

Therefore, more studies and investigations particularly from the customers' perspectives are still essential to better understand what to do to enhance banking innovations in Ethiopia.

As a result this research is intended to contribute towards filling up the gap:-

- In terms of understanding factors that influence banking innovation and how these factors influence users in individual selection of specific bank in order to keep working with a given bank. Accordingly the determinants use for this study are combined from two models called “Technology Acceptance Model” and “Diffusion of Innovation (DOI) Theory”
- This research makes efforts to combine views of users’ of different banking innovations in CBE. Many previously done researches were focus on only one innovation but this study combine all banking innovations which offered by CBE.

1.3 Research Question

The general research question in this study is:

- What is the effect of Banking Innovation on Customer Retention in Commercial Bank of Ethiopia?

Sub-Research Questions: -

1. What is the effect of Perceived usefulness (PU) of banking innovation on customer retention?
2. What is the effect of perceived ease of use (PEOU) of banking innovation on customer retention?
3. What is the effect of perceived risk (PR)/Complexity of banking innovation on customer retention?
4. What is the effect of Compatibility of banking innovation on customer retention?
5. What is the effect of Relative advantage of banking innovation on customer retention?

1.4 Research Objective

1.4.1 General Objective

The main objective of this study was to examine the possible relationship between banking innovation and customer retention in the Commercial Bank of Ethiopia. Logical reasoning behind this study hypothesized that while banks introduce new innovations or products, there is significant effect on customer's preference to attach with that bank.

1.4.2 Specific Objective

This study has the following specific research objectives:-

1. To examine the effect of Perceived usefulness (PU) of banking innovation on customer retention.
2. To determine the effect of perceived ease of use (PEOU) of banking innovation on customer retention.
3. To investigate the effect of perceived risk (PR)/Complexity of banking innovation on customer retention.
4. To examine the effect of Compatibility of banking innovation on customer retention.
5. To investigate the effect of Relative advantage of banking innovation on customer retention.

1.5 Research Hypotheses

This study was look for the following Hypotheses.

H01 Perceived usefulness (PU) of banking innovation has positive and significant effect on customer retention in CBE.

H02 Perceived ease of use (PEOU) of banking innovation has positive and significant effect on customer retention in CBE.

H03 Perceived risk (PR)/Complexity of banking innovation has negative and significant effect on customer retention in CBE.

H04 Compatibility of banking innovation has positive and significant effect on customer retention in CBE.

H05 Relative advantage of banking innovation has positive and significant effect on customer retention in CBE.

1.6 Definition of terms

1.6.1 Bank: is an institution which collects idle money temporarily from the public and lends to other people as per need. R.P. Kent.

1.6.2 Commercial bank: A commercial bank is a dealer in capital or more property a dealer in money. It is intermediate party between the borrower and the lender. It borrows from one party and lends to another and the difference between the terms at which he borrows and those at which he lends from the source of his profit. (Prof. Gilbert)

1.6.3 Innovation: An innovation is a feasible relevant offering such as a product, service, process or experience with a viable business model that is perceived as new and is adopted by customers. Gijs van Wulfen

1.6.4 Banking Innovation: is the entrance of new or improved products or processes which reduces the operational cost of rendering existing banking services. Nofie (2011)

1.6.5 Mobile banking means performing banking activities which mainly consist of opening and maintaining mobile/regular accounts and accepting deposits; furthermore, it includes performing fund transfer or cash-in and cash-out services using mobile devices (NBE Directive, FIS-01-2012).

1.6.6 Internet banking Internet banking: refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent device (Booz, Allen & Hamilton, 1999).

1.6.7 Point of sale (POS) POS: is an electronic payment type that allows credit/debit cardholders make payments at sales/purchase outlets. It allows customers to perform the following services: Retail Payments, Cashless Payments, Cash Back Balance Inquiry, Airtime Transaction, Printing mini statement etc. (Kumaga, 2010).

1.6.8 Automated teller machine (ATM), also known as a Cash Point, Cash Machine, is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry (Fenuga, 2010).

1.7 Significant of the Study

This study is providing an empirical examination of the effect of banking innovations on customer retention in commercial bank of Ethiopia. Additionally it helps other researchers and professionals to understand the effect of technological advancement of innovations and effect of different variables on customer retention. Also the result insight information to the responsible bodies of bank who participate on making decision about adopting new technological innovations in the banking sector in product development section.

1.8 Scope of the Study

1.8.1 Geographical Scope

The study is concentrate on some selected Addis Ababa branches of CBE called Gelan Condominium Br, Bulbula Condominium Br, Nifasilk Br, Akaki Kela Br, Kolfe Dildiy Br, Amist Kilo Br, Jan Meda Br, Bole Cargo Br, Kotebe Welgemo Br, Wossen Akababi Br. Using samples believing Addis Ababa is a city of diversified society and getting of different types of customers easily.

1.8.2 Conceptual Scope

Customer retention is result of different situations and depends on the product or service. A customer may decide to stay with the specific bank based on a product, a service, accessibility or availability or any of these. However, this study is only emphasizing on Banking innovation and customer retention. This research analyzed the effect of banking innovation based on variables like perceived usefulness (PU), perceived ease of use (PEOU), perceived risk (PR)/Complexity, Compatibility and Relative advantage on customer retention in Commercial Bank of Ethiopia.

1.8.3 Methodological Scope

The researcher has chosen a research method which is within the limits of what can do. I.e, time, money and availability to measure the study are considered. For instance, the researcher use probability standards (random or probability samples) and non-probability standards (no probability samples).

1.9 Limitation of the Study

There are few limitations on this research. The research was conducted in Commercial Bank of Ethiopia A.A branches called Gelan Condominium Br, Bulbula Condominium Br, Nifasilk Br, Akaki Kela Br, Kolfe Dildiy Br, Amist Kilo Br, Jan Meda Br, Bole Cargo Br, Kotebe Welgemo Br and Wossen Akababi Br. Therefore it is difficult to generalize for all branches of Commercial Bank of Ethiopia and other banks operating in Ethiopia. Even if Addis Ababa city have more diversified population compare to other cities of Ethiopia, the finding in this study may not represent whole view of intention of customers in different banking innovations.

The other limitation of the study is the study does not include the opinion of non banking innovation users. But if they were included on the study the result of the study might be changed. Finally, the pandemic covid 19 was obstacle to distribute and collect the questioners. Since the disease needs social distancing and the country is on the state of emergency, it was difficult to communicate peoples easily and the student researcher was forced to use gloves and face masks and the distribution and collection of questioners takes more time than needed.

1.10 Organization of the research report

This study has arranged in five chapters. The first chapter contains the introduction part of the research topic. Chapter two has review of related literature, chapter three contains the research methodological approach and measurement techniques, chapter four is about data analysis and interpretation, and the fifth chapter contains summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter discusses the overall concepts which were an input for this study by starting with the introduction of banking innovation, which is narrowed down to some selected innovations apply in CBE. And also includes models which used in the study. This review of literature establishes the theoretical frame works for the study and highlights different frame works used in different studies.

2.2 Definition of Banking

The modern sense of banking evolved in the 14th century in the prosperous cities of Renaissance Italy. The financial institution that accepts deposits from the public and creates credit is called Bank. While Banking refers to the business activity of accepting and safeguarding money owned by other individuals and entities, and then lending out this money in order to earn a profit. However, through passage of time, the product and services provided by banking industry have expanded. Among others, issuance of debit and credit cards, providing safekeeping of valuable items, lockers, ATM services and online transfer of funds across the World are some of the services offered by the current banking industry.

2.3 Commercial Bank of Ethiopia

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. CBE is pioneer to introduce modern banking to the country. It is the leading African bank with assets of 711.96 billion Birr as on June 30, 2019 and it has more than 1456 branches stretched across the country. CBE plays a catalytic role in the economic progress & development of the country. It is the first bank in Ethiopia to introduce ATM service for local users. 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. As of June 30, 2019, 2,513 ATM machine and 9,539 POS machines were available. It has strong correspondent relationship with more than 50 renowned foreign banks like Commerz Bank A.G., Royal Bank of Canada, City Bank, HSBC Bank ... CBE has a SWIFT bilateral arrangement with more than 700 others banks across the world. CBE combines a wide capital base with more than 37,894 talented and committed permanent employees and more than 22,000 outsourced jobs as of June 30, 2019. Pioneer to introduce Western Union Money Transfer Services in Ethiopia early 1990s and currently working with other 20 money transfer agents like Money Gram, Atlantic International (Bole), Xpress Money,... CBE has opened four branches in South Sudan and has been in the business since June 2009. CBE has reliable and long-standing relationships with many internationally acclaimed banks throughout the world.

2.4 Banking Innovation

Innovation means something new or something which had not been done before. The same goes for banking section as well. There are many sections in banks which are going through or have gone through innovation in recent past. They are no longer restricted to age-old (traditional) methods. Thus, to increase the business avenues and capture the new market banks are resorting to innovation. This term innovative banking is being in use a lot nowadays. There are many types of banking facilities that the banks have started in recent years.

Banking innovation has played an important role in improving service delivery standards in the Banking institution. In its simplest form, Automated Teller Machines (ATMs), POS, credit cards, mobile banking and other deposit machines now allow consumers carry out banking transactions beyond banking hours. The main objective of the study was to establish the effect of banking innovations on customer satisfaction in Commercial Bank of Ethiopia.

Different authors express innovations in different ways. According to Rogers (1995) technological innovation is an improved process, new idea or improved service or good that has been commercialized for the production of better services and goods. Kwashie (2012), state that technological innovation is recognized as one of the main indicators on the organizational competitive advantage as well as a crucial element in improving the loyalty of customers as well

as their satisfaction and retention. The same goes for banking section as well. In recent past, it was possible for banks to satisfy their customers and to meet their own performance targets without the need to develop any new products to enhance service delivery due to the fact that account holders and banks were few, with the low volume of transactions, and lack of competition in the banking industry. The traditional commercial banking is declining in terms of competition and this may threaten the stability of customers who attached with the bank for long time. And this may result to make the bank out of market.

Bank innovations involve the development of new products or services process that lead to efficient and effective operations. Nofie (2011), described innovations in the banking industry as the entrance of new or improved products or a processes which reduces the operational cost of rendering existing banking services. According to Agboola (2003), the adoption of Information and Communication Technology in financial institutions have improved customer services, facilitated the accuracy of account, provided for home and office banking services, ensured convenient business hours, timely and fair attention, and improved service delivery.

Currently Innovative banking is being in use a lot. Banking innovations like those existing in phone banking, smart card applications, ATMs and internet banking, are going on at a fast pace in the global banking industry. Through innovation home banking has become easier and very convenient to users. Home banking gives the user different advantages like; privacy, speed, accuracy and the ability to do business in all the 24 hours in a day. The banks also charge moderate commission for the use of home banking innovation.

Following rise in competition among the banking sector, Ethiopian banking sector has brought to the need for the creation of innovative banking services or products that would maintain current customers and attract new ones.

In Ethiopia there are many sections in banks which are going through or have gone through innovations. According to the NBE 2017/18 annual report, Ethiopia has 18 banks, out of which 16 are private while the rest 2 are government banks. All those banks introduce different new products with new technologies which help them to survive in the market and have the highest market share.

2.5 Customer Retention

Customer retention refers to the ability of a company or product to retain its customers over some specified period. High customer retention means customers of the product or business tend to return to, continue to buy or in some other way not defect to another product or business, or to non-use entirely. Selling organizations generally attempt to reduce customer defections. Customer retention starts with the first contact an organization has with a customer and continues throughout the entire lifetime of a relationship and successful retention efforts take this entire lifecycle into account. A company's ability to attract and retain new customers is related not only to its product or services, but also to the way it services its existing customers, the value the customers actually generate as a result of utilizing the solutions, and the reputation it creates within and across the market place.

Successful customer retention involves more than giving the customer what they expect. Generating loyal advocates of the brand might mean exceeding customer expectations. Creating customer loyalty puts 'customer value rather than maximizing profits and shareholder value at the center of business strategy. The key differentiation in a competitive environment is often the delivery of a consistently high standard of customer service. Furthermore, in the emerging world of Customer Success Retention is a major objective.

Customer retention has a direct impact on profitability. Research by John Fleming and Jim Asplund indicates that engaged customers generate 1.7 times more revenue than normal customers, while having engaged employees and engaged customers return a revenue gain of 3.4 times the norm.

2.6 Banking Innovations in Commercial Bank of Ethiopia

As stated above CBE is the first to introduce many of banking innovations in our country Ethiopia. Among the many banking innovations used by CBE, four innovations selected for this study. Those are mobile banking, internet banking, CBE Birr/Mobile Money and ATM service which are the most widely used and discussed below:-

2.6.1 Mobile Banking

Mobile banking means performing banking activities which primarily consist of opening and maintaining mobile/regular accounts and accepting deposits; furthermore, it includes performing fund transfer or cash-in and cash-out services using mobile devices (NBE Directive, FIS-01-2012).

Mobile banking in CBE allows customers access and manage their saving and current accounts or enable customers to transfer money from their account. Currency used by CBE mobile banking is birr. Target markets for this product are sole owners; businesses; associations and unions. There are eligibility criteria's like CBE account holder is eligible to subscribe; person with power of attorney entitlements designed to use mobile service and customer with impaired/no vision. Customers will get benefits of check balances and transfer money (account to account and local transfer) using this mobile banking. Also a customer can access the maximum balance on customer account.

2.6.2 Internet Banking

Internet banking refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent device (Booz, Allen & Hamilton, 1999).

Internet banking uses to transfer, view balance, download statement, create or cancel standing order, request check book and effect utility payment such as water and electricity. Currency used by CBE internet banking is birr. Target markets for this product are individuals; sole owners; businesses; associations; unions and corporations. All CBE account holders are eligible to subscribe CBE internet banking. It has benefit of check balance, transfer money (account to account and local transfer) and request statement. Also a customer can access the maximum balance on customer account.

2.6.3 CBE Birr/Mobile Money

CBE Birr/Mobile Money has a purpose of easy, convenient, flexible and secure payment services for customers and provides a new revenue channel for providers and the CBE. Currency used by CBE Birr/Mobile Money is birr. Target markets for this product are individuals; Merchants;

business owners; associations; Government offices; NGOs and salary paying organizations. All CBE account holders and non-bank account holders, any individual whose age is greater than or equal to 18 are eligible to subscribe CBE Birr/Mobile Money. In addition any Ethiopian national with renewed trade license and tax identification certificate (TIN) and has one year business experience is eligible criteria for CBE Birr/Mobile Money. It has benefit of withdraw cash, deposit, money transfer, make payment, bill payment and buy airtime. Also a customer can access the maximum balance on CBE Birr account.

2.6.4 Automated Teller Machines (ATM)

It is a machine where cash withdrawal can be made over the machine without going in to the banking hall. ATMs also sell recharge cards and transfer funds which can be accessed 24 hours/7 days with account balance enquiry (Fenuga, 2010). Unlike teller point, it runs automatically using identity like card and password. It does not need any slip or Check but it is very much based on account holder's ATM card and its Password. Generally, ATM machines provide money withdrawal, fund transfer, balance enquiry, mini statement, and money transfer services.

CBE first introduced ATM service for local users with its eight ATM machines located in Addis Ababa (Gardachew, 2010). CBE customers can use those ATMs using different cards supplied by CBE like Domestic (Pre-paid Cards), Domestic (Visa Cards), International visa debit cards and International visa pre-paid cards.

2.7 Benefits of Adopting Banking Innovation

The innovative banking has changed radically the way the banking transaction and service delivery is carried out by the banks in Ethiopia. From the fruits of information and communication technology, Internet banking is the major one that changed the product delivery channels by enabling Banks to sell their products through online system. Several innovative technologies include mobile banking, RTGS, POS, ATM, Online banking. Number of activities that has impact on the adoption of the innovative banking technology has been brought in beginning of the 21st century (Chavda&Solanki, 2014). The innovative banking has changed the banking industry and inspires banks to invest in information and communication technology to achieve their strategic goals.

Banks should understand their customers and need to provide services to the customers in such a way that customers can easily adopt the new technology. The introduction of innovative banking changes overall thinking of the customers and competitors'. Great promotional efforts require creating awareness for the new technologies and benefits of it.

According to Chavda & Solanki (2014) adoption of innovative banking by the customers adds value to them and also it gives opportunity for the banks to deliver services at the affordable cost as well as boost their incomes. Furthermore innovative banking tools provides feature to secure longer-term relationships with the bank by the customer, if it handled properly. However, there are several behavioral concerns such as trust, security and reluctant to change towards new technology.

2.8 Benefits of Banking Innovation for Banks and Customers

It should be noted that banking innovation can bring about various benefits for banks and their customers as well. Cost savings, efficiency, gaining new segments of customers, improvement of the banks reputation and better customer services and satisfaction are primary benefits to banks (Jayawardhena & Foley, 2000).

Innovative banking products have a win-win situation both for the banks as well as for the customers. Innovative technology has benefits to the customer as well as banks. It offers lower operating and transaction cost to the banks while it provides convenience, fast transaction, and transparency to the customer. Innovative banking is been seen as a cost minimizing and convenient channel by both the customer and banks. It saves times and there is no geographical boundaries to it, bank customer residing in Ethiopia can have their bank transactions worldwide through the information and communication technology.

Innovative banking has various channels to deliver services to the customers. Growth of the Internet is the major growth driver behind innovative technology. Innovative banking adds value by providing better customer service and creating opportunities. It treats customer as individuals and so that they would be more loyal towards institution. Innovative banking also provides opportunity for banks to offers new banking experience to their clients.

Consumers use innovative banking as it provides payback assessment to traditional banking channels. The main prominent factor indicates that consumers are having more capability to use

computer, mobile and internet becomes user of innovative banking. Perceived risk, Ease of use, and quality of internet were most significant variable. Some studies found perceived risk as an important factor. In spite of the quality of internet, cost and penetration of the internet remains the most important factors for adoption of internet banking. (AMINI, MUSTAFA, AZIZI, 2011).

2.9 Theoretical Review

Theories of Innovation Adoption

Adoption is defined as the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1995).

2.9.1 Adoption of Innovation Theories

Rogers' Innovation Diffusion Theory is among the most popular theories for studying adoption of information technologies (IT) and understanding how IT innovations spread within and between communities. According to Rogers' (2003) diffusion of innovation theory, the process by which an innovation idea distributes through a societal group and focuses upon decision-making processes which lead to adoption of a new product or service. Ideally, according to this theory, innovation is an idea, process, or a technology that is perceived as new or unfamiliar to individuals within a particular area or social system. Consumer passes from initial knowledge of an innovation to developing a positive attitude toward the innovation. This leads to an intention to adopt it and, finally, to buying and consuming the innovation.

Communication channels, the attributes of the innovation, the characteristics of the adopters, and the social system are the main determinants of success of an IT innovation. The communication channels refer to the medium through which people get awareness about the innovation and perceive its usefulness. It includes both mass media and interpersonal communication.

The features of an innovation contain five user-perceived qualities: *relative advantage*, *compatibility*, *complexity*, *trialability* and *observability*.

- **Relative advantage** is the degree to which the user perceives benefits or improvements upon the existing technology by adopting an innovation.
- **Compatibility** captures the extent to which an innovation is consistent with the existing technical and social environment. The more an innovation can integrate with existing values, past experience and the needs of potential adopters, the greater its prospects for diffusion and adoption.
- **Complexity** measures the degree to which an innovation is perceived to be difficult to understand, implemented or used. An innovation that is less complicated is more likely to be rapidly accepted by end users.
- **Trialability** is the ability of an innovation to be put on trial without total commitment and with minimal investment. An innovation with higher trialability is more likely to be adopted by individuals.
- Finally, **Observability** is the extent to which the benefits of an innovation are visible to potential adopters. Innovation is adopted only when the results are perceived as beneficial.

Rogers has also characterized the individuals of a social system into five groups according to their attitudes toward an innovation: *innovators*, *early adopters*, *earlier majority*, *later majority* and *laggards*. According to Rogers, innovators have the skill to understand and apply complex technical knowledge important for bringing in the innovation from outside the social system. Innovators are the first group to adopt an innovation. The next group is the early adopters who are a more integrated part of the social system than the innovators. They tend to be well informed about the innovation, well attached with the new technologies and more economically successful. The first two groups of adopters comprise 16% of the population in a social system. The next two groups, which account for 68% of the population of the social system, are earlier and later majority adopters. The last 16% of the individuals in the social system are called laggards. They are the strongest resisters to the adoption of an innovation and most likely they tend to become non-adopters because of their limited resources and lack of awareness or knowledge of the innovation (X Zhang - 2015).

In Rogers' theory (2003), a social system is "a set of interrelated units engaged in joint problem solving to accomplish a common goal". It constitutes a boundary within which the diffusion of innovations takes place. Rogers suggests that the structure of a social system affects the

individuals' attitude toward the innovation, and consequently, the rate of adoption of innovations.

In recent years, diffusion of innovation theory has been used to study individuals' adoption of innovations. Different studies demonstrated that Rogers' innovation theory is useful for conceptualization of technology adoption.

2.9.2 Rational Choice Theory

Rational choice theory uses a precise definition of rationality simply to mean that an individual acts as if balancing costs against benefits to arrive at action that maximizes personal advantage. Rational choice theory mainly focuses on human behavior of choice in order to exploit benefit and lessen risk of choice decision. According to the Rational Choice Theory, an individual should have a proper knowledge of his or her own selection of goals and the cost of that selection. Rational people always select only those options that can offer good results (Peter, 2004). Rationality, interpreted as wanting more rather than less of a good, is widely used as a theory of the behavior of individuals in microeconomic models and analysis. It attaches wanting more to instrumental rationality, which involves seeking the most cost-effective means to attain a specific goal without reflecting on the value of that goal (Blume & Easley 2008).

According to the Rational Choice Theory, human beings are encouraged by their own goals and preferences. Mostly human actions are regulated by the information concerning the conditions under which a particular individual is going to work and would try to achieve his or her goal. It is almost impractical for the human beings to get what they desire. In rational choice theory, all decisions are postulated as mimicking such a rational process. Thus rationality is seen as a property of patterns of choices, rather than of individual choices. The basic idea of rational choice theory is that people make decisions about how they should act by comparing the costs and benefits of different courses of action. In other words, patterns of behavior in societies reflect the choices made by individuals as they try to capitalize on their benefits and reduce their costs. As a result, patterns of behavior build up within the societies that result from those choices.

2.9.3 Task Technology Fit (TTF) Theory

According to the theory of task-technology fit, fit between task and technology is a reason to the success of an information system, whereby success has been related to individual performance (Cicea C and Hincu D. 2009) and to group performance Mugenda, O. (2003). TTF is better to use if the capabilities of information communication and technology (ICT) match the tasks that the user must perform (Cicea C and Hincu D. 2009) and Compared to other theories TTF is more likely to have a positive impact on individual performance. Factors that measure task-technology fit are *Quality, Locatability, Authorization and Compatibility, Eases of use/training, Production timeliness, Systems reliability and Relationship* with users.

According to the theory explaining and predicting the success of information system needs a match between business tasks and information technology with existence of TTF. The concept of task-technology fit promises to help identify aspects that are critical to support a given business task, and contribute to the success of technology innovations (Junglas and Watson, 2006).

At the same time, though, usability studies suggest that the use-context may have a non-trivial effect on the conditions of task-technology fit (Perry et al., 2001).

- 1st, it can be experiential that non-functional features, such as size and weight, play a more prominent role in mobile than in non-mobile use contexts (Gebauer and Ginsburg, 2006).
- 2nd, functional requirements may modify as business tasks are often performed another way in mobile versus non-mobile use contexts (Gebauer and Shaw 2004).

2.9.4 Schumpeter Theory of Innovation

Schumpeter's saw innovations as continuous way of creativity that was essential forces driving growth rates in a capitalist system. Schumpeter's early thinking where innovation was largely dependent on exceptional individuals/entrepreneurs willing to take on exceptional hazards as an act of will. But later thinking recognized the role of large corporations in organizing and supporting innovation.

According to Schumpeter, before the economy could equilibrate/set a new innovation, conceptualized by Schumpeter as Kondratiev cycles, would emerge to begin the business cycle over again. While Schumpeter point to role of innovation and importance in timing economic cycle, but did not explain the source of innovation. Schumpeter's assertions have been supported by Porter (2002) that innovation is vital for a country's long-run economic growth and competitive advantage. Sustained investment in physical and intangible assets results innovation and upgrading of goods and services.

Schumpeter's concise thought of innovations in the field of banking may come out to propose an affirmative role for financial innovations in financing the new innovations that produce the primary wave growth spurts. Financial markets play critical roles in mobilizing savings, evaluating projects, managing risk, monitoring managers, and facilitating transactions. Schumpeter put a clear difference between innovators of conditions for profitable new enterprises and the bankers who create credit to finance the construction of the new ventures (Clarence, B. 2010). Schumpeter points that the special role of credit-creation by bankers was 'the monetary complement of innovations' (Francesca, A. & Claeys, P. 2010). As independent agents who have no interest in the new enterprises they finance, bankers are the capitalists who accept all the risks (none is borne by the entrepreneurs). That needs having the exceptional ability to judge the potential for achievement in financing entrepreneurial activities. Schumpeter points that it is just as important to deny credit to those lacking that potential as it is to supply credit to those having it (Maholtra, 2002).

2.9.5 Diffusion of Innovation (DOI) Theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product, acquire and perform a new behavior, etc.). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible.

There are four main interacting elements of the key concept: Diffusion of Innovations – A) an innovation, B) communicated through certain channels, C) over time and D) among members of a social system.

Definitions

A. Innovation: Is an idea, practice or object that is perceived as new by an individual or group [or organization]. (Rogers, 2003:12)

B. Communication: The process by which participants create and share information to one another in order to reach a mutual understanding (Rogers, 2003:18)

C. Time: Time involved in the innovation-decision process, the time taken to adopt an innovation by the adopter and the adoption rate across the social system (Rogers, 2003:20)

D. Social System: Are a set of interrelated social units (e.g. individuals, informal groups, organizations) that are engaged in problem solving to achieve a common goal. (Rogers, 2003:23) – it determines the boundary for a diffusion process; it can be affected by norms, and the degree to which individuals can influence one another

These four elements are present in every diffusion research study and in every diffusion program (i.e. the main elements are the variables in the diffusion process).

The stages, by which a person adopts an innovation, and whereby diffusion is accomplished, include *awareness* of the need for an innovation, *decision to adopt* (or reject) the innovation, *initial use* of the innovation to test it, and *continued use* of the innovation. There are **five main factors that influence adoption of an innovation**, and each of these factors is at play to a different extent in the five adopter categories.

Relative advantage (perceived benefit) is the degree to which an innovation is perceived as better than the idea it supersedes. The degree of relative advantage may be measured in economic terms, but social-prestige factors, convenience, and satisfaction are also often important components. It does not matter so much whether an innovation has a great deal of "objective" advantage. What does matter is whether an individual perceives the innovation as advantageous. The greater the perceived relative advantage of an innovation, the more rapid its rate of adoption is going to be.

Compatibility is the degree to which how consistent the innovation is with the values, experiences, and needs of the potential adopters. An idea that is not compatible with the prevalent values and norms of a social system not be adopted as rapidly as an innovation that is compatible. The adoption of an incompatible innovation often requires the prior adoption of a new value system.

Perceived risk/Complexity is the degree to which an innovation is perceived as difficult to understand and use. Some innovations are readily understood by most members of a social system; others are more complicated and be adopted more slowly.

Trial ability is the extent to which the innovation can be tested or experimented with before a commitment to adopt is made. New ideas that can be tried on the installment plan generally be adopted more quickly than innovations that are not divisible.

Observability is the extent to which the innovation provides tangible results. The easier it is for individuals to see the results of an innovation, the more likely they are to adopt. Such visibility stimulates peer discussion of a new idea, as friends and neighbors of an adopter ask others for innovation-evaluation information about it. External characteristics of organization refer to system openness.

2.9.6 Technology Acceptance Model (TMA)

The Technology Acceptance Model (TAM), introduced by Davis (1986), is an adaptation of the Theory of Reasoned Action (TRA) specifically modified for modeling user acceptance of information technology. (Davis, 1986) stated that the main goal of TAM is to explain the determinants of IT acceptance across a broad range of information technologies and user populations. Moreover, Davis (1986) suggested that acceptance of IT can be determined by two primary constructs: perceived usefulness and perceived ease of use of the technology. When predicting the acceptance of information technologies, TAM suggests the following factors are important: external variables; beliefs about information technology (perceived usefulness and perceived ease of use), attitudes, behavioral intention, and finally, actual IT use. Davis (1986) suggested that using an information system is directly determined by the behavioral intention to use it, which is in turn influenced by the users' attitudes toward using the system and the perceived usefulness of the system. Attitude and perceived usefulness are also affected by the

perceived ease of use. According to TAM, greater perceived usefulness and the perceived ease of use of an information system positively influence the attitude toward this system. The attitude, in turn leads to a greater intention to use the system, which positively affects one's actual use of the system. According to Davis (1986), even though external variables do not have a direct influence on attitudes and behavioral intention to use, TAM underlies the bridging role of beliefs and attitudes between external variables and behavioral intention.

Perceived Ease of Use refers to the level of degree where an individual believes that using a particular system would be free of physical and mental effort. It measures the prospective user's assessment of the mental efforts required of the use of the target applications (Davis, 1993). Opija (2008) claimed that innovations with perceived complexities of user interface and steep learning curve, which thought risky to adopt. Empirical findings confirm the positive relationships between attitude towards use and ease of use (Venkatesh & Davis, 2000) and show that PEOU is a proven key determinant of users' intention to accept IT (Venkatesh, 2000). Thus, ease of use is a powerful determinant of intention to accept innovation(s) (Hart O. et al, 2012).

Perceived Usefulness on the other hand is related to users' perception of the degree to which using a system will be beneficial (Alsabbagh & Molla, 2004). It provides diagnostic lenses into how actual use and intention to use or attitude towards using are influenced. The near-term results are synonymous with postulates of PU; and the long-term consequences refer to consequential results in one's career or social image, which reflects Rogers' (1995) important motivation for adoption of innovation. The attainment of perceived near-term usefulness paves way for long-term usefulness (Hart O. et al, 2012). It relates with the cost and time saving and it considered from the perspective of improving service delivery and creating more access to users. Decomposing PU as (Triandis, 1980) and (Chau, 1996) did explicitly provides more specific lenses into understanding user perception of Information Technology's usefulness.

The study is trying to adapt the technology acceptance model (TAM) and diffusion of innovation to measure effect of banking innovations on customer retention. The adaptation of the TAM model made by using factors which are *Perceived Ease of Use (PEoU)* and *Perceived Usefulness (PU)* to look at individual's technology acceptance and the addition of three factors from Diffusion of Innovation (DOI) Theory: *Relative advantage, Compatibility and Complexity/Perceived risk*.

In these study six dimensional models is applied by integrating TAM and DOI, which also considers the nature of the banking business, especially banking innovations in CBE. This study aims to find out the impact of each of the five dimensions on the sixth dimension (banking innovation), as well as knowing the nature of the correlation between them and aims to identify which one of the dimensions has more correlation and a positive relationship with banking innovation. The knowledge provided by this study, help in building a clear strategy to accept banking innovations, as well as laying the groundwork for the future studies of this important topic.

2.10 Empirical Review of the Study

Many researches study about different banking innovations separately like mobile banking, internet banking, ATM, online banking etc...

Sathye (1999), found that consumers were unaware about the possibilities, advantages/disadvantages involved with internet banking. Sathye (1999) on the adoption of Internet banking by Australian consumers also identified, the use of electronic banking services is fairly new experience to many people, low awareness of electronic banking is a major factor in causing people not to adopt internet banking and information about electronic banking is a important factor in adoption of electronic banking.

According to Pikkarainen et al. (2004) consumer acceptance of online banking study; Pikkarainen found strong relationship between perceived ease of use and electronic banking adoption in the study. Pikkarainen also show positive relationship between perceived ease of use and adoption of e-banking. Pikkarainen et al. (2004) also found security and privacy to have relatively weak relationship with adoption in Finland. Another United Kingdom study called consumer attitude and the usage and adoption of home-based banking by Howcroft (2002) identified concerns over risk and fears over the chance of errors as the most important discouraging factors for consumers' adoption of telephone and internet banking. Turkish researchers Polatoglu & Ekin (2001) conducted a research on an empirical investigation of Turkish consumer acceptance of internet banking and mention reliability as the prime factor in their finding for the adoption of new technological innovations, reliability consists of security and privacy in Internet Banking transactions.

Yohannes A (2010) in his study of key factors that determine adoption of internet banking in Ethiopia discovered that demographic factors including age, income, education level and occupation have a relationship with the adoption of internet banking. In the study 80% of the users were employed and concluded that occupation has an impact on the adoption of internet banking. 85% of the study sample agreed that internet banking enables them to manage their account better. 95% of users agree that internet banking allows them to conduct transactions at any time, from any location, with time savings being the end result. Thus internet banking eliminates time and place constraints. The results indicated that internet banking charges are a key factor in motivating the use of internet banking. In his study, the age group 30-39 accounts for 52% of internet banking users, which is relatively high proportion of younger users and based on his data, concluded that age has an impact on the use of internet banking in Ethiopia. In the study, 81% of internet banking users have a higher education level (diploma or degree), whereas only 34% of non-users have tertiary education level qualification and confirmed that education levels have an impact on the use of internet banking in this study. In his study findings education levels were regarded as an influential factor in consumers' use of internet banking services with high education levels being particularly significant.

An Ethiopian researcher Ayana (2012) explored in his study on "Adoption of Electronic banking system in Ethiopian Banking industry: Barriers and Drivers" that E-banking system, such as internet banking, mobile banking, ATM and others were not well adopted by Ethiopian banking industry. This is due to low level of ICT infrastructure and lack of legal frame work at NBE, which can initiate banking industry to implement the system. In addition to the above two basic factors affecting adoption of E banking in Ethiopia, result of the study also shows that lack of trust on the use of technological adoption and security risk are other major barriers for the system. The level of security risk associated with E-banking product or service, such as mobile banking, ATM, internet banking and others, pose different challenges to different banks. Improvements are required to ensure client confidence. Lack of competition among local and foreign banks is also another challenge for the adoption of E-banking in the country. Managerial and Technical skills available in Ethiopian banks for the adoption of E-banking are also limited.

Paul S (2013) in his study entitled ATM: The new horizon of e-banking on commercial banks customers in Odisha, Hyderabad, India out of the 300 sample, 61.33% were male and 38.66% were female and most of the respondents (30.66%) belong to 25-35 age groups. Regarding

education most of the customers were qualified that is 68.34 of them have degree and above. Out of total respondents 28% were students, 24.33% were self-employed, 8.33% were professionals where as 19.33% were belong to the house hold group. In the study he also found reasons why customers do not prefer ATM were lack of knowledge, lack of security and ATM Machine problem and reasons why people prefer ATM were time saving, faster transaction, easy to use, easy banking anytime/anywhere.

A research conducted here in Ethiopia by Arega Henok, 2015 although the penetration of mobile phones among the population continues to grow in significant numbers year on year mobile banking adoption is too low. This argument is evidenced by the fact that the use of mobile banking service is much lower than the initial anticipated and still underused, and the mobile banking service coverage in terms of financial coverage and number of users still remains very far behind as we compared to the entire banking transaction.

The same study on commercial bank customers in Addis Ababa which was studied by Mulualem Worku (2015) revealed that perceived risk has negative relationship with the adoption of mobile banking perceived, whereas usefulness and perceived ease of use have positive relationship with the adoption of mobile banking. As it was presented above we have got divergent research finding on some variables which required elucidating.

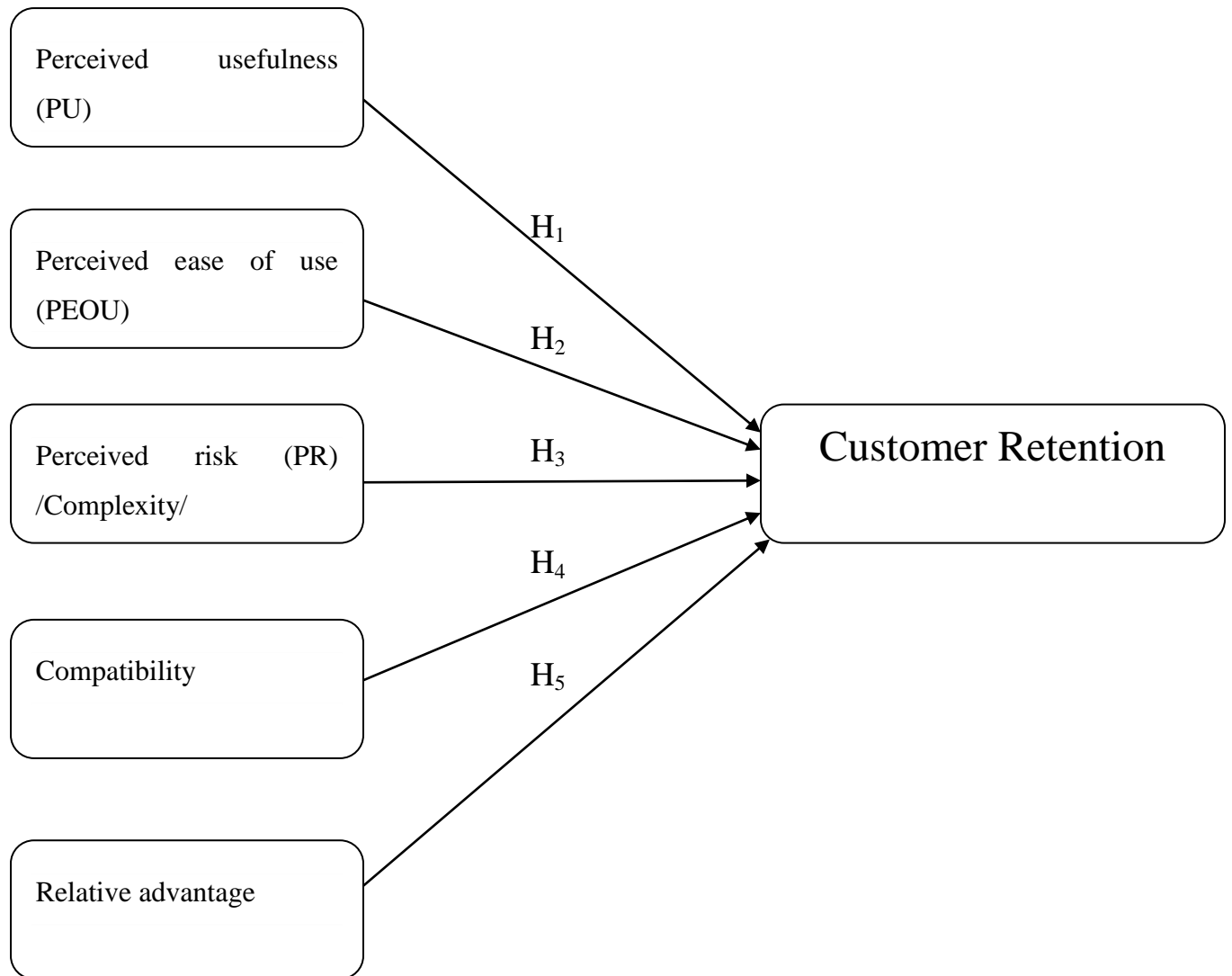
According to Gizachew Kalkidan (2016) discovered that Perceived ease of use has emerged in this study as having an insignificant negative influence on mobile banking usage. In addition the researcher concluded that Awareness was found to have an insignificant impact on mobile banking usage. The researcher concluded that having more or less awareness about mobile banking has no significant impact on usage of mobile banking adoption for customers in Addis Ababa, Ethiopia.

In fact there is a difference in socio –economic and cultural belief exist between study groups, different researchers found different and unrelated result on some determinant factors which has significant influence on customers' different banking innovation adoption. There was also divergent result observed in this specific target population. Thus, this research will propose the following research model for the study.

2.11 Conceptual Frame Work /Research Model/

The conceptual framework displayed below, is extracted from previously discussed known theories. It illustrates the causal effect of independent variables on dependent variable. It shows *perceived usefulness (PU)*, *perceived ease of use (PEOU)*, *perceived risk (PR)/Complexity*, *Compatibility* and *Relative advantage* variables have an effect on customer retention.

Figure 2.1 Conceptual Framework



Source: Modified from Technology Acceptance Model, developed by Davis (1986) and Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Designing appropriate research methodology is a prerequisite in order to conduct a good research work. Accordingly, this chapter discusses about the methodology by which the researcher used to conduct the study. Thus, study area, research approach, research design, population and sampling, data source and type, data collection method, data collection instrument, data analysis methods.

3.2 Study Area

This section describes the banking innovation in CBE with respect to customer retention. CBE is selected for this study and the study focuses on Addis Ababa city. CBE is selected for this study because CBE is pioneer to introduce modern banking to the country. It is the leading African bank with assets of 711.96 billion Birr as on June 30, 2019 also relatively CBE work on different banking innovations aggressively.

3.3 Research Approach

Scientific studies can be conducted as either quantitative or qualitative studies. Many researchers are concerned with the choice between a quantitative and a qualitative methodology (Sobh & Perry 2006). Most people consider the difference between qualitative and quantitative approach is that quantitative researchers focusing on numbers and qualitative researchers on words. This distinction is not accurate, as many qualitative researchers use numbers in their analyses. Rather, the distinction should be made according to when the information is quantified (Mooi and Sarstedt 2011).

Since the aim of the study is to examine the effect of banking innovation on customer satisfaction, the study is explanatory and quantitative in nature which involves the use of primary data in order to answer the research questions; and test previous hypotheses by

measuring relationships between dependent and independent variables, expecting to develop a better understanding point of view.

3.4 Research Methods

The student researcher used Quantitative research in this study. Some forms of quantitative data are obviously based on numbers but there are, however, other types of data that initially seem remote from quantitative measures but that can be converted to numbers, for example, people's opinions. Survey and experimental design can be used in quantitative approach. According to (Sobh & Perry 2006) Quantitative research is used for answering relationships among measured variables with the purpose of explaining, predicting and controlling a phenomenon.

3.5 Research Design

This study has descriptive and explanatory designs. According to Saunders Mark, Lewis Philip and Thornhill Adrian (2009), explanatory research seeks to establish relationship that exists between variables, that is, to identify how one variable affects the other; it also seeks to provide an explanation to the causes and/or effects of one or more variables. The descriptive is used to describe effect of banking innovation on customer retention in CBE. The explanatory design used to explain the relationship among the variables of the study. The desire to know "why," to explain, is the purpose of explanatory research. The study explains the relationship between independent and dependent factors by using multiple regression analysis. It is a continuation of descriptive research and builds on exploratory and descriptive research and goes on to identify the reasons for something that occurs.

3.6 Sampling Design

3.6.1 Target Population

In research methods, population is the entire aggregation of items from which samples can be drawn. For the purposes of this study, the population was Commercial Bank of Ethiopia's customers and staffs in Addis Ababa. The total number of CBE A.A city branches which opened

in 2018/19 in all four districts is 39 with a total of 61,952 customer bases and for this study Gelan Condominium Br, Bulbula Condominium Br, Nifasilk Br, Akaki Kela Br, Kolfe Dildiy Br, Amist Kilo Br, Jan Meda Br, Bole Cargo Br, Kotebe Welgemo Br and Wossen Akababi Br are selected. The populations for this study are also Individual customers selected from the above CBE branches. According to Zikmund (2003) a population is any complete group of people, companies, hospitals, stores, college students or the like that share some set of characteristics. Major relevant characteristics of the target population also age, education qualification and beneficiary of banking innovations in CBE. The units of analysis for the study is individual customers which use one of banking innovations in CBE and also branch managers and staffs of Strategy and Innovation Department in CBE because the study entirely focuses to know effect of banking innovation on customer retention.

3.6.2 Sampling Techniques

Malhotra (2007) claimed that, theoretically, the sampling procedures conducted were mainly based on probability standards (random or probability samples) and non-probability standards (no probability samples).

Sampling is the process of choosing, from a much large population, a group about which wish to make generalized statements so that the selected part represent the total group (Leedy, 1989). Commercial Bank of Ethiopia Addis Ababa city area customers are take as population, and purposely draw a sample from the total to get rich evidence. These categories are chosen because members of each category significantly contribute to the use and provision of banking innovation services. Those CBE branches further classified to four districts called East District, West District, North District and South District. In addition A.A branches are purposely selected for the reason that the researcher has got willing and cooperative individuals who can assist in providing the relevant information on banking innovations. Moreover, the researcher selected commercial bank of Ethiopia for the reason that CBE is pioneer bank to introduce most of banking innovations in Ethiopia. Individual customers are selected using convenient sampling techniques.

3.6.3 Sampling Procedure and Sample Size

Yamane (1967) suggested simplified formula for calculation of sample size from a population which is an alternative to Cochran's formula. According to him, for a 95% confidence level and $p = 0.5$, size of the sample should be

$$n = \frac{N}{1 + N(e^2)}$$

Where, N is the population size is sample size and e is the level of precision. Let this formula be used for our population, in which $N = 61,952$ with $\pm 5\%$ precision. Assuming 95% confidence level and $p = 0.5$, we get the sample size

$$n = \frac{61,952}{1 + 61,952(.05^2)} = 397$$

Based on the above formula, 397 individual customers are included in the sample as respondents for the questionnaire. The proportional allocation method was originally proposed by Bowley (1926). In this method, the sampling fraction $\frac{n}{N}$ is same in all strata. This allocation was used to obtain a sample that can estimate size of the sample with greater speed and a higher degree of precision. The allocation of a given sample of size n to different stratum was done in proportion to their sizes. I.e. in the

i^{th} stratum, $i=1, 2, 3, \dots$

$$N_i = n \frac{N_i}{N}$$

Where n represents sample size, N_i represents population size of the i^{th} strata and N represents the population size. In our study, $N = 61,952$; $n = 397$. Based on the above assumption the sample from each bank should be;

Table 3.1 Population Size

CBE Districts	Population Size
Northern District	166
West District	40
East District	102
South District	89
Total	397

Own Survey Finding (2020)

3.7 Data Sources and Types

There are two types of data which is usually used in researches, primary and secondary data. Primary data does not actually exist until and unless it is generated through the research process as part of the consultancy or dissertation or project. It is often collected through techniques such as experimentation, interviewing, observation and surveys.

On the other hand Secondary data is information which already exists in some form or other but which was not primarily collected, at least initially, for the purpose of the consultancy exercise at hand. In fact, secondary data is often the start point for data collection in as much as it is the first type of data to be collected (Creswell, 2009).

For the realization of the research objectives, the researcher is gathered quantitative data through the enquiry of both primary and secondary sources. The primary data was collected using self administered questionnaire due to the merits of low cost and respondents have adequate time to give well thought out answers. Whereas; secondary data was organized from magazines, websites, different articles, academic journals, bank reports, different books, brochures and policies.

3.8 Data Collection Methods

Questionnaire is used for data collection. This research paper is intended to examine the effect of banking innovations on customer retention in CBE. To start this research, the specific methods of

data collection are survey and document sources. Survey for the quantitative strategy is through distributing self-administered questionnaires to 397 sampled customers of CBE.

3.8.1 Data Collection Instrument

The data collection instrument for the study is questionnaires. Questionnaires were distributed to 397 customers on purposely sampled districts of CBE. Questions were presented in the form of affirmative statements, relating to different banking innovations used by CBE and to identify customers' intention on innovations to retain with the bank, in such a way to enable measurement of the respondent's opinions. The respondents are asked to indicate their level of agreement on a five point linker scale with the following ratings. Strongly agree (SA; or 5), agree (A; or 4), neutral (N; or 3), disagree (DA; or 2), and strongly disagree (SD; or 1). The numbers are indicated in the questionnaires to provide a feel of ordinal scale measurement and to generate data suitable for quantitative analysis. The questionnaire is a close ended questionnaire to elicit guided responses and for easy analysis.

Secondary data Sources:

The data was obtained mainly from records and reports of the CBE, reports of the NBE, from the website, books, articles and journal.

Data Analysis Software used

In this study, the research use software called Statistical Package for Social Science (SPSS) coding software to find the results for this research study, and this SPSS helped me to find the effect of the all variables on the customer retention, and understand the influence and relationship between the independent variables on the customer retention in CBE.

3.9 Data Analysis Methods

This chapter deals with the data returned from Customers of the selected CBE Addis Ababa branches. The data analysis includes editing of raw data, classification, coding of responses according to class intervals and tabulation. Based on the research questions, descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistic were employed.

Summarized data were presented in the form of frequency tables, cumulative tables, percentage and bar chart. The quantitative data were analyzed using SPSS software package. Multiple regression analysis was applied to identify the relationship between the dependent and independent variables and to test the research hypothesis.

The descriptive statistics result obtained through SPSS software is presented by tables, frequency distributions, percentages and charts to analyze answers of the respondents. SPSS imply to conduct the analysis: Pearson's Correlation Analysis and Multiple Regression. Inferential statistics is conclusion through analyses and observation on a sample that draw from a population. In this study Pearson's correlation coefficient used to determine the relationships between explanatory variables (perceived usefulness (PU), perceived ease of use (PEOU), perceived risk (PR)/Complexity, Compatibility, Relative advantage) and explained variable (Customer Retention). In addition Multiple regression analysis used examine the effect perceived usefulness (PU), perceived ease of use (PEOU), perceived risk (PR)/Complexity, Compatibility and Relative advantage on customer retention. In addition to this regression analysis were used to test the research hypothesis.

The equation of multiple regressions are build around the two sets of variables, namely dependent variables (Customer retention) and independent variables (perceived usefulness (PU), perceived ease of use (PEOU), perceived risk (PR)/Complexity, Compatibility, Relative advantage).

3.10 Validity and Reliability

3.10.1 Validity

Validity refers to a situation when evidence proves that the findings are reasonable (McMillan, 2012). It also determines whether the measuring instrument actually measures what it was planned to measure or accuracy of the research. To assure validity, questionnaires on this study is designed simple and avoid open questions so that the respondents would easily understand the questions.

3.10.2 Reliability

The reliability indicates the quality of the measuring instrument of the research. Hence, the research is aiming at creating surveys, which could be answered in the same way by the respondents if they would answer the survey a second time. Therefore, to maintain reliability, the questions are formulated with the help of predetermined answer alternatives so that they could be simply understood and tried to decrease the risk of the answers varying if the study was performed a second time.

Although the risk of a questionnaires being misunderstood can happen so the student researcher is made a valid test to check out the extent to which the variables are consistent with what it is intended to measure.

The study uses cronbach's alpha test to test the reliability of the instrument used for the study. As per Hair et al. (2006), Cronbach's Alpha Reliability allows researchers to get a reliable result by testing on the reliability of the research. The test is unreliable when the reliability coefficient is zero while the higher reliability coefficient of a test result is reliable. According to George and Mallery (2003) rules, <0.5-Unacceptable, >0.5-Poor, >0.6-Questionable, >0.7-Acceptable, >0.8-Good and >0.9-Excellent (By Gleam and Rosemary, 2003).

Table 3.2 Reliability Statistics

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Perceived Usefulness	.974	.974	5
Perceived Ease of Use	.976	.977	5
Perceived Risk	.921	.922	5
Compatibility	.981	.982	5
Relative Advantage	.963	.964	5
Customer Retention	.734	.734	3
All Variables	.846	.791	28

Source: Own Survey Finding (2020)

As shown in Table 4.1 Reliability Statistics, the Cronbach's alpha computed results .846 which is an acceptable range. Also, Internal Reliability Statistics, the Cronbach's alpha computed on the above six variables indicate that the items had reasonable internal consistency reliability which range from 0.734 up to .981

Based on the results above, all variable values are more than 0.7 alphas which are more than acceptable level. The dependent variable, Customer Retention has the lowest alpha value of 0.734 to 3 items and the dependent variable, Perceived Risk followed by an alpha value of .921 with each 5 items. Relative Advantage has the third alpha value of .963 to 5 items followed by Perceived Usefulness having the alpha value of .974 with a total of 5 items for each. Perceived Ease of Use with 5 items and alpha value of .976 and Compatibility with 5 items and alpha value of .981 takes a fifth and sixth level respectively. Finally, based on the above six variables, all scores above acceptable results concluding the test are reliable with both dependent and independent variables fulfilled the level of reliability.

3.11 Ethical Consideration

Ethics is the code of moral principles and values that governs the behavior of an individual or group with respect to what is right or wrong (Bartton and Gold, 2000). Considering ethical issues the study ensures that participating respondents' information is obtained strictly confidential.

As the study have special consideration on ethical issues, the purpose of the research clearly inform to the participants during data gathering stage of the research. To assure confidentiality, the participants also not required to write their names. Moreover, the participants were assured that their responses for the questionnaire used for only the intended purpose.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The study was totally focused on examining the effect of Perceived Usefulness, Perceived ease of Use, Perceived Risk, Compatibility and Relative Advantage of banking innovation on customer retention.

The chapter mainly focuses on the presentation and analysis of the data collected and interpretation of the results based on the above variables. It consists of three main parts which are reliability test, descriptive analysis and inferential test. Which starts with testing reliability, presenting the geographical background of respondents, Pearson correlation, multiple regression and finally test the hypothesis. The student researcher uses Statistical package for the Social Sciences (SPSS) software to analyze the findings.

4.2. Response Rate of Respondents

397 questionnaires were distributed in different CBE branches in Addis Ababa, which exist in four different districts; North=166, West=40, East=102 and South=89 respectively. Out of 397 questionnaires, only 84.6 % were returned, which is 336 due to different reasons, including the state of emergency regulations on pandemic Covid 19. Although all these 336 were not used to the analysis because of 9 (Nine) questionnaires were discarded for not completed properly. These make the total numbers of questionnaires for analysis 327 which is 82% of the total questioner. According to (M. G. Saldivar, 2012) basic response rate calculation; dividing the number of people who submitted a completed survey by the number of people the researcher attempted to contact and results 80%-85% takes as good which makes the result 82% valid.

4.3 Demographic Characteristics/Profile of Respondents

Table 4.1 General Characteristics of Respondents

		Frequency	Valid Percent
CBE Staff or Not	Yes	46	14.1
	No	281	85.9
	Total	327	100.0
Gender of the respondent	Male	46	14.1
	Female	281	85.9
	Total	327	100.0
Age of the respondent	20-30	98	30.0
	31 – 40	108	33.0
	41-50	56	17.1
	51-60	39	11.9
	above 60	26	8.0
	Total	327	100.0
Educational background	primary School	8	2.4
	Secondary School	22	6.7
	Diploma	54	16.5
	Bachelor Degree	164	50.2
	Master's Degree	62	19.0
	Above Masters	17	5.2
	Total	327	100.0
Type of employment	Government Employee	164	50.2
	Private Employee	97	29.7
	Private Business	26	8.0
	Student	40	12.2
	Total	327	100.0
CBE branch	Branches in north district	123	37.6
	Branches in south district	78	23.9
	Branches in east district	86	26.3
	Branches in west district	40	12.2
	Total	327	100.0

Own Survey Finding (2020)

The demographic profile of the respondents is shown in the above Table 4.1. Demographic factors like gender, age, educational background, educational states and the district respondents use questions also help to make some general observations about the data collected in this

research. The results are described in the form of table to enhance the understanding of the samples.

Frequencies were used to determine how often respondents made a certain response in answering the respective questions and these gave background information about the sample respondents general characteristics.

Based on the above table, 46 respondents were staffs of CBE which represents 14.1% of the total respondents, while the 281 were customer of CBE which are 85.9% of the total respondents.

Out of the total 327 respondents, male respondents are 194 which are 59.3% and female respondents are 133 with a percent of 40.7 of the total population. It indicates numbers of male banking innovation users are a slight higher than female mobile banking users. This indicated the existence of significant gender gap in access to banking innovation services provided by CBE. This gap needs a great effort by the Bank to attract and retain female customer by providing various value adding products and services tailored with compelling value propositions.

Considering the age groups of the respondents, the higher number of respondents was in the range of 31-40 years, which represent 33%, followed by age groups 20-30 years which represent 30% and 41-50 which represent 17.1%. The respondents which are in the age of 51-60 and above 60 also represent 11.9% and 8% respectively. This implies that innovation acceptance is influenced by age and young people are more attracted by innovations. Evidence shows from the total population more than half of the Ethiopian population (53%) is young which an ideal potential segment with emerging opportunity for future business development in general and banking business in particular so more effort is needed to broaden customer base focusing on young population. Given the majority of the customers that patronize banks were youth age groups, this is a big opportunity to the Bank to retaining existing customer segments as well as attracting new customers through providing competitive services.

In educational background the higher score is recorded in bachelor degree with a total respondents of 164 which are 50.2% of the total population, followed by a masters degree with 62 respondents which are 19%, diploma with 54 respondents which are 16.5%, secondary school with 22 respondents which are 6.7%, above masters with 17 respondents which are 5.2% and the lowest respondents are primary school with 8 respondents which are 2.4% of the total

population. Implying majority of banking innovation users are educated ones. Therefore CBE should develop innovations which are suitable for uneducated peoples. Peoples above masters also the lowest users of innovation again the bank should upgrade the innovations to the level of this kind of customers.

Considering the employment status of the respondents, the higher numbers of respondents are government employees, with frequency 164 which represents 50.2% of the total population, followed by Private Employee with frequency 97 which represents 29.7% of the total population, student with frequency 40 which represents 12.2% of the total population and finally private business with frequency 26 which represents 8% of the total population. Implying that CBE should develop adjusted innovations in order to address the demand of all this segments.

Considering the district of the respondents, the higher numbers of respondents are found in the north district, with frequency 123 which represents 37.6% of the total population, followed by east district with frequency 86 which represents 26.3% of the total population, south district with frequency 78 which represents 23.9% of the total population and finally the west district with frequency 40 which represents 12.2% of the total population. As the result implies there is little gap among the number of innovation users of four districts and this is due to the sample size taken. This gap can be improve if western and south district improves there customer base.

4.4 Descriptive Statistics

Descriptive analysis was used to present the data collected in relation to the demographic factors for more clarification. The detailed information on the main characteristics of the sample used in the study is gained from descriptive analysis.

The descriptive analysis, interpretation of the study was made according to (Poonlar Btawee: 1987) mentioned by Hailu Demissie-2013 measurement scale intervals which is, Mean scores 4.51-5.00 excellent or very good, 3.51-4.50 good, 2.51-3.50 average or moderate, 1.51-2.50 fair and 1.00-1.50 is poor. The descriptive statistics of the mean scores and standard deviation of 28 attributes discussed in the subsequent 6 tables in each category.

Table 4.2 Descriptive Statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
Perceived Usefulness	327	4.29	1.073
Perceived Ease of Use	327	3.82	1.288
Perceived Risk	327	4.55	.629
Compatibility	327	3.76	1.365
Relative Advantage	327	4.31	1.020
Customer Retention	327	4.60	.488
Valid N (listwise)	327		

Source: Own Survey Finding (2020)

Based on table 4.2 above, Perceived Usefulness scores mean rating 4.29 and the standard deviation 1.073 of respondents' evaluation. It indicates that Perceived Usefulness is in good range. According to (Poonlar Btawee: 1987), the mean score 3.51-4.50 is good. Therefore, it indicates that perceived usefulness has high positive intention to customer retention.

Perceived Ease of Use also has the same result with Perceived Usefulness by rating 3.82 and the standard deviation 1.288 of respondents' evaluation. This implies that the effect of perceived ease of use towards customer retention was good. The customer's response showed that different banking innovations offered by CBE were easy to learn and use and less effort need to perform transactions.

Perceived Risk has scored mean rating 4.55 and the standard deviation .629 of respondents' evaluation, which implies the result is excellent or very good. Based on the result scored customers of CBE believe that banking innovations offered by CBE has lower risk and they are in agreement with the products.

The variable Compatibility has scored mean rating 3.76 and the standard deviation 1.365 of respondents' evaluation, which implies the result is good. It indicates that Compatibility scores excellent or very good based on (Poonlar Btawee: 1987) rule, the mean score 3.51-4.50 is good. The result revealed that customers were in agreement with the compatibility of banking innovation because of the system meet their need of banking business technology access compliant and social value.

Another variable Relative Advantage also scored mean rating 4.60 and the standard deviation .488 of respondents' evaluation, which implies the result is excellent or very good. The result discovered that customers were strongly in agreement regarding the Relative Advantage of the system because of the new banking innovation helped customers to get better banking service than the traditional one.

As a final point, Customer retention's scored mean rating 4.60 and the standard deviation.488 of respondents' evaluation, which implies the result is excellent or very good. From this it can be suggested that banking innovation is a reason for customers to decide to keep working with CBE because as per the data collected customers believe that CBE deserves the respondent's loyalty and their loyalty grows stronger through time.

4.4.1 Respondents perception level of Perceived Usefulness

Table 4.3 Respondents perception on Perceived Usefulness

Perceived Usefulness	N	Mean	Std. Deviation
Bakinginnng Innovations will enabe me to accomplish my banking task more quickly.	327	4.31	1.124
Banking Innovations will make it easier for me to do my banking.	327	4.28	1.150
Using Banking innovations will decrease my cost of banking.	327	4.23	1.132
Banking Innovations saves time compared to tradtional banking.	327	4.30	1.147
I think Banking innovations enables one to complete banking activities more conveniently.	327	4.33	1.085
Overall Score	327	4.29	1.128

Own Survey Finding (2020)

As indicated in the above table 4.3, the overall mean value of the access dimension was computed from the composite mean of the five items. The first higher mean is scored by the fifth item; second highest mean is scored by first item followed by the fourth, second and the third item respectively. Accordingly, the mean value for the first item is 4.31 (standard deviation=1.12) which is above the average, for the second item the mean value is 4.28 (standard deviation=1.15) which is above the average. Also the mean value for the third item is 4.23(standard deviation=1.13) which is above the average value. The fourth and fifth items are

also 4.30(standard deviation=1.14) and 4.33(standard deviation=1.08) respectively which are above average. The evaluation of perceived usefulness dimension based on the average respondents rating shows the mean value for all five items is above average. This shows that the respondents have good perception on the perceived usefulness of innovations. Based on the descriptive statistics points the overall mean of the dimension was computed to be 4.29 with a standard deviation of 1.128. The results indicate that the majority of the respondents have a close positive opinion towards the perceived usefulness dimension of the banking innovation with small diverse opinions. Thus, it can be concluded the respondents agree with the usefulness of banking innovations offered by Commercial Bank of Ethiopia.

4.4.2 Respondents perception level of Perceived Ease of Use

Table 4.4 Respondents perception on Perceived Ease of Use

Perceived Ease of Use	N	Mean	Std. Deviation
I think it is easy to become skilful at using Banking Innovations.	327	3.86	1.299
I can use Banking Innovations without anyone helping me.	327	3.79	1.243
It is easy to use Banking Innovations to accomplish banking tasks.	327	3.82	1.496
Using Banking Innovations is easy to do banking activities from anywhere.	327	3.81	1.384
Using Banking Innovations is easy to make various payments.	327	3.83	1.304
Overall Score	327	3.82	1.345

Own Survey Finding (2020)

As indicated in the above table 4.4, the overall mean value of the access dimension was computed from the composite mean of the five items. The first higher mean is scored by the first item, second highest mean is scored by fifth item followed by the third, fourth and the second item respectively. Accordingly, the mean value for the first item is 3.86 (standard deviation=1.29) which is above the average, for the second item the mean value is 3.79 (standard deviation=1.24) which is above the average. Also the mean value for the third item is 3.82(standard deviation=1.49) which is above the average value. The fourth and fifth items are also 3.81(standard deviation=1.38) and 3.83(standard deviation=1.30) respectively which are

above average. The evaluation of perceived ease of use dimension based on the average respondents rating shows the mean value for all five items is above average. This shows that the respondents have good perception on the perceived ease of use of innovations. Based on the descriptive statistics points the overall mean of the dimension was computed to be 3.82 with a standard deviation of 1.345. The results indicate that the majority of the respondents have a close positive opinion towards the perceived ease of use dimension of the banking innovation with small diverse opinions. Thus, it can be concluded the respondents agree with the banking innovations offered by Commercial Bank of Ethiopia are easy to use.

4.4.3 Respondents perception level of Perceived Risk

Table 4.5 Respondents perception on Perceived Risk

Perceived Risk	N	Mean	Std. Deviation
Banking Innovations principles and procedures are difficult to understand.	327	1.50	.669
Using Banking Innovations may expose me to fraud or monetary lose.	327	1.49	.669
I am not confident with the security aspects of banking innovations.	327	1.49	.802
Banking Innovations is not as secure as conventional banking (going directly to the branch)	327	1.39	.795
I think that privacy is not guaranteed when using Banking Innovations.	327	1.39	.660
Overall Score	327	1.45	0.719

Own Survey Finding (2020)

As indicated in the above table 4.5, the overall mean value of the access dimension was computed from the composite mean of the five items. Accordingly, the mean value for the first item is 1.50 (standard deviation=.669) which is below the average, for the second item the mean value is 1.49 (standard deviation=.669) which is below the average. Also the mean value for the third item is 1.49(standard deviation=.802) which is below the average value. The fourth and fifth items are also 1.39(standard deviation=.795) and 1.39(standard deviation=.660) respectively which are below average. The evaluation of perceived risk dimension based on the average respondents rating shows the mean value for all five items is below average. This shows that since perceived risk has negative relation with the banking innovations, the respondents have

good perception on the perceived risk of innovations. Based on the descriptive statistics points the overall mean of the dimension was computed to be 1.45 with a standard deviation of 0.719. The results indicate that the majority of the respondents believe the risk related to innovations doesn't force them to not to use banking innovations.

4.4.4 Respondents perception level of Compatibility

Table 4.6 Respondents perception on Compatibility

Compatibility	N	Mean	Std. Deviation
Banking Innovations are compatible with customers.	327	3.77	1.295
Banking Innovations service is technology access compliant.	327	3.63	1.451
Banking Innovations is compatible with my social values.	327	3.72	1.475
Banking Innovations is in line with status of customers in banking business.	327	3.90	1.370
Banking Innovations responds to my banking needs.	327	3.77	1.482
Overall Score	327	3.75	1.414

Own Survey Finding (2020)

As indicated in the above table 4.6, the overall mean value of the access dimension was computed from the composite mean of the five items. Accordingly, the mean value for the first item is 3.77 (standard deviation=1.29) which is above the average, for the second item the mean value is 3.63 (standard deviation=1.45) which is above the average. Also the mean value for the third item is 3.72(standard deviation=1.47) which is above the average value. The fourth and fifth items are also 3.90(standard deviation=1.37) and 3.77(standard deviation=1.48) respectively which are above average. The evaluation of compatibility dimension based on the average respondents rating shows the mean value for all five items is above average. This shows that the respondents have good perception on the compatibility of innovations. Based on the descriptive statistics points the overall mean of the dimension was computed to be 3.75 with a standard deviation of 1.414. The results indicate that the majority of the respondents have a close positive opinion towards the compatibility dimension of the banking innovation with small diverse opinions. Thus, it can be concluded the respondents agree with the banking innovations offered by Commercial Bank of Ethiopia are compatible with the respondents.

4.4.5 Respondents perception level of Relative Advantage

Table 4.7 Respondents perception on Relative Advantage

Relative Advantage	N	Mean	Std. Deviation
Banking Innovations are advantageous to both customers and bank.	327	4.26	1.057
Banking Innovations transaction fee is inexpensive	327	4.26	1.057
It doesn't take much time to learn about the use of Banking Innovations.	327	4.25	1.172
Using Banking Innovation service is faster to get banking service quickly than visiting a bank.	327	4.38	1.043
In general, Banking Innovations are better than the conventional ones.	327	4.41	1.128
Overall Score	327	4.31	1.091

Own Survey Finding (2020)

As indicated in the above table 4.7, the overall mean value of the access dimension was computed from the composite mean of the five items. Accordingly, the mean value for the first item is 4.26 (standard deviation=1.05) which is above the average, for the second item the mean value is 4.26 (standard deviation=1.05) which is above the average. Also the mean value for the third item is 4.25(standard deviation=1.17) which is above the average value. The fourth and fifth items are also 4.38(standard deviation=1.04) and 4.41(standard deviation=1.13) respectively which are above average. The evaluation of relative advantage dimension based on the average respondents rating shows the mean value for all five items is above average. This shows that the respondents have good perception on the relative advantage of innovations. Based on the descriptive statistics points the overall mean of the dimension was computed to be 4.31 with a standard deviation of 1.091. The results indicate that the majority of the respondents have a close positive opinion towards the relative advantage dimension of the banking innovation with small diverse opinions. Thus, it can be concluded the respondents agree with the relative advantage of banking innovations offered by Commercial Bank of Ethiopia.

4.4.6 Respondents perception level of Customer Retention

Table 4.8 Respondents perception on Customer Retention

Customer Retention	N	Mean	Std. Deviation
I believe CBE deserves my loyalty.	327	4.70	.556
Over the past years, my loyalty to CBE has grown stronger.	327	4.61	.581
CBE values people and relationships ahead of short term goals.	327	4.51	.669
Overall Score	327	4.60	0.602

Own Survey Finding (2020)

As it is shown in the above Table 4.8, in this section of the questionnaire the mean result indicates employee's perception on loyalty, attachment with CBE and relationship with CBE are above average mean value Accordingly, the mean value for the first item is 4.70 (standard deviation=.556) which is above the average, for the second item the mean value is 4.61 (standard deviation=.581) which is above the average. Also the mean value for the third item is 4.51 (standard deviation=.669) which is above the average value. The evaluation of customer retention dimension based on the average respondents rating shows the mean value for all three items is above average. This shows that the respondents have good perception on their relation with CBE. Based on the descriptive statistics points the overall mean of the dimension was computed to be 4.60 with a standard deviation of 0.602. The results indicate that the majority of the respondents have a close positive opinion towards being a customer of CBE. Thus, it can be concluded the respondents agree with their CBE deserves their loyalty and long time relation with it.

4.5 The Relationship between Banking Innovation and Customer Retention

Correlation measures how two variables strongly relate to each other. Correlation matrix is used to check the pattern of relationship in Pearson Correlation Coefficient. The most widely used methods of measuring the degree of relationship between two variables are simple correlation or Karl Pearson's coefficient. The calculated value of the correlation coefficient ranges from -1 to 1, where -1 indicates a perfect negative relation the relationship is perfectly linear and 1 indicates a perfect positive relationship. A correlation coefficient of 0 indicates that there is no correlation (Mooi & Sarstedt, 2011). This is to ensure all variables in this study have determined strength of the linear relationship. Preliminary analysis was conducted before multiple regression analysis to ensure the regression model does not consist of any serious violation.

Below are the rules of thumb of correlation coefficient, assume correlation coefficient is statistically significant:

Table 4.9 Rules of thumb about Correlation Coefficient size

Strength of association	Coefficient range
Very Strong	0.91 to 1.00 / -1.00 to -0.91
High	0.71 to 0.90 / -0.90 to -0.71
Moderate	0.41 to 0.70 / -0.70 to -0.41
Small but define relationship	0.21 to 0.40 / -0.40 to -0.21
Slight, almost negligible	0.01 to 0.20 / -0.20 to -0.01

Source: Hair et al (2006).

The following correlation analysis was done using SPSS based on the questionnaire which collected from customers and staffs of CBE which use different banking innovations.

Correlations

Table 4.10 Correlation between Banking Innovations and Customer Retention

		PU	PEOU	PR	C	RA	CR
Perceived Usefulness	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	327					
Perceived Ease of Use	Pearson Correlation	.381**	1				
	Sig. (2-tailed)	.000					
	N	327	327				
Perceived Risk	Pearson Correlation	-.342**	-.266**	1			
	Sig. (2-tailed)	.000	.000				
	N	327	327	327			
Compatibility	Pearson Correlation	.149**	.154**	-.271**	1		
	Sig. (2-tailed)	.007	.005	.000			
	N	327	327	327	327		
Relative Advantage	Pearson Correlation	.057	.134*	-.458**	.084	1	
	Sig. (2-tailed)	.301	.015	.000	.130		
	N	327	327	327	327	327	
Customer Retention	Pearson Correlation	.418**	.284**	-.868**	.260**	.452**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	327	327	327	327	327	327
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).							

Source: Own Survey Finding (2020)

According to the above table, correlation matrix represents that all five independent variables are significantly connected at the 0.01 level and 0.05 level to the dependent variable within the range of .260** to -.868** which have a different level of relationship, from High up to Very Strong relationship level.

4.5.1 Correlation between Perceived Usefulness and Customer Retention

A Pearson correlation test was conducted for the independent variable Perceived Usefulness and the dependent variable Customer Retention and scores a correlation of .418^{**}. Based on rules of thumb correlation coefficient this implies their relation is significant with the value of 0.000 and moderate relationships.

4.5.2 Correlation between Perceived Ease of Use and Customer Retention

A Pearson correlation test was conducted for the independent variable Perceived Ease of Use and the dependent variable customer retention. The test results with a significant value of 0.000 lower than 0.05 and scores a correlation of .284^{**}. According to the rules of thumb of correlation coefficient this implies, the two variables have positive relation and the result is small but define relationship.

4.5.3 Correlation between Perceived Risk and Customer Retention

The Pearson correlation test was also conducted for the independent variable Perceived risk and the dependent variable customer retention. The test results with a significant value of 0.000 lower than 0.05 and scores a correlation of $-.868^{**}$. According to the rules of thumb of correlation coefficient this implies, the two variables have negative relation and highly significant correlation.

4.5.4 Correlation between Compatibility and Customer Retention

A Pearson correlation test was conducted for the independent variable Compatibility and the dependent variable customer retention. The test results with a significant value of 0.000 lower than 0.05 and scores a correlation of .260^{**}. According to the rules of thumb of correlation coefficient this implies, the two variables have positive relation and the result is small but define relationship.

4.5.5 Correlation between Relative Advantage and Customer Retention

A Pearson correlation test was conducted for the independent variable Relative Advantage and the dependent variable customer retention. The test results with a significant value of 0.000 lower than 0.05 and scores a correlation of .452^{**}. According to the rules of thumb of correlation coefficient this implies, the two variables have positive relation and moderately significant correlation.

4.6 Multicollinearity Testing

To check the Multicollinearity among the independent variables the researcher uses Variance Inflation factor (VIF). The VIF is just the reciprocal value of the tolerance. A tolerance of below 0.10 indicates that (multi) collinearity is a problem and the Multicollinearity exists if VIF is greater than 10. (Mooi and Sarstedt, 2011).The other author (Garson G.David, 2012) says Variance inflation factor used in tolerance as VIF is simply the reciprocal of Tolerance. As a rule of thumb, if $VIF > 4$ and $Tolerance < 0.2$ then multicollinearity is a problem.

Based on the table below 4.7, the result shows the Variance Inflation Factor (VIF) values ranges between 1.091 to 1.541 and a tolerance values ranges between .649 to .916. Therefore, according to (Garson G.David, 2012) case the factors are highly correlated which indicates that Multicollinearity problem is not exist and all independent variables are uncorrelated each other. Also the variables can be used in the regression analysis.

Table 4.11 Collinearity Statistics

Model	CollinearityStatistics	
	Tolerance	VIF
PerceivedUsefulness	.779	1.285
PerceivedEaseofUse	.827	1.210
PerceivedRisk	.649	1.541
Compatibility	.916	1.091
RelativeAdvantage	.776	1.289

Source: Own Survey Finding (2020)

4.7 Normality Test

The presence of outliers in a distribution or distributions propensity for producing outliers is measured by Kurtosis (Wetfall). Skewness measures the degree and direction of asymmetry. When the mean is less than a median, has a negative Skewness. A normal distribution has a Skweness of 0 and a distribution skewed to the left.

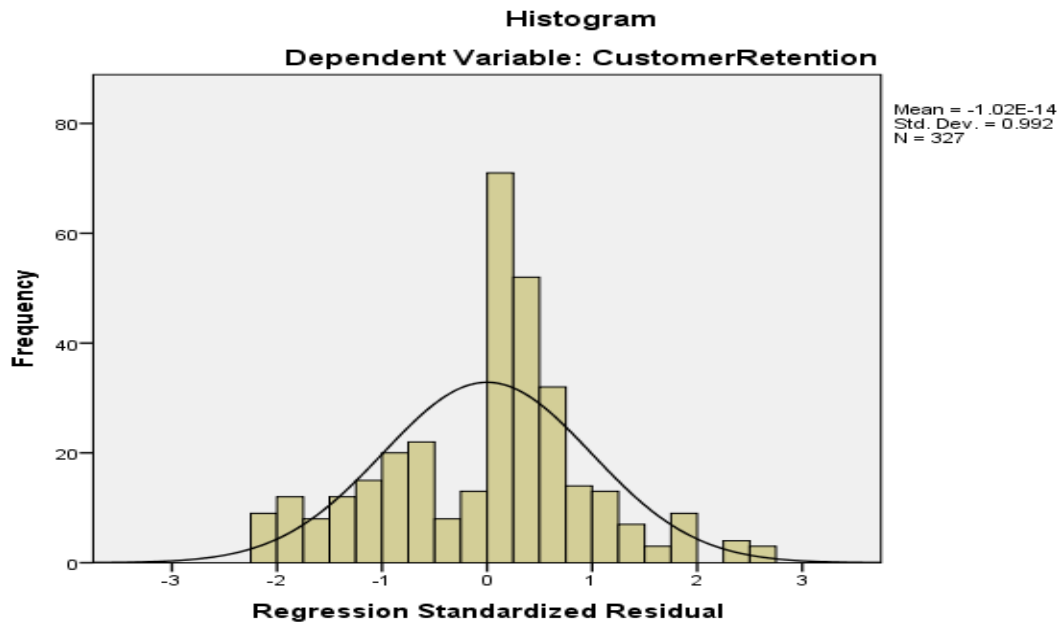
Table 4.12Normality Test

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Perceived Usefulness	-1.621	.135	1.072	.269
Perceived Ease of Use	-.756	.135	-1.154	.269
Perceived Risk	-1.955	.135	3.019	.269
Compatibility	-.646	.135	-1.444	.269
Relative Advantage	-1.689	.135	1.446	.269
Customer Retention	-1.755	.135	3.262	.269

Source: Own Survey Finding (2020)

4.8 Linearity Test

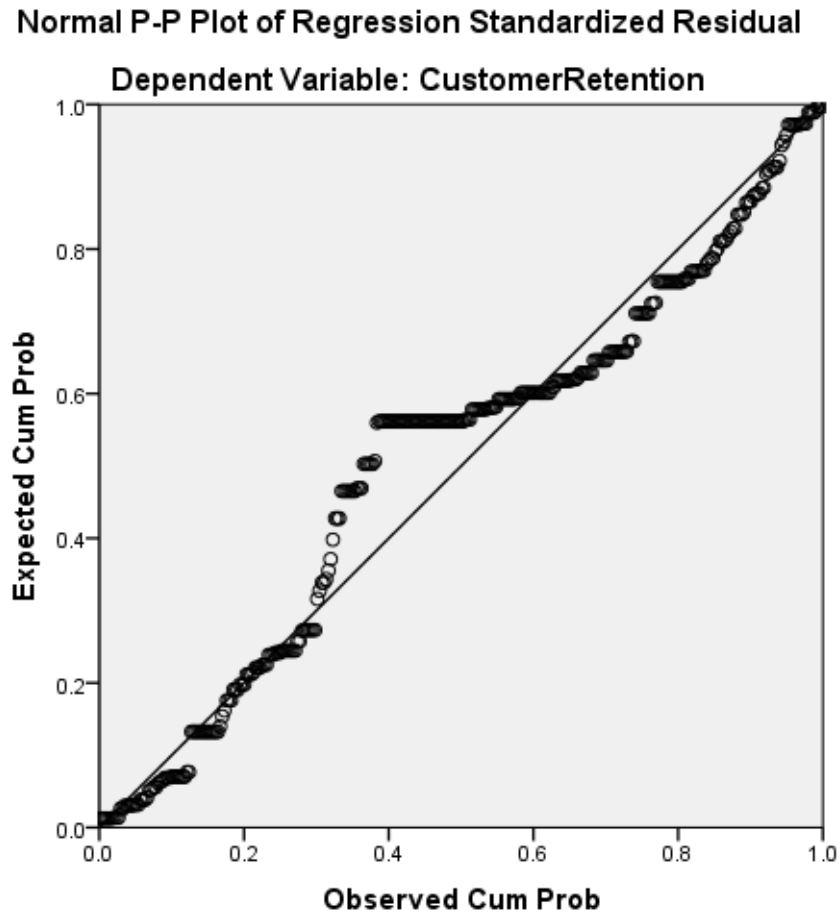
Figure 4.1 Normal Curve for the regression standardized residual



Source: Own Survey Finding (2020)

In above figure 4.1, the frequency distribution is normally distributed. Shape of data that is normally distribution for a single metric variable is referring to the normality test.

Figure 4.2 P-Plot graphs

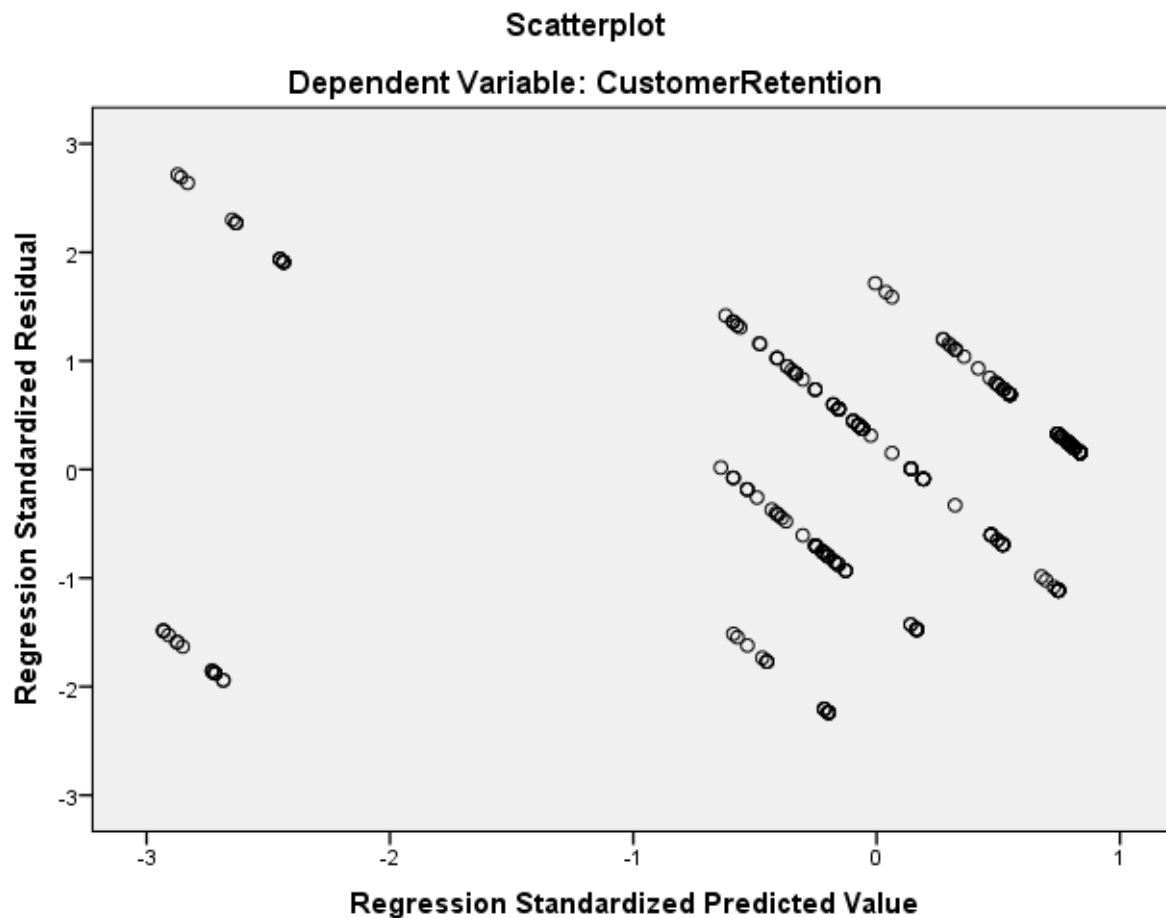


Source: Own Survey Finding (2020)

As figure 4.2 above shows the relationship of independent variables with dependent variables are linear.

4.9 Test of Homoscedasticity

Figure 4.3 Scatter plot



Source: Own Survey Finding (2020)

For the variables plot in Figure 4.3 indicates the responses seem concentrated in a specific area. This show the errors are constant throughout the observations.

4.10 The Effect of Banking Innovations on Customer Retention

Regression analysis allows market researchers to analyze relationships between one independent and one dependent variable. This regression analysis was conducted to know and understand by how much each independent variable (perceived usefulness, perceived ease of use, perceived risk, compatibility and relative advantage) explains the dependent variable customer retention. In

order to show the effect that each independent variable has on the dependent variable, the study checked the Standardized Coefficients. The results of the regression analysis are the following.

Model summary for banking innovations variables

Table 4.13 Model Summary for Banking Innovations variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.881 ^a	.777	.774	.232

Source: Own Survey Finding (2020)

Hear in the above table it can be seen that the R Square value for the model showed that 77.7% of the variance in the model can be predicted from the independent variables. This is to mean that the adjusted R2 with the value 0.777 show that 77.7 percent of the variation to customer retention is explained by the factors influence and the rest 22.3 percent is explained by other factors.

ANOVA for banking innovations variables

Table 4.14 ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	60.228	5	12.046	223.687	.000 ^b
Residual	17.286	321	.054		
Total	77.513	326			
a. Dependent Variable: CustomerRetention					
b. Predictors: (Constant), RA, PU, PR, PEoU, C					

Source: Own Survey Finding (2020)

The above analysis of variance (ANOVA) test determined the model is significant in predicting the outcome of the independent variable since the significance level of F statistics shows a value .000 which is <0.05

Table 4.15 Coefficient for banking innovations variables

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		4.973	.122		40.732	.000
Perceived Usefulness		.065	.014	.143	4.798	.000
Perceived Ease of Use		.003	.011	.009	.303	.762
Perceived Risk		-.598	.025	-.771	-23.572	.000
Compatibility		.007	.010	.020	.741	.459
Relative Advantage		.042	.014	.088	2.928	.004

a. Dependent Variable: CustomerRetention

Source: Own Survey Finding (2020)

The above table shows the standardized Beta Coefficients that present the contributions of each variable to the model. Also helps to understand which variable is most important among the five independent variables in explaining the variance in customer retention. In other word, the value under B represents the level of each contribution in the model.

It is clear that the construct Perceived Risk has the highest impact on dependent variable customer retention while Compatibility has the least impact on customer retention. Therefore, Perceived Risk with having a high beta value -.598 is the leader in explaining significantly effect on customer retention.

The statistical results on the regression equation are shown below:

$$Y = 4.973 + 0.065(\text{PU}) + 0.003(\text{PEOU}) - 0.598(\text{PR}) + 0.007(\text{C}) + 0.042(\text{RA})$$

Where: Y = Customer Retention

PU = Perceived Usefulness

PEOU = Perceived Ease of Use

PR = Perceived Risk

C = Compatibility

RA = Relative Advantage

4.11 Regression Analysis and Hypothesis Testing Results

H01 Perceived usefulness (PU) of banking innovation has positive and significant effect on customer retention in CBE.

The results of multiple regressions, as presented in above, revealed that Perceived Usefulness has a Positive relation and significant effect on customer retention ($\beta = .065$, $p=0.000 < 0.05$), it indicates that the result is supported in this study. Based on respondent's response this shows the usefulness of banking innovation is meeting their expectations. As banking innovation, usefulness increases customer's intention to keep working with the bank also significantly increase. This study result is in line with the previous studies by Fred D. Davis on 07 January (2015 and Study of Adnan Abed. Hamida**, Fahmi Zaidi Abdul Razakb, Azlina Abu Bakarc, Wan Salihin Wong Abdullahc which published by Elsevier B.V. (2016)

H02 Perceived ease of use (PEOU) of banking innovation has positive and significant effect on customer retention in CBE.

The results obtained in the SPSS test result showed that the coefficient B and p value of Perceived Ease of Use have a positive relation and insignificant effect on customer retention ($\beta =$

.003, $p=0.762 > 0.05$), therefore the result is not supported in this study. Thus, Perceived Ease of Use has a positive and insignificant effect on customer retention. This implies that when there is a single change on banking innovations which are easy to use, customer loyalty to CBE is affected by .003. The positive relation result is consistent with the study done by Fred D. Davis on 07 January (2015 and Study of Adnan Abd. Hamida**, FahmiZaidi Abdul Razakb, Azlina Abu Bakarc, Wan Salihin Wong Abdullahc which published by Elsevier B.V. (2016). But not consistent on significance.

H03 Perceived risk (PR)/Complexity of banking innovation has negative and significant effect on customer retention in CBE.

Perceived Risk was found to have a negative relation and significant effect towards customer retention ($\beta = -.598$, $p=0.000 < 0.05$), based on this the researcher proves that Perceived Risk has a negative and significant effect on customer retention which supports the hypothesis. This implies that CBE should give great emphasis on the perceived risk to retain customers because as risk increases, customer retention is affected negatively. The studies by Yong qing Yang , Yong Liu , Hongxiu Li , Benhai Yu Published on 9 March 2015 supports the result of perceived risk test, they found that different perceived risk has strong negative effects on perceived value and acceptance intention. Mohd Shoki Md Ariff *et al* 2014 also supports this study result by concluding that, perceived risk's negative effect on consumers' attitude is universal.

H04 Compatibility of banking innovation has positive and significant effect on customer retention in CBE.

The results of multiple regressions, as presented in the above tables, revealed that Compatibility has a positive relation and insignificant effect on customer retention ($\beta = .007$, $p=.459 > 0.05$). Compatibility has positive relationship but it doesn't fulfill significance standard. Therefore, compatibility is not supported in this study. Based on respondent's response this could be because the banking innovations are not that much compatible with their culture of the payment system, banking service usage system, respondent's attitude to innovations and not go along with their banking culture. Nomsa Mndzebele *July 2013* research also supports this study result by concluding Compatibility does not significantly contribute to the model for predicting the extent of adoption of E-Commerce on business to customer (B2C) outbound communication. Nomsa Mndzebele *July 2013*

H05 Relative advantage of banking innovation has positive and significant effect on customer retention in CBE.

Similar to Perceived Ease of Use, Relative advantage has a positive relation and significant effect on customer retention ($\beta = .042, p=0.004 < 0.05$), therefore the result is supported in this study. Thus, Relative advantage has a positive and significant effect on customer retention. This implies that when there is a single change on banking innovations Relative advantage, customers' loyalty to CBE is affected by .096. Contradict to this study, Nomsa Mndzebele *July 2013*, concludes that relative advantage was not a predictor of E-Commerce (EC) which contradict with this study.

4.12 Summary of Hypothesis Testing Results

Based on the results of the regression analysis coefficient depicted in Table 4.10, the summary of the results of the hypothesis testing has been presented below in table 4.11.

Table 4.16 Summary of hypothesis testing results

No.	Hypothesis	Result	Reason
H1	Perceived usefulness (PU) of banking innovation has positive and significant effect on customer retention in CBE.	Supported	P=0.000<0.05
H2	Perceived ease of use (PEOU) of banking innovation has positive and significant effect on customer retention in CBE.	Not Supported	P=0.762>0.05
H3	Perceived risk (PR)/Complexity of banking innovation has negative and significant effect on customer retention in CBE.	Supported	P=0.000<0.05
H4	Compatibility of banking innovation has positive and significant effect on customer retention in CBE.	Not Supported	P=0.459>0.05
H5	Relative advantage of banking innovation has positive and significant effect on customer retention in CBE.	Supported	P=0.004<0.05

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents main findings, conclusions and recommendations gained from chapter four analyses and interpretations. It also presents limitations and implications for many other researches. Furthermore, is recommended for Commercial Bank of Ethiopia, particularly in Addis Ababa branches related to banking innovation.

The findings of this empirical study provide support for the theoretical model embracing Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) Theory. The mean value of descriptive statistics of the independent variable: Perceived Usefulness, Perceived Ease of Use, Perceived risk, Compatibility, Relative Advantage and The dependent variable Customer Retention are in the range of Excellent or Very Good level.

The purpose of this research is to examine and identify the effect of banking innovation on customer retention in Commercial Bank of Ethiopia. Specifically, sample respondents were selected from four districts in the Addis Ababa city. The study was factored out five constructs from two different models. From Technology Acceptance Model (TAM): *Perceived Ease of Use (PEoU)* and *Perceived Usefulness (PU)* to look at individual's technology acceptance and the addition of three factors from Diffusion of Innovation (DOI) Theory: *Relative advantage, Compatibility and Complexity/Perceived risk*.

The study was a quantitative research approach in nature. It focuses on the effect of perceived usefulness, perceived ease of use, perceived risk, compatibility, and relative advantage on customer retention in Commercial Bank of Ethiopia Addis Ababa branches. 397 Questionnaires were distributed targeting having large number of respondents, but for different reasons 327 sample respondents was collected from the CBE Addis Ababa branches.

Thus, the observed data were analyzed using SPSS by descriptive and inferential statistical techniques, such as percentages and frequency distribution table and regression analysis.

5.2. Summary of Major Findings

The previous chapter presented in details the extent of constructs or dimensions which has an effect on customer retention in different Addis Ababa branches of Commercial Bank of Ethiopia. In this section of the chapter, the findings of the respondents are presented in a summarized and informative manner. As a result the following major findings are observed from the previous sessions,

- Based on the descriptive analysis males are the dominant users of different banking innovations with a percent of 59.3 from the total respondents and the most banking innovation users are in the age range of 31-40 years which are 33% of the total respondents. Also peoples in the educational background of bachelor degree are leading users of banking innovation by scoring 50.2%. This has the implication of educated, adult and meal customers are near to technology acceptance than female, old and illiterate customers.
- The researcher also have tested the questionnaires before he goes into the analysis by using the reliability test and the result showed that, the coefficient alpha for this study's instrument was found to be .846.
- As it is already mentioned in the analysis of this study, from the developed hypothesis H2 (Perceived ease of use has a positive and significant effect on customer retention) was not supported by the result. Implying that Perceived ease of use by itself can't be guarantee to the innovation to be accepted by customers. Rather customers focus on additional services on the innovation than its ease of use.
- The other developed hypothesis H4 (Compatibility has positive and significant effect on customer retention) was also not supported by the result. Here also compatibility by itself can't be guarantee to accept innovation. Because compatibility can be affected by

external (like network failures and electric power failure) and internal (system failure, low speed due to low capacity of data servers, follow up problem and so on) factors.

- The rest developed hypothesis H1 (Perceived ease of use has positive and significant effect on customer retention), H3 (Perceived risk has negative and significant effect on customer retention) and H5 (Relative advantage has positive and significant effect on customer retention) are supported by the result gained.

5.3 Conclusion

The study successfully identified banking innovation factors that have an effect on customer retention. Those are Perceived Usefulness, Perceived Ease of Use, Perceived Risk, Compatibility and Relative Advantage. Based on the statistical analysis and the results of the study, a number of conclusions can be drawn.

1. To retain customers, commercial bank of Ethiopia should develop perceived usefulness and relative advantage of banking innovations and minimize perceived risk. This is good for both the customer and the bank for eliminating bank costs and building the good image.
2. The study revealed that the variable perceived usefulness has a positive and significant effect on customer retention. This means that customers' decision to keep working with banks is significantly affected by the usefulness of banking innovations offered by the bank. As the result shows banking innovations offered by CBE enable customers to accomplish bank task more quickly, decrease cost of banking, save time and complete banking activities more conveniently.
3. The other result of the study revealed that perceived ease of use has a positive and insignificant effect on customer retention. This means although there is a positive relation with customer retention the effect is insignificant so based on the result, chance of using banking innovation when customers perceived that the services are easy to use is low and not supported in this study.

4. The result of perceived risk has shown that perceived risk has negative and significant effect on the customer retention. This means when customers assume that there is a high risk, they refuse to use banking innovations.
5. The study revealed that the variable compatibility has a positive and insignificant effect on customer retention. This means that it has no significant effect on customer retention and not supported in the study. According to the result customers are not satisfied by CBE innovations technology access compliant and compatibility with their social values.
6. The fifth hypothesis test of the study revealed that having relative advantage of banking innovation has a positive and significant effect on customer retention. This implies that having relative advantage of banking innovations than the traditional banking service is essential in order to achieve a higher rate of customer retention. Based on customers response banking innovations offered by CBE has advantages for both customers and the bank itself, doesn't take much time, faster to get banking service quickly and better than the conventional banking service.

5.4 Recommendations

Based on the above conclusion the researcher recommends the following points that help to Commercial Bank of Ethiopia in retaining customers using banking innovations;

- ❖ Commercial Bank of Ethiopia should take into account their different banking innovation technology in terms of being useful and having relative advantage. Because the research result revealed that customers more prefer a technology which is more useful and having relative advantage.
- ❖ Continually review and upgrade the existing system of security to the level that minimize risk and make it more useful.

- ❖ Now a day's banks use similar innovation technology therefore Commercial Bank of Ethiopia should work on relative advantage of innovations compared to other banks by adding additional features on existing ones to keep on the industry being competent. For example: - adding a service payment system for entertainment entrance like concerts and football games by using CBE birrin addition to the basic banking services.
- ❖ Protecting the banking innovation from unauthorized act, possible of reduction in uncertainties, ambiguities, risks and frauds related to banking transactions while using the technology is enhance the likelihood of increasing customer retention. Thus, creating a favorable environment in banking innovation help the CBE in retaining customers more easily.
- ❖ Since perceived risk has negative influence on customer retention, Commercial Bank of Ethiopia should come up with risk reducing strategies that could give a solution to customers' concerns about the use of banking innovations. These can be done by upgrading the technology and applications used for different banking innovations, formulating security policies and guidelines in order to enhance customers' confidence of using banking innovations.
- ❖ Finally the researcher strongly believes that if the above listed recommendations are implemented, using banking innovations as one factor to retain customer by competing with the existing market be effective.

References

Rose, P.S. (1999). “*Commercial bank management*”, 4th edition, Irwin/McGraw-Hill, Boston, MA.

Rogers, E.M. (1995). “*Diffusion of Innovations* (4ed.)”. New York: The Free press.

Kwashie, W. (2012). “*The Impact of Electronic Banking on Service Delivery to Customers of Ghana Commercial Bank Limited.*” A Thesis submitted to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology.

Nofie, I. (2011). “*The diffusion of electronic banking in Indonesia*”, Manchester Business School.

Agboola, A. A. (2003). “*Information Technology, bank automation, and attitude of works in Nigerian banks*”. Journal of Social Sciences.

Holden, J. & Karsh, B. (2010). “*The technology acceptance model: its past and its future in health care*”. Journal of Biomedical Informatics 43 (1) 159–172.

Njenga, A. (2010). “*Mobile phone banking: Usage experiences in Kenya.*” Catholic University of Eastern Africa

NBE (2017/18): <http://www.nbe.gov.et/aboutus/index>.

Fenuga, O.J, (2010). “*The effect of electronic payment on customer service delivery*”

Gardachew W. (2010). Electronic banking in Ethiopia –Practice, opportunities and challenges, available at: <<http://ssrn.com/abstract=1492006>>. [11 May 2015]

Yohannes A (2010) *Key factors that determine adoption of internet banking in Ethiopia.*

Paul S (2013) ATM: *The New Horizon of E-Banking. Science, Technology and Arts Research Journal* 2: 148-152.

Mohammad Taqi Amini, Mustafa Ahmadinejad & Mohammad Javad Azizi. (2011). *Adoption Of Internet Banking By Iranian Customer: An Empirical Investigation*. The International Journal of Management Science and Information Technology, 1(1), 47-64.

Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., and Pahnla, S., (2004). *Consumer acceptance of online banking: an extension of TAM*. Internet Research: Electronic Networking Applications and Policy, 14(3), pp. 224-235.

Sathye, M. (1999), Adoption of Internet banking by Australian consumers: an empirical investigation. *International Journal of Bank Marketing*, 17(7), pp. 324-34.

Joubert Janine and Bellev Jean-Paul Van (2013) The Role of Trust and Risk in Mobile Commerce Adoption within South Africa. *International Journal of Business, Humanities and Technology Vol. 3 No. 2; February 2013*

Arega H.(2014)Mobile banking in Ethiopia Challenges and prospects *Birritu quarter magazine, no.119 published by NBE, Feb, 2015*

MulalemWorku (2015) *Factors affecting the adoption of mobile banking: The case ofcommercial bank of Ethiopia, AA city administration.*

Gizachew k. (2016) *Factors affecting usage of mobile banking in Addis Ababa, Ethiopia.*

Mooi, E. and Sarstedt, M. (2011), “*A Concise Guide to Market Research the Process, Data, andMethods Using IBM SPSS Statistics*”, Heidelberg, Germany.

TilahunDejene (2018)“*An Assessment Of Customers’Satisfaction With New Product Innovation: The Case Of Awash Bank*”, Addis Ababa, Ethiopia.

YosephDegu (2017) “*Factors Affecting Customer’s Adoption of Internet Banking: In Case of Commercial Bank of Ethiopia*” Addis Ababa, Ethiopia.

Holden, J. & Karsh, B. (2010). The technology acceptance model: its past and its future in health care, *Journal of Biomedical Informatics* 43 (1) 159–172.

Zikmund, W.G (2003). *Exploring Marketing Research USA*: Thompson Learning Reference

Bartton, J. and Gold, J. 2000. *Human Resource Management: Theory and Practice*. 2nded. New Jersey: Lawrence Erlbaum Associates.

Jon Sundbo, in *International Encyclopedia of the Social & Behavioral Sciences* (Second Edition), 2015

M. G. Saldivar (2012) "*A Primer on Survey Response Rate Learning Systems*" Institute Florida State University

Hair, J2006, "*Marketing Research, with in changing information environment*" 3rd ed, Tata McGraw Hill Publishing Company limited, New Delhi.

Mooi, E. and Sarstedt, M. (2011), "*A Concise Guide to Market Research the Process, Data, and Methods Using IBM SPSS Statistics*", Heidelberg, Germany

Garson G. David (2012): "Testing statistical assumptions Statistical publishing association, 274 Glenn Drive Asheboro, NC 27205 USA"

Fred D. Davis on 07 January 2015 "*Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*"

Adnan Abd. Hamida**, Fahmi Zaidi Abdul Razakb, Azlina Abu Bakarc, Wan Salihin Wong Abdullahc © 2016 Published by Elsevier B.V. "*The Effects Of Perceived Usefulness And Perceived Ease Of Use On Continuance Intention To Use E-Government*"

Yongqing Yang , Yong Liu , Hongxiu Li , Benhai Yu Publication date: 9 March 2015 "*Understanding perceived risks in mobile payment acceptance*"

Mohd Shoki Md Ariff *et al* 2014 "*Consumer Perceived Risk, Attitude and Online Shopping Behaviour; Empirical Evidence from Malaysia*"

Nomsa Mndzebele July 2013 "*The Effects of Relative Advantage, Compatibility and Complexity in the Adoption of EC in the Hotel Industry*"

Appendix 1

Questionnaire in English

ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE MARKETING MANAGEMENT PROGRAM

Dear Respondent,

The aim of this questionnaire is to identify the Effect of banking innovation on customer retention. The results of the study are expected to supply to the understanding on the effect of banking innovation in Commercial Bank of Ethiopia found in Addis Ababa, Ethiopia. I would like to assure you that the information you provide will be used only for the purpose of achieving academic award. Thank you for your participation.

Best Regards,

Section I: Demographic profile of respondents

Please indicate the following by ticking (✓) on the spaces in front of the response options:

1. Are you staff of CBE? Yes No
2. Gender: Male Female
3. Age: 20-30 31-40 41-50
 51-60 above 60
4. Educational level: Primary school Secondary school
 Diploma holder First degree holder
 Master's degree Above Masters
5. Occupations: Government Employee Private Employee
 Private Business Student

Other please specify _____

Section II: Questionnaires related with effect of banking innovation on customer retention

2.1. Basic questions

Please indicate the following by ticking (√) on the spaces in front of the response options:

1. In which CBE branch do you have an account?

2. Do you use banking innovations?

Yes No

If yes, please answer question number 3 and 4.

3. Which type of electronic banking services do you use?

ATM POS
Mobile banking Internet banking Others

If you choose other, please specify_____

4. Why do you prefer to use the service (s) you mentioned above?

It is easy to use
It is more secure
Doesn't require network connection
Low risk
Other

If you choose other, please specify_____

5. If your answer for question No 2 is no, what is your reason for not using the available e-banking services?

I do not know how to use it
I do not have internet access
Electronic banking is not safe
There is a problem in network connection

I have not heard about electronic banking

Other

If you choose other, please specify _____

2.2 Questionnaires related to factors influencing adoption of electronic banking.

The following are questioners related to factors influencing the adoption of electronic banking. Please indicate whether you agree or disagree with each of the statements by ticking (√) on the spaces that specify your choice from the options that range from “strongly agree” to “strongly disagree”. Each choice is identified by numbers ranging from 1 to 5.

Note: SA- Strongly Agree = 5,

A- Agree = 4,

N- Neutral = 3,

DA- Disagree = 2,

SD- Strongly Disagree = 1

S.N	Measured Constructs	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I	Perceived Usefulness (PU)	1	2	3	4	5
1	Banking Innovations will enable me to accomplish my banking task more quickly.					
2	Banking Innovations will make it easier for me to do my banking.					
3	Using Banking Innovations will decrease my cost of banking.					
4	Banking Innovations saves time compared to traditional banking.					
5	I think Banking Innovations enables one to complete banking activities more conveniently.					
II	Perceived Ease of Use(PEOU)					
1	I think it is easy to become skilful at using Banking Innovations.					
2	I can use Banking Innovations without anyone helping me.					
3	It is easy to use Banking Innovations to accomplish banking tasks.					
4	Using Banking Innovations is easy to do banking activities from anywhere.					
5	Using Banking Innovations is easy to make various payments.					
III	Perceived Risk (PR)					
1	Banking Innovations principles and procedures are difficult to understand.					
2	Using Banking Innovations may expose me to fraud or monetary lose.					
3	I am not confident with the security aspects of Banking Innovations.					

4	Banking Innovations is not as secure as conventional banking (going directly to the branch).					
5	I think that privacy is not guaranteed when using Banking Innovations.					
IV	Compatibility					
1	Banking Innovations are compatible with customers.					
2	Banking Innovations service is technology access compliant.					
3	Banking Innovations is compatible with my social values.					
4	Banking Innovations is in line with status of customers in banking business.					
5	Banking Innovations responds to my banking needs.					
V	Relative Advantage					
1	Banking Innovations are advantageous to both customers and bank.					
2	Banking Innovations transaction fee is inexpensive.					
3	It doesn't take much time to learn about the use of Banking Innovations.					
4	Using Banking Innovation service is faster to get banking service quickly than visiting a bank.					
5	In general, Banking Innovations are better than the conventional ones.					
VI	Customer Retention					
1	I believe CBE deserves my loyalty.					

2	Over the past years, my loyalty to CBE has grown stronger.					
3	CBE values people and relationships ahead of short term goals.					

አዲስ አበባ የኒ ሸርሲቲ የንግድ ሥራ ኮሌጅ

ሚኒስትሪ ትምህርት ክፍል

የጥናት ማጠቃለያ

ውድ የጥናት ተሳታፊዎች

የዚህ ማጠቃለያ ዋና አላማ በኢትዮጵያ ንግድ ባንክ አዲስ አበባ ቅርንጫፍ አዳዲስ የባንክ አገልግሎቶች ደንቦችን ይዘ ማቆየት ላይ ያላቸውን ተጽእኖ እና የመፍትሄ ሃሳብ ለማጠቃለያ የሚረዳ የመረጃ ቁጥር ፅሁፍ ለማዘጋጀት ነው። በዚህ ጥናት ተሳታፊ የሚሆኑት የባንክ ደንቦች ሆነው የሂሳብ ቁጥር ያላቸውን ነው። የምትሰጡን ሀሳብ ከዚህ አላማ ወጭ የማንጠቀም ትኩረት ከሚሆኑም በተጨማሪ ምላሽ ጥራትን የተጠበቀ ነው። ለምታደርጉልን ትብብር ከወዲሁ እና ማሳገጥ ነው።

ክፍል 1 :- የግል ሁኔታ

እባክዎን ከሚከተሉት ሰነዶች ውስጥ ስለእርስዎ ትክክል በሆነ ውሳኔ ይህንን (✓) ምልክት ያድርጉ፡፡

1. የኢትዮጵያ ንግድ ባንክ ሰራተኛ ነዎ አዎ ሊሁም
2. ምታ ወንድ ሴት
3. ዕድሜ 20 - 30 31 - 40 41 - 50 >50
4. የት/ደረጃ 1ኛ 2ኛ ዲግ
የመጀመሪያ ደረጃ ማስተርስ ከማስተርስ ላይ
5. ስራ የመንግስት ተ የግል ተ የግል የን ስራ
ተመሪ ሌላ

ሙሉ ስም ከሆነ ይግለጹ _____

ክፍል 2 :-

አዳዲስ የባንክ አገልግሎቶች ደንቦችን ይዞ ማቆየት ላይ ያላቸውን ተጽእኖ ለማወቅ በሚረገፈው ጊዜ ላይ የቀረቡ ጥያቄዎች

2.1: - ማስረጃ ጥያቄዎች

1. ከኢትዮጵያ ንግድ ባንክ የ የ ትኛ ውቅርን ጭንቀት ተጠቃሚነት ዎት?

2. አዳዲስ የ ባንክ አገልግሎቶች ተጠቃሚነት ዎት?

አዎ አይደለም

ሚልስዎ አዎ ከሆነ ቀጣዮቹን ከተራ ቁጥር 3-4 ያሉትን ጥያቄዎች ይሙሉ ስ: :

3. ከአዳዲስ የ ባንክ አገልግሎቶች የ የ ትኛ ውቅር ይጠቀማሉ?

የ ኢንተርኔት አገልግ ፖስት

የ ሞባይል ባንኪንግ አገልግ ት ኤ.ቲ.

ሌላ የ ሚዲያዎችን ከሚጠቀሙት ይጠቀሙ

4. ከላይ የ ሚዲያዎችን የ ንግድ ባንክ አዳዲስ የ ባንክ አገልግሎቶች ዓይነት ለ ማጠቀም ለ ምን ወሰን?

አጠቃቀም ለ ል ስለሆነ

የ በለጠ አስተማማኝ ስለሆነ

የ ኔትዎርክ ማረጋገጫ ስለሚጠይቅ

የ ማረጋገጫ ውስጥ አንስተኛ በሆኑ

ሌላ

ሌላ ከሌሎች ያዎቹን ይጠቀሙ

5. ከላይ በተራ ቁጥር 2 ለተሞላ ከተዉ ጥያቄ ሚልስዎ አይደለም ከሆነ የ ሚዲያዎችን

ማከንያት(ቶች) ይጠቀሙ

አጠቃቀም ስለ ሚዲያዎች

የ ኢንተርኔት አገልግሎት ስለ ሚዲያዎች

አዳዲስ የ ባንክ አገልግሎቶች አስተማማኝ ባለ ማረጋገጫ

የ ኔትዎርክ ማረጋገጫ ስለሌለ

ስለ አዳዲስ የ ባንክ አገልግሎቶች ስለ ልሰማሁ

በሌላ ማከንያት(ቶች)

በሌላ ማከንያት(ቶች) የ ሚዲያዎችን ከሚጠቀሙት ማከንያት(ቶችን) ይጠቀሙ

2.2. ቀጣዮቹ ጥያቄዎች አዳዲስ የባንክ አገልግሎቶች ደንቦችን ይዞ ማቆየት ላይ ያላቸው ተጽእኖ ጋር ተያያዥን ት ያላቸው ጉዳዮች ጋር የቀረቡ ሲሆኑ አሜራጮቹ ደግሞ ከእስማላሁ እስከፈፀሙ አልስማምም በቅደም ተከተል የተቀማጡ በመሆናቸው ትክክለኛ ነዉ በሚሉት ላይ ይህንን (✓) ምልክት በማድረግ እንዲሟሉ በአክብሮት እጠይቃለሁ፡ ፡ አሜራጮቹ እንደሚከተለው ተብራርተዋል፡ ፡

1 በጣም እስማማለሁ

2 እስማማለሁ

3 አስተያየት የለኝም

4 አልስማምም

5 ፈፀሞ አልስማምም

ተ.ቁ	መላኪ ስም ጥያቄዎች	በጣም አልስማምም	አልስማምም	እርግጠኛ አይለሁም	እስማማለሁ	በጣም እስማማለሁ
	የሚያስገኝ ነውጥቅም	1	2	3	4	5
1	አዳዲስ የባንክ አገልግሎቶች በባንኩ ምጠቀሚዎቹውን ተግባራትን በቅልጥፍና እንደጨረሰ ይረዳኛል፡ ፡					
2	አዳዲስ የባንክ አገልግሎቶች የባንክ አጠቃቀሜን ቀላል አረገውልኛል፡ ፡					
3	አዳዲስ የባንክ አገልግሎቶች ማጠቃለያ ለባንክ አገልግሎት ማክክነት ጊዜና ጉልበት ቀንሶልኛል፡ ፡					
4	አዳዲስ የባንክ አገልግሎቶች ከተለመደው የባንክ አገልግሎት አሰጣጥ አንፃር ጊዜ ቆጣቢ ነው፡ ፡					
5	አዳዲስ የባንክ አገልግሎቶች					

	<p>የተለያዩ የባንክ አገልግሎቶችን ለማጠቀም የበለጠ ምቹ ናቸው ብዬ አስባለው፡</p>					
	<p>የአጠቃቀምቅለት</p>					
1	<p>አዳዲስ የባንክ አገልግሎቶችን በብቃት ለማጠቀም ቀላል ናቸው ብዬ አስባለው፡</p>					
2	<p>የማንም እርዳታ ሳያስፈልገኝ አዳዲስ የባንክ አገልግሎቶችን ማጠቀም እችላለሁ፡</p>					
3	<p>አዳዲስ የባንክ አገልግሎቶችን ማጠቀም የባንክ አገልግሎቶችን በቀላሉ ለማጠቀም ይረዳል፡፡</p>					
4	<p>አዳዲስ የባንክ አገልግሎቶች ማጠቀም የባንክ አገልግሎቶችን በየትኛውም ቦታ ላይ ሆኖ ለማግኘት ይረዳል፡፡</p>					
5	<p>አዳዲስ የባንክ አገልግሎቶች ማጠቀም የተለያዩ ክፍያዎችን ለመፈጸም ይረዳል፡፡</p>					
	<p>በአገልግሎቱ ላይ ያለ ስጋት</p>					
1	<p>የአዳዲስ የባንክ አገልግሎቶችን መመሪያ አና ስርዓቶችን ለመረዳት አስቸጋሪ ናቸው፡</p>					
2	<p>አዳዲስ የባንክ አገልግሎቶች ማጠቀም ለመጭበርበር እና ለኪሳራ ይዳርጋል፡፡</p>					
3	<p>አዳዲስ የባንክ አገልግሎቶች ላይ የደህንነት (ከአደጋ ነፃ</p>					

	ለመሆኑ) ስጋት አለኝ: :					
4	አዳዲስ የባንክ አገልግሎቶችን ከመጠቀም የልቅ ወደ ባንኩ ቅርንጫፎች በመሄድ መገልገል የበለጠ ደህንነት እንዲሰጠኝ ያደርጋል: :					
5	አዳዲስ የባንክ አገልግሎቶችን መጠቀሜ የባንክ አጠቃቀም ማስጠፊን ይጠብቅልኛል ብዬ አላስብም: :					
	ምቹነት					
1	አዳዲስ የባንክ አገልግሎቶች ለደንበኞች ምቹ ናቸው: :					
2	አዳዲስ የባንክ አገልግሎቶች ካለው የቴክኖሎጂ አቅርቦት ጋር አብረው ይሄዳሉ: :					
3	አዳዲስ የባንክ አገልግሎቶች ካለኝ ከመህበራዊ እሴቶች ጋር አብረው ይሄዳሉ: :					
4	አዳዲስ የባንክ አገልግሎቶች ከባንኩ ደንበኞች ሁኔታ ጋር አብሮ ይሄዳሉ: :					
5	አዳዲስ የባንክ አገልግሎቶች ለባንክ አገልግሎት ፍላጎቴ በቂ ምላሽ ይሰጣሉ: :					
	አንፃራዊ ጠቀሜታ					
1	አዳዲስ የባንክ አገልግሎቶች ደንበኞችንም ሆነ ባንኩን ተጠቃሚዎ ደርጋሉ: :					
2	የአዳዲስ የባንክ አገልግሎቶች					

	የአገልግሎት ክፍያ ወድ አይደለም :					
3	አዳዲስ የባንክ አገልግሎቶችን ለማወቅና ለመረዳት ብዙ ጊዜ አይወስድም :					
4	አዳዲስ የባንክ አገልግሎቶችን ማጠቀም ወደ ባንኩ ቅርንጫፍ ከመሄድ ይልቅ የተሻለ ፍጥነት አለው :					
5	ባጠቃላይ አዳዲስ የባንክ አገልግሎቶች ከመደበኛው የባንክ አጠቃቀም የተሻለ ነው :					
VI	ደንበኞችን ይዞ ማቆየት					
1	የኢትዮጵያ ንግድ ባንክ የኔ ታማኝ ደንበኝነት ይገባቸዋል: :					
2	ባለፉት አመታት ለኢትዮጵያ ንግድ ባንክ ያለኝ ታማኝ ደንበኝነት አየ ጩሞላ መቱአል: :					
3	የኢትዮጵያ ንግድ ባንክ ደንበኞቼንና ከባንኩ ጋር ያለቸው ንግንኙነት ከባንኩ አለመኖር አንፃር ያያቸዋል: :					