THE IMPACT OF ELECTRONIC BANKING ON CUSTOMER SATISFACTION: IN COMMERCIAL BANKS OF ETHIOPIA THE CASE OF COMMERCIAL BANK OF ETHIOPIA'S: NORTH ADDIS ABABA DISTRICT

BY

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A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF BUSINESS AND ECONOMICS GRAGUATE STUDIES IN PARTIAL FULLFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION (FINANCE STREAM)

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CANDIDATE'S DECLARATION

I do hereby declare to the senate of Addis Ababa University that the work which is being presented in this thesis entitled THE IMPACT OF ELECTRONIC BANKING ON CUSTOMER SATISFACTION; IN COMMERCIAL BANKS OF ETHIOPIA THE CASE OF COMMERCIAL BANK OF ETHIOPIA'S: NORTH ADDIS ABABA DISTRICT " with the guidance and support of the research advisor, is my own original work, that it has not been submitted partially; or in full, by any other person for an award of a degree in any other university or institution and that all sources of material used for the thesis have been duly acknowledged.

By: Tale Birhanu

Signature _____

Date _____

LETTER OF CERTIFICATION

This is to certify that Tale Birhanu carried out his study on the topic entitled **The Impact of Electronic Banking on Customer Satisfaction:- in Commercial Banks of Ethiopia:- The Case of Commercial Bank Of Ethiopia's: North Addis Ababa District**. I have directed the student in undertaking the research reported herein and I confirm that the student has effected all corrections suggested and suitable for submission for the award of the Masters Degree in Business Administration-Finance strem to the best of my knowledge.

_____ _____

Abebe Yitayew (PhD)

(Thesis Advisor) **Date**

APPROVAL

This is to certify that this thesis has been submitted in partial fulfillment of the requirements for the award of master in Business Administration (Finance Stream) with my approval as Advisor and Examiner.

Approved by Examining Board

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Advisor	Signature	Date
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External Examiner	Signature	Date

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Acronyms & Abbreviations

ANOVA	Analysis of Variance
ATM	Automatic Teller Machine
CBE	Commercial Bank of Ethiopia
CSEB	Customer Satisfaction In Electronic Banking
CORE Banking	Centralized Online Real-Time Electronic Banking/Environment
E-banking	Electronic Banking
EBSQ	Electronic Banking Service Quality
EFT	Electronic Fund Transfer
ICT	Information Communication Technology
NBE	National Bank Of Ethiopia
POS	Point Of Sale/Purchase
SERVQUAL	Service Quality

ABSTRACT

The objective of the study is to assess and examine the impact of electronic banking service on customer satisfaction and the major opportunities and challenges of e-banking activities to satisfy customers of commercial bank of Ethiopia in north Addis Ababa district. A total of 360 questionnaires were properly filled and returned and purposive and simple random sampling were employed. The findings show that service quality dimensions (reliability, assurance, responsiveness, empathy and tangibility) have posetive and significant relationship with customer satisfaction in e-banking. The three service quality dimensions (reliability, assurance, & empathy) have positive and significant impact on customer satisfaction in e-banking of Commercial Bank of Ethiopia. However tangibility and responsiveness have a posetive but insignificant impact on customer satisfaction. Thus the respective management bodies of commercial bank of ethiopia should work more to strengthen these service dimension. Although the opportunities of e-banking is promising, the fundamental challenging problems faced by commercial bank of ethiopia in relation to e-banking is infrastructural barriers such as network failure, low level of internet penetration, unreliable power supply and lack of ICT knowledge from the customer side so that commercial bank of Ethiopia should enhance their internal capacity and work with the government bodies (Ethio-Telecom, Ethiopian electric power & NBE) to acquire modern technological advancement consistently. In addition, the bank should design and implement the mechanism of increasing their electronic banking customers' confidence, knowledge, and technological skill via sustainable awareness creation programs of using e- banking service.

***Key words**: CBE, E-banking, Customer satisfaction and SERVQUAL model.*

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Today's fast paced and increasingly competitive global market requires effective and efficient strategies to survive and to make profits which can contribute toward the growth of the organization. It is obvious that the customers are very essentials stakeholders in many organizations and their satisfaction is a priority in marketing management. Customer satisfaction and service quality has been an interest to researchers and organizations as it has been proven by some researchers that service quality is related to it (Wilson, Zeithaml, Bitner, & Gremier, 2008).

Moreover, understanding and meeting customers' expectations and subsequently being different from competitors are important in order to survive in the today world of globalization. Technology is having a lot of impacts upon service companies in general and the financial services sector is not an exceptional. The imposition of information and communication technology concepts, techniques, policies and use of implementation strategies to banking services has become a subject of great importance and concerns to all banks and indeed a criterion for local and global competitiveness in banking industry. As a result of this technological improvement business environment in financial sector is extremely dynamic and experience rapid changes and demands banks to serve their customer electronically. The gradual change of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first in the world to have taken a lead in e-banking (Mishra RK, Kiranamai J, 2009). E-banking has been globaly used in developed countries and in developing economies; however, the spread of e-banking is much limited. As indicated by Claessens, Glaessner and Klingebiel, developing nations in general have an advantage as they can learn from the experience of advanced economies (Claessens S, Glaessner T, and Klingebiel D, 2000). Today, almost all banks are adopting electronic banking as a means of improving service quality of a bank. They are providing electronic banking to their customers to improve customers' satisfaction in relation to banking service. According to Hansemark OC, Albinson M (2004), Satisfaction is a cummulation of customer attitude towards a service provider, or an emotional response to the

difference between what customers expect and what they receive, regarding the fulfillment of some need, goal or desire.

Oliver defined satisfaction as a judgment following a consumption experience-it is the consumer's judgment that a product provided (or is providing) a pleasurable level of consumption-related fulfillment (Oliver RL 1997). Kotler defined satisfaction as a person's feelings of pleasure or disappointment resulting from a relative comparision of a product's perceived performance (or outcome) in relation to his or her expectations (Kotler P, 2000).

Satisfaction can be associated with feelings of acceptance, happiness, relief, excitement, and delight. Most researchers confirm that the confirmation or disconfirmation of pre-consumption of expectations is the very important determinant of satisfaction. This means that customers have a certain prediction related to product performance in mind prior to consumption. During consumption, customers experience the product performance and compare it to their expected product performance level. Satisfaction judgments are then formed based on this comparison. The resulting judgment is labeled as positive confirmation when the performance is better than expected, negative disconfirmation when it is worse than expected and simple confirmation when it is as expected. In short, customers evaluate product performance by comparing what they expected with what they believe they received (Lovelock & Wirtz, 2011).

E-banking is a product designed for the purposes of online banking that enables you to have easy and safe access to your bank account. E-banking is a safe, fast, easy and efficient electronic service that enables you access to bank account and to carry out online banking services, 24 hours a day, and 7 days a week. With this service you save your time by carrying out banking transactions at any place and at any time, from your home or office, all you need is internet access. E-banking enables the following elements: accurate statement of all transactions processed in your bank account,Statement of current account, credits, overdrafts and your deposits, execution of national and international transfers in various currencies, execution of all types of utility bill payments (electricity, water supply, telephone bills, etc..) carrying out customs payments, electronic confirmation for all transactions executed by E-banking and management of your credit cards (Singh K, 2006).

In Africa, electronic banking is starting to pick up its roots over the mainland. For instance, Madueme (2009) compose that with globalization, Nigerian banks must choose the option to embrace electronic banking services to upgrade successful service conveyance that rises above to customer satisfaction.

The Ethiopian banking system is underdeveloped compared to the rest of the world and hence the introduction of electronic banking also too late in the country. Cash is still the most dominant medium of exchange. The modern e-banking methods like Automated Teller Machine (ATM), Internet banking, Mobile banking and others are new to the Ethiopian banking sector. Information and communication technologies are playing a very important role in the advancement of banking by introducing electronic banking to ease the banking activities. These banking activities may include viewing account balance, creating payment requests, transferring funds in a simple and efficient manner, retrieving an account history, paying bills etc. (Gikandi and Bloor, 2010).

Thus, this study aimed to examine the level of customers satisfaction in electronic banking via service quality dimensions and identifying the challenges in E-banking usage in commercial bank of Ethiopia particularly North Addis Ababa District selected branch.

1.2 Background of the Organization

The history of Commercial Bank of Ethiopia (CBE) dates back to the estableshement 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 owend Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country. Commercial bank of Ethiopia combines a wide capital base with more than 37,894 talented and committed permanent employees and it has more than 1456 branch stretched across the country. Currently CBE has more than 22 million account holders and the number of mobile and internet banking users also reached more than 2.5 million and active ATM card holders reached more than 8 million as of June 30 2019 (CBE June 2019 report).The induction of electronic banking technology was for the first time started by commercial bank of Ethiopia by ATM service for local users in 2001with its eight ATMs located in Addis Ababa. And also CBE introduced mobile banking service in 2014. Nowadays,

Commercial bank of Ethiopia provides electronic banking service (ATM, MB, IB, CBE birr and POS) in all branches (CBE June 2019 report).

1.3 Statement of the Problem

All banks compete with each other to attract their customers in different ways through providing convenient, accessible and acceptable services or/and products to their customers (Ammar, 2012). One of the most important of these services is electronic service that has contributed significantly to enhance the distance between customers and the bank. It was adopted by banks so as to improve their service delivery, decongest queues in the banking hall, enable customers withdraw cash 24/7, aid international payment and remittance, track personal banking transaction, request for online statement, or even transfer deposit to a third party account (Akindele and Rotimi, 2014). E-banking was adopted by a banks so as to improve their service delivery, decongest queues in the banking hall, enable customers withdraw cash 24/7, aid international payment and remittance, track personal banking transaction, request for online statement, or even transfer deposit to a third party account. Abraham described several benefts of electronic banking like transferring money, collecting receivable, paying bill, productivity gains, transaction cost reduction, customer service improvement and at the same time establishing a means to control the overall activities on bank accounts (Abraham H 2012).

Despite the effort of banks to ensure that customers reap the benefits of e-banking,the bank is met with compliants from customers as regards, machine out of order, machine out of cash, no printing statements, cards get blocked, frequent breakdown of ATM service, payment of hidden cost of electronic banking like short message service (SMS), lack of sufcient technicians in all bank who solve break down of ATM machine, lack of sufcient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of credit card service, under development of technological infrastructure, low level of relevant knowledge creation and innovation, interruption of network, lack of suitable and regulatory frame work for e-commerce, resistance to changes in technology among customers and service providers as result of fear of risk, lack of fair distribution of E-banking service in all over Ethiopia. This study is aimed at finding out the reason why these problems occur and in most case persist, and then to make recommendations based on the outcome of the study.

Nowadays, like any business sectors banks in Ethiopia are competing to provide different products or services in a better quality to meet the need of the customer. Developing e-banking service is one of the methods to increase the competitive position of a bank in the market. The recent thesis on the subject matter of under investigation was conducted on 2015 entiteld with the impact of e-banking on customer satisfaction. However, the current covid-19 pandemic and also the growing demand of banks the financial transaction via physical cash has been under threat. Therfore, creating cashless society is a must. In addition, the impact of e-banking on customer satisfaction in the case of commercial bank of Ethiopia, North Addis Ababa District is not yet investigated.

1.4 Research Questions

The research has both basic and sub research questions to address the objectives of the study.

1.4.1 Basic Research Question

This study is design to answer central question examining the impact of E-banking on customer Satisfaction in commercial bank of Ethiopia paricularly North Addis District to realize the main objective of this study.

1.4.2 Sub Research Questions

The research has the following sub research questions to address the specific reasech objecives of the research.

1. What is the the relationship between using of electronic banking and customer satisfaction in CBE?
2. What type of effect E-banking has on Customer Satisfaction?
3. What are the opportunities of E-banking to boost customer satisfaction?
4. What are the challenges in using E-banking to enhance customers' satisfaction?

1.5 Objectives of the Study

1.5.1 General Objective

The general objectives of the study is to find out the impact of E-banking on customer Satisfaction in commercial bank of Ethiopia particularly in North addis District.

1.5.2 Specific Objectives

1. To identify the relationship between using of electronic banking and customer Satisfaction in CBE.
2. To determine that weather the e-banking service can affect customer satisfaction or not.
3. To identify the opportunities that can increase customer satisfaction by using CBE electronic banking service.
4. To identify the major challenges of electronic-banking on customer satisfaction.

1.6 Significance of the Study

Proper understanding of the impact of e-banking on customer satisfaction is unthinkable. So that the findings and recommendations of the research be significantly important to commertial bank of Ethiopian in order to see the impacts of e-banking on customers' satisfaction in comparison with the ordinary mortar and brick banking system. It helps in understanding what attitude customers' have towards e-banking and what actions should the banks take in order to benefits from the opportunities and how to overcome the challenges. Finally, it adds value to the existing knowledge of electronic banking and customer satisfaction in financial institutions and the study can be used as a base point for further investigations in the related subject matters.

1.7 Delimitation of the Study

The scope of the study concentrates on two major areas. This comprises of the contextual and geographical scope of the study. Contextually, the research emphasize on electronic banking focusing on the impact of E-banking on customer satisfaction in commercial bank of Ethiopia. The geographical scope of the study was only focus on those selected branches of CBE located in North Addis Ababa district. These branches are selected because of the extensive use of e-banking facilities or products .The study chooses CBE because it has large number of customer accounts in the country compared to other private banks while selecting North Addis Ababa District due to the resource and time constraints. The study is also delimited on independent variable reliability, assurance, responsiveness, empathy and tangibility but there are also many variables that determine dependent variable customer satisfaction on E-banking.

1.8 Limitation of the Study

There are currently more than 1444 branches throughout the country and out of this 123 branches found under north Addis district. Out of this, 480 branches are located at Addis Ababa city under 4 different districts and the remaining 964 branches found at different cities and towns in the country. Considering the geographical view, the study is limited to branches operating in Addis Ababa city specifically North Addis District branches this is due to not only time and monetary constraints but also proximity to the researcher to get intended data for the study.

The study is limited due to the fact that it is limited to small number of branches and it is difficult to generalize to the finding obtained from just 11 branches to represent all the branches of commercial bank of Ethiopia.

1.9 Operational Definition of key terms

For this study, the operational definitions for the key terms and concepts are as follows as per CBE, 2016 procedure.

1.9.1 *Automated Teller Machine (ATM):* is unattended acceptance terminal that has electronic capacity, accepts PIN, disburses money, and may provide balance confirmation, fund transfers between accounts and other services.

1.9.2 *Commercial Bank of Ethiopia*: a goverment owned bank that accepts deposits and channels the money into lending activities.

1.9.3 *Customer:* shall refer to legal person or natural person with whom the bank agrees to conduct business.

1.9.4 *Customer Satisfaction*: is a measure of how products and services supplied by a company meet or surpass customer expectation. It is seen as a key performance indicatorwithin business.

1.9.5 *E-banking:* is the provision of financial banking service through electronic devices.

1.9.6 *E-payment:* is a financial exchange that takes place electronically between one party to the other one.

1.9.7 *Internet Banking (IB):* shall mean the internet as a remote delivery channel for banking service through a secure website operated by the bank using access devices, including personal computers, lap top and other intelligent devices.

1.9.8 *Mobile Banking (MB):* refers to the use of a Smartphone or other cellular device to perform online bankingtasks while away from your home.

1.9.9 *Point-of-Sale Terminal (POS)*: is electronic device used for authorizing and processing bankcard transactions at point-of-sale.

1.10 Organization of the Paper

The study is presented in five chapters. The first chapter contain the introduction part of the paper which comprises the background of the study, background of the company, statement of the problem, basic research questions, objectives of the study, hypothesis of the research, definition of key terms, significance of the study, and scope and limitation of the study.

The second chapter provides the relevant theoretical and empirical information obtained from related reviewed literatures pertaining to the topic under the study. The third chapter presents the research methodology part used to carry out the research activities. This part of the research report comprises the type and design of the research, the participants and samples of the study, sampling methods and procedures employed, data sources and data collection instruments used, the data collection procedures, the data analysis and presentation methods used. The fourth chapter show the findings, the interpretation and discussion parts of the research. Finally, the fifth chapter contain the summary, conclusion and recommendation part of the study report.

CHAPTER TWO

REVIEW OF RELATED LITRATURE

2.1 INTRODUCTION

2.1.1 Theoretical Literature Review

The 21st Century, shaped by the technological revolution, is the age of globalization. The Internet massively impacts all aspects of business. In the 21st century, electronic business is no longer an option for businesses; it is a necessity (George, 2011). Recently, electronic banking has been adopted in various commercial activities (Mambi, 2010), advancing services such as sell and purchase of items through the use of internet systems.

The enormous increase of the internet is changing the way businesses interact with consumers as most businesses are now conducted using the internet. It is this introduction of e-commerce as a means of payment that has urged banks to take a leap from the traditional banking services, offering a service strongly through the medium of internet, which has come to be known as internet banking or e-banking. This has given banks the chances to inspire clients who urge them to continue banking with them (George, 2011).

Today, it is hard to see a bank in the nation that does not offer one type of electronic banking service or the other, even banks in the most remote parts of the country. Developed and developing areas of the world are now using internet banking services as a competitive. The competitiveness in the banking industries have called for the need to improving on board the electronic platform into industries around the world. Banks chose to implement, investigate, analyze and endeavor to present internet banking service to decrease holding up time, lapses, costs, and enhance customer service support. Their internet banking services permit clients to access and inquire about their own particular accounts and perform basic transactions by means of the internet from their PCs and smart phones at their workplace and home whenever the timing is ideal time (Mambi, 2010).

2.2 Conceptual Definitions

2.2.1 Customer

A customer is a person who maintains an account with the bank. One view of this question is that a person does not become a bank customer unless and until he opens an account with a bank (Adebayo, 2013). Based on this study, customer is defined as any person who seeks for banking services or products from the commercial banks.

2.2.2 Customer Satisfaction

Customer satisfaction is defined as the number of customers, or percentage of total customers, whose reported experience with a firm, its products or its services (ratings) exceeds specified satisfaction goals (Farris et al., 2010). Customer satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance or outcome in relation to his or her expectations (Musiime and Biyaki, 2010). Based on this study, customer satisfaction will be defined as the measure of how a product or service given to a customer meets the expectations of that particular customer.

2.2.3 Electronic Banking

Timothy (2012) electronic banking refers to the use of the Internet as a remote delivery channel for providing services, such as opening a deposit account, transferring funds among different accounts and electronic bill presentment and payment. This can be offered in two main ways. First, an existing bank with physical offices can establish a Website and offer these services to its customers in addition to its traditional delivery channels. Second, is to establish a virtual bank, where the computer server is housed in an office that serves as the legal address of such a bank. Virtual banks offer their customers the ability to make deposits and withdraw funds via ATMs (Automated Teller Machines) or other remote delivery channels owned by other institutions, for which a service fee is incurred. Based on this study, electronic banking can be defined as the means of transferring cash from an electronic terminal device or medium to another.

2.2.4 Internet Banking

Arunachalam and Sivasubramanian (2007) content that Internet banking is where customer can access his or her bank account via the internet using PC or mobile phone and web-browser. Ongkasuwan and Tantichattanon (2002) defined Internet banking service as banking service that allows customers to access and perform financial transactions on their bank accounts from their computers with Internet connection. Based on this study, internet banking is defined as an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. According to this study, it is an online banking that gives a 24/7 access to customers.

2.2.5 Automated Teller Machines (ATMs)

According to Love rock (2011), Automated Teller Machines (ATM) reduces the workload of bank`s staff – ATMs reduce the work pressure on bank`s staff and avoid queues in bank premises. The customer can obtain exact amount. There is no human error as far as ATMs are concerned. Using ATM, a customer can withdraw cash up to a certain limit during any time of the day or night. ATM is an electronic service that provides a 24 hours' service to customers.

2.2.6 Mobile Banking

Literally this is banking conducted through the use of a mobile phone. A mobile banking transaction can be an account inquiry that does not involve a payment such as checking account balance, checking credit limit, looking up transaction history or that involve payment transaction such as a mobile payment, a mobile purchase, a mobile money transfer (Karthikeyan et al., 2017).

2.2.7 Challenges of E-Banking

Electronic banking is the wave of future; it provides enormous benefits to consumers in terms of easy and costs transactions but it also poses new challenges for country authorities in regulation and supervisions of the financial system and designing and implementing macroeconomic policy. One of the main trending challenges in e-banking is money frauds. Reports show frauds and forgeries in some of the Tanzania commercial banks and more on telephone banking are

increasing daily. These issues basically defeat the key ingredients of information technology, which includes confidentiality, integrity and availability. Chronic unemployment among graduates and the widening gap between the few rich and the many poor is another challenge. One key issue here borders on how to handle the rising level of frauds and forgery prevalent in the entire banking system; and how to make Internet banking fit well in the banking structure of a country so notoriously identifiable with criminals use Internet access (George, 2011).

2.3 Challenges & Opportunities of E-Banking on Customer Satisfaction

Kumari Nidhi (2016) listed the following challenges and opportunities regarding electronic banking operation.

2.3.1 Challenges in E-Banking

2.3.1.1 Security Risk: The problem related to the security has become one of the major concerns for banks. A large group of customers refuses to opt for e-banking facilities due to uncertainty and security concerns. According to the IAMAI Report (2006), 43% of internet users are not using internet banking in India because of security concerns. So it's a big challenge for marketers and makes consumers satisfied regarding their security concerns, which may further increase the online banking use.

2.3.1.2 The Trust Factor: Trust is the biggest hurdle to online banking for most of the customers. Conventional banking is preferred by the customers because of lack of trust on the online security. They have a perception that online transaction is risky due to which frauds can take place. While using e-banking facilities lot of questions arises in the mind of customers such as: Did transaction go through? Did I push the transfer button once or twice? Trust is among the significant factors which influence the customers‟ willingness to engage in a transaction with web merchants.

2.3.1.3 Customer Awareness: Awareness among consumers about the e-banking facilities and procedures is still at lower side in Indian scenario. Banks are not able to disseminate proper information about the use, benefits and facility of internet banking. Less awareness of new technologies and their benefits is among one of the most ranked barrier in the development of e-banking.

2.3.1.4 Privacy risk: The risk of disclosing private information & fear of identity theft is one of the major factors that inhibit the consumers while opting for internet banking services. Most of the consumers believe that using online banking services make them vulnerable to identity theft. According to the study consumers‟ worry about their privacy and feel that bank may invade their privacy by utilizing their information for marketing and other secondary purposes without consent of consumers.

2.3.1.5 Strengthening the public support: In developing countries, in the past, most e-finance initiatives have been the result of joint efforts between the private and public sectors. If the public sector does not have the necessary resources to implement the projects it is important that joint efforts between public and private sectors along with the multilateral agencies like the World Bank, be developed to enable public support for e-finance related initiatives.

2.3.1.6 Availability of Personnel services: In present times, banks are to provide several services like social banking with financial possibilities, selective up gradation, computerization and innovative mechanization, better customer services, effective managerial culture, internal supervision and control, adequate profitability, strong organization culture etc. Therefore, banks must be able to provide complete personnel service to the customers who come with expectations.

2.3.1.7 Implementation of global technology: There is a need to have an adequate level of infrastructure and human capacity building before the developing countries can adopt global technology for their local requirements. In developing countries, many consumers either do not trust or do not access to the necessary infrastructure to be able to process e-payments.

2.3.1.8 Non- Performing Assets (NPA): Nonperforming assets are another challenge to the banking sector. Vehicle loans and unsecured loans increases N.P.A. which terms 50% of banks retail portfolio was also hit due to upward movement in interest rates, restrictions on collection practices and soaring real estate prices. So that every bank has to take care about regular repayment of loans.

2.3.1.9 Competition: The nationalized banks and commercial banks have the competition from foreign and new private sector banks. Competition in banking sector brings various challenges before the banks such as product positioning, innovative ideas and channels, new market trends, cross selling ad at managerial and organizational part this system needs to be manage, assets and contain risk. Banks are restricting their administrative folio by converting manpower into machine power i.e. banks are decreasing manual powers and getting maximum work done through machine power. Skilled and specialized man power is to be utilized and result oriented targeted staff will be appointed.

2.3.1.10 Handling Technology: Developing or acquiring the right technology, deploying it optimally and then leveraging it to the maximum extent is essential to achieve and maintain high service and efficiency standards while remaining cost effective and delivering sustainable return to shareholders. Early adopters of technology acquire significant competitive advances Managing technology is therefore, a key challenge for the Indian banking sector.

2.3.2 Opportunities in E-Banking

2.3.2.1 Untapped Rural Markets: most of the total population in Ethiopia is a largely untapped market for banking sector. In all urban areas banking services entered but only few big villages have the banks entered. So that the banks must reach in remaining all villages because majority of Indian still living in rural areas.

2.3.2.2 Multiple Channels: Banks can offer so many channels to access their banking and other services such as ATM, Local branches, Telephone/mobile banking, video banking etc. to increase the banking business.

2.3.2.3 Competitive Advantage: The benefit of adopting e-banking provides a competitive advantage to the banks over other players. The implementation of e-banking is

beneficial for bank in many ways as it reduces cost to banks, improves customer relation, increases the geographical reach of the bank, etc. The benefits of e- banking have become opportunities for the banks to manage their banking business in a better way.

2.3.2.4 Increasing Internet Users & Computer Literacy: To use internet banking it is very important or initial requirement that people should have knowledge about internet technology so that they can easily adopt the internet banking services. The fast increasing internet users in India can be a very big opportunity and banking industry should encase this opportunity to attract more internet users to adopt internet banking services.

2.3.2.5 Worthy Customer Service: Worthy customer services are the best brand ambassador for any bank for growing its business. Every engagement with customer is an opportunity to develop a customer faith in the bank. While increasing competition customer services has become the backbone for judging the performance of banks.

2.3.2.6 Internet Banking: It is clear that online finance will pick up and there will be increasing convergence in terms of product offerings banking services, share trading, insurance, loans, based on the data warehousing and data mining technologies. Anytime anywhere banking will become common and will have to upscale, such up scaling could include banks launching separate internet banking services apart from traditional banking services.

2.3.2.7 Retail Lending: Recently banks have adopted customer segmentation which has helped in customizing their product folios well. Thus retail lending has become a focus area particularly in respect of financing of consumer durables, housing, automobiles etc., Retail lending has also helped in risks dispersal and in enhancing the earnings of banks with better recovery rates.

2.4 Service Quality Dimensions & Customer Satisfaction in Using E- Banking

According to Lai et al. (2000), electronic commerce is integrated into all dimensions of businesses. One dimension of e-commerce is e-banking. Electronic banking is used everywhere now a day. Electronic banking accelerates the banking industry to gauge competitive advantage over the traditional banks. E-banks can provide efficient, reliable, secure and cost effective

services to the users, such as online payment, online account information and online transaction. This research paper is designed to find out the factors that influence the perception of the customers about the use of internet banking. Questionnaire method was used to check the behavior of respondents. A sample of 178 respondents was surveyed which showed that all the environmental, organizational and globalization factors will affect the customer satisfaction with e-banking.

The results of the survey showed that internet banking has more eye-catching influence on the customers using internet banking and those who are using internet banking are more likely to use the internet banking more frequently. Because the degree of penetration of technology in the customer is very fast that they think internet banking is the blessing of technology. It makes their work very easy and they embraced it quickly.

E-banking is a single click between the customer and the bank (Bello, 2005). It provides the customer with rapid growth and much better results than human teller system. It allows the customers not to visit the bank regularly because it is very difficult for the business personnel to come to the bank for their transactions each day. Studies have shown that E-banking leave a positive impact on the customers. It was observed that the service quality in manually operated organizations was not as good as they were seen in fully automated organizations.

According to Yap et al. (2009), traditional banking system provides a way to the internet banking system and helps the customer to build their trust in the e-banking services. It is observed that the size and the reputation of the bank can only provide the structural assurance to the customers if the traditional banking system is present. Those customers who lack the knowledge of internet banking mostly rely on the staff of the banks to guide them about the features of internet banking, help them to make an e-banking account and password, resolve the problems of e-banking website and provides clarifications to the issues related to e-banking services. Such services can only be provided at the counter if the customers feel hesitation of adopting new system. The factor of trust is very important for making the customer more attractive towards it. Management should make such policies that can build the trust among the employees. It is observed that the promoting activities play a more important role in grabbing the attention of the customers.

Delightful service packages, cost effectiveness and speediness enhance the satisfaction of the customers towards internet banking. Customers perceive that the good services they receive at the counter is indicative of the services they are going to get online. So building the trust among the customers requires better management strategies.

Dimitriadis, Kouremenos, and Kyrezis (2010) have carried out similar research on consumer's perception. They identified the trust as an important variable in categorizing and predicting the behavior of customers in self-service technology. In this study trust is recognized as segmentation variable. They are very keen to observe the impact of trust in two baking channels i.e. internet banking and phone banking. The main purpose of this study is to examine factors that differentiate high SST trustors and low SST trustors and to find out whether these levels are consequential in terms of willingness to use SSTs or not. Data, collected through interviews with executives of participating banks, have shown that only half of the customers are using internet banking and one third are using phone banking. They surveyed 762 real bank customers and used discriminant analysis to test the variables differentiating the customers having high and low level of trust in internet and phone banking. Discriminant analysis has shown that the difference in the level of trust is due to attitudinal, behavioral and psychological criteria. It is also categorized that the consumers from different level of trust react different in term if their intention to use SSTs. It has shown that trust based segmentation is very helpful in predicting the behavioral responses towards SST services.

Proenca and Rodrigues (2011) have newly conducted a research on self-service technology used in banking industry. Banks have passionately accepted self-service technology i.e. Internet banking, Phone banking and Automated teller machines so that clients can independently operate banks services without any interaction with bank employees. The use of this study is to evaluate the demographic behaviors of users and non-users of self-service technologies in banking services. Data were collected through telephonic survey. Interview of 300 respondents was carried out based on adult population in terms of age, gender, and geographical places. Six variables of customer performance have recognized for research purpose i.e. Satisfaction, Tendency to complain, Compassion to price, Tendency to change providers, Word of mouth and Intention to repurchase.

The study discovered that there is major relationship between self-service technologies and demographic variables. It is found that those who are the satisfied with their banks exhibit positive word of mouth, greater intention to repurchase, less tendency to price, fewer tendency to change banks and a greater propensity to complain. But the users of SSTs have greater tendency to price and complains. This study has not identified a significant positive relation between SSTs and the consumer behavior dimensions but it has shown that customers loyalty with banking service in terms to SSTs have significantly heighten the profits of the firm, lowered the cost, increases the level of purchases, less price sensitivity and positive word of mouth.

2.5 The relation between Service Quality & Customer Stisfaction

In the era of stiff competition of the banking industry, both private and state banks are in the game of market arena in terms of providing service quality in every aspect of their competitive strategies because the awareness of their customers are developed in selecting whose bank provides better quality of services as per the satisfaction level they expected to achieve so that different banks designed winning strategies of rendering best service quality to enhance theircustomer satisfaction over existing competitors in the market rivalry. The relationship between expectation, perceived service quality and customers satisfaction have been investigated in anumber of researches (Zeithaml, et al, 1988). They found that, there is very strong relationshipbetween quality of service and customer satisfaction (Parasuraman et al, 1985; 1988). Increase inservice quality of the banks can satisfy and develop attitudinal loyalty which ultimately retainsvalued customers (Nadiri, et al 2009).The higher level of perceived service quality results in increased customersatisfaction. Whenperceived servicequality is less than expected service quality customer will be dissatisfied (Jainand Gupta,2004).

According to Cronin and Taylor (1992) satisfaction super ordinate to qualitythatquality is one of the service dimensions factored in to customer satisfaction judgmentParasuramanet. al (1985) and Zeithaml et., al (1990) noted that the key strategy for thesuccessand survival of any business institution is the deliverance of quality services to customers. Thequality of services offered will determine customer satisfaction andattitudinal loyalty(Ravichandran et al. 2010). Research has indicated that service quality has been increasingly recognized as a critical factor inthe success of any business (Parasuramanet al., 1988), and the banking industry in this case isnot exceptional.

Parasuraman, A.,ZeithmaI,V.A., &Berry,L.L. (1988) found thatthe performanceof theservice provider on coreand relational dimensions of services was an important driver forcustomer satisfaction in retail banking.Service quality has been widely used to evaluate the performance of banking services (Cowling& Newman, 1995).The banks understand that customers will be loyal if they provide greatervalue (quality services) than their competitors (Dawes &Swailes, 1999), and on other hand,banks can only earn high profits if they are able to position themselves better than competitorwithin specific market (Davies et al., 1995). There is positive linear relationship between theservice quality and customer satisfaction. Consequently, banks need to focus on service qualityand customer satisfaction as a core competitive strategy (Chaoprasert & Elsey, 2004).

2.6 Service Quality Dimensions (Service Quality Model)

As Johnston (1995) pointed out that identification of the determinants of service quality is necessary in order to be able to specify measure, control and improve customer perceived service quality. The most frequently used scales in the measurement of perceived service quality are SERVQUAL (Parasuram, Zeithaml, and Berry 1988) and SERVPERF (Cronin andTaylor 1992).Both are the result of research work from the US school of quality thus Among the models for measuring service quality, the most acknowledged and applied model in diversity of industries is the SERVQUAL (service quality) model developed by (Parasuraman et al,1985) The SERVQUAL model of Parasuraman et al. (1988) proposed a five dimensional construct of perceived service quality tangibles, reliability, responsiveness, assurance and empathy as the instruments for measuring service quality (Parasuramanet*el al*., 1988; Zeithamlet*el al.*, 1990).Therefore in this study SERVQUAL model is used to measure to service quality of electronic banking provided by selected banks towards their customer satisfaction.

2.6.1 Reliability

It involves two concepts, dependability and uniformity in performance. Reliability also means honouring the commitments in areas such as billing accuracy, properrecord maintenance and delivering the service within acceptable time limit. It also refers to the correct technical functioning of a self-services technology and the accuracy of service delivery. Many authors have detected that reliability is significant in the determination of service quality (Bagozzi, 1990; Davis et al., 1992; Parasuraman et al., 1988 Zeithaml & Bitner, 2000). Andreliability is the most

crucial characteristics for customers in the evaluation of service quality. Zeithaml and Bitner (2000) advised that customers should be specifically influenced by the reliability of new technology because they might be associated with risks such as the technology malfunctioning. Parasuraman et al. (1988) also considered reliability of the service as a important factor of service quality. Furthermore it is also discovered that reliability is the most crucial determinant of service quality. Research on the use of computers or technologies which share similar characteristics also affect performance (or dependability) as it is an important attribute (Davis et al., 1989; Bagozzi, 1990; Davis et al., 1992). Finally, Dabholkar (1996) in his study revealed that reliability and accuracy are appropriate measure for assessing service that has to do with technology.

2.6.2 Assurance

Parasuraman et al. (1985) defined assurance as knowledge and courtesy of employees and their ability to inspire trust and confidence. According to Sadek et al. (2010), in British banks assurance means the polite and friendly staffs, provision of financial advice, interior comfort, eases of access to account information and knowledgeable and experienced management team. This is made up of the guarantee that the record showing banking activities and security of account Information is not shared (Yang and Fang 2004). Security is another essential determinant in the decision of consumers to use internet banking. Strong issues on security are a common concern to individuals hence their unwillingness to use internet banking (Madu, 2002). Other studiesalso indicated that in Australia security concerns were shown to be the major cause of the slow growth of electronic banking in the country whilst Polatoglu and Ekin (2010) also indicated that risk interms of financial, physical and social characteristics was the main cause of slow growth of electronic banking usage. Bagozzi (1990) in their study found out that most individuals had faint knowledge and understanding of online banking security risks though they know of the risks. A further finding shows that individuals are aware that their bank will protect their privacy hence their strong confidence in their bank but have a weak confidence in technology use for online banking, Cunningham (2003) indicated that one of the most important future challenges facing individuals or customers of a bank is the fear of higher risks associated with using the Web for banking and financial transaction.

2.6.3 Responsiveness

Customers are particularly interested in the speed with which a service is offered or delivered (Bateson, 1985). In addition, most researches have indicated that in most cases, customers overrate the processing time of a service. Base on the above Lovelock and whrtiz (1979) posited that on certain occasion customers has a strong liking to carry out the service by themalso resolved that slow service delivery has a negative effect on individuals overall perceptions of the service quality. So, if individuals are expecting a rapid service delivery, it is probable that they will assess the service more positively (Dabholkar, 1996). Similarly discovered also that time was a significant factor for individuals in using a new service or technology. And in the same way discovered that time savings were essential to individuals who use electronic banking and shopping (Dabholkar, 1996). Customers often utilizes the bank responsiveness towards e-banking when they are on the position of withdrawing of money from ATM machine the machine may not work due to various reasons so that the customer's enforced to request the bank for immediate responseof serving them in solving their problem using either POS machine found in the bank or other mechanism.

2.6.4 Empathy

Parasuraman et al. (1985) defined empathy as the caring and individual attention the firm provides its customers. It involves giving customers individual attention and employees who understand the needs of their customers and convenience business hours. Ananth et al. (2011) referred to empathy in their study on private sector banks as giving individual attention; convenient operating hours; giving personal attention; best interest in heart and understand customer's specific needs.

2.6.5 Tangibility

Parasuraman et al. (1985) defined tangibility as the appearance of physical facilities, equipment, personnel, and written materials. Ananth et al. (2011) referred to tangibility in their study ofprivate sector banks as modern looking equipment, physical facility, employees are well dressed and materials are visually appealing.

2.6.6 Empirical Reviews

A lot of related studies were conducted by different researchers in different countries. Nevertheless, there are limited numbers of studies were conducted in Ethiopia on the e banking customer satisfaction. Some of the study includes.

In two private banks in Gonder city, (Milion, 2013) conducted a report on the Effect of Electronic Banking on Customer Satisfaction.. The researcher employed both descriptive and explanatorystatistics in analyzing the data. The results of the study implied that majority of users of e-banking are the young, the educated, salaried and students but business men and women are not actively using the service. The finding also shows e-banking has impact in improving customer satisfaction by reducing waiting time for customers to get bank service and enable them to control their account movements.

A study entitled with the challenges and opportunities of e-payments in Ethiopia; found that, the main obstacles to the development of e-payments are, lack of customers trust in the initiatives, unavailability of payment laws and regulations particularly for e-payment, lack of skilled manpower and frequent power disruption (Wondwossen&Tsegai, 2005). According to the study, inadequate legal structure and security framework could foster the use of e-payments, which is contradicting with the finding of the previous study.

Echekoba et al (2011) examined user acceptability and problems of electronic retail payment systems in Nigeria and found that cash usage is still very high in Nigeria despite efforts of CBN(Commercial bank of Nigeria) towards the adoption of electronic payment system. The study came up with the challenges such as insufficient power supply, insufficient critical technological infrastructures, lack of socio-cultural support and inadequate legal framework that are required to operate seamless and effective electronic payment system

Abenet (2010) has tried to study the relationship between customer educational level and e-banking usage. His study revealed that e-banking usage practice is greater among those peoples who are in a better educational level as compared to others, so educational level has positive impact on e-banking adoption. This finding is in line with Edwin et al. (2014) who found that the level of education of consumers and their ICT knowledge impacts their acceptance of e-banking

services. The study made use of respondents that are ICT literate and who use it in their everyday transactions, which shows a fair amount of ICT knowledge.

Gardachew (2010) has carried out a study on the opportunities and challenges of E-banking in Ethiopia and discovered that lack of suitable legal and regulatory frame works for E-commerce and Epayments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks are the major challenges. The research finding indicates the availability of opportunities offered by ICT through e-learning programs and governments' commitment on development of ICT infrastructures is considered as drivers of using Ecommerce and E-payment systems.

A study conducted by Yitbarek, (Yitbarek, 2015) indicated that service quality dimensions' reliability, customer support and ease of use have strong influence on electronic banking users in both private and state-owned banks. And the findings showed that the major problem faced by commercial banks in relation to electronic banking is interruption of network due to poor ICT infrastructure, shortage of sustainable electric power supply, lack of ICT knowledge from customer end.

2.7 Conceptual Framework

Service Quality is a vital antecedent of customer's satisfaction (Cronin and Taylor, 1992). In turn customer satisfaction is believed to affect post-purchase and perception and future decisions. Following from the literature review done above, the relationship between service quality variables and customer satisfaction can be shown as following. In this conceptual model the five Service quality dimensions have been selected from the study conducted by Parasuraman et al., (1988). Parasuraman et al., (1985) conducted research on different service organization (Bank, Hotel, Electrical Corporation, Hospital, Transportation) by using ten service quality dimensions (tangibility, reliability, responsiveness, communication, access, competence, courtesy, credibility, security, and knowledge). Later Parasuraman et al., (1985) conducted research and then the ten dimensions were further purified and developed into five dimensions (tangibility, reliability, responsiveness, assurance and empathy). The reason behind purified the ten dimensions into five dimensions was the appropriateness of each service quality dimensions to different service organizations for example security dimension is appropriate for transportation,

credibility dimension is appropriate for hotel. Therefore, this convinced me to use Parasuraman et al., (1988)'s model.

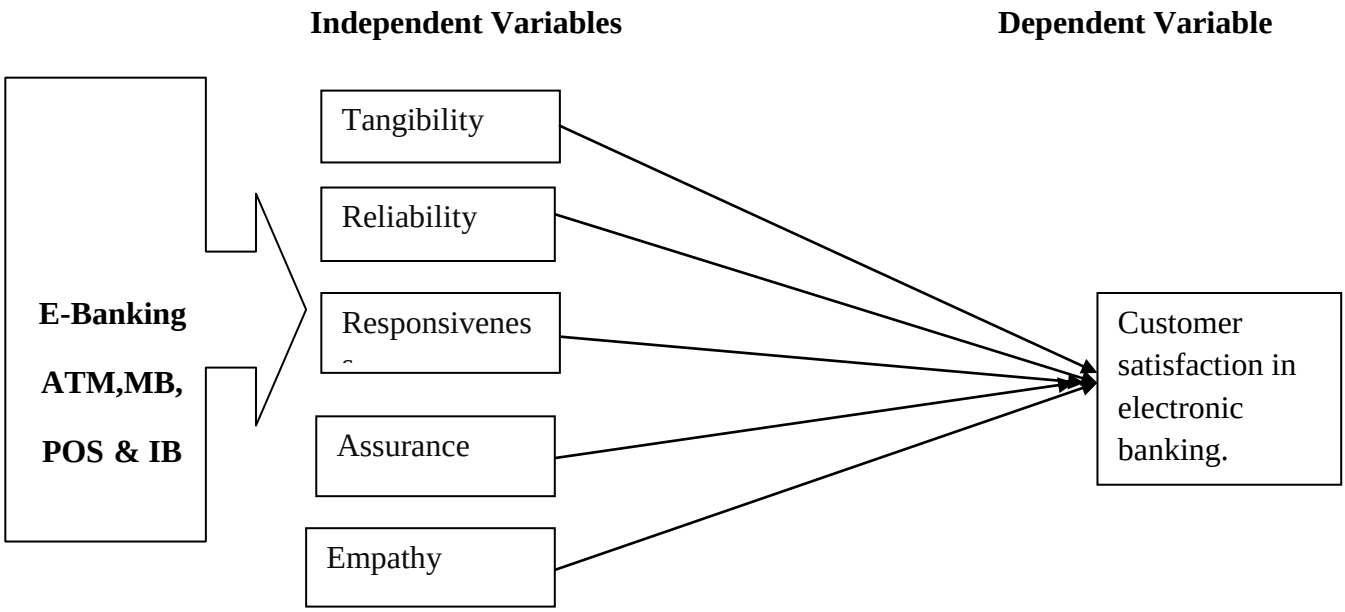


Fig 2.1 Conceptual framework of the effect of customer service quality on customer satisfaction. source: Parasuraman et al., (1988).

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the research methodology adopted throughout this study to meet the research objectives and to address the research questions. It describes: the choice of particular research designs, research approach, sample and sampling techniques, source of data collection, data collection instruments and the method of data analysis.

3.1Research Design

Since objective of this study is to assess the impact of electronic banking on customer satisfaction: the case of commercial bank of Ethiopia, North Addis Ababa District, descriptive and explanatory type of research design is more appropriate. The study chooses the descriptive and explanatorydesign because the nature of the designs is helpful in describing the current situation of the electronic banking impact on customer satisfaction in detail and inferential statistics help to show the direction and magnitude of the relationship.

This is Therefore; the research design of this study is both descriptive and explanatory type of research design. In addition, the research design for this study is the cross-sectional field survey method.

3.2 Research Approach

The study follows both qualitative and quantitative research as a research approach to describe the current impact of electronic banking on customer satisfaction: the case of commercial bank of Ethiopia, North Addis Ababa District. Mixed research approach enables to use multiple methods of data collection and helps to generate reliable findings.

According to John (2003) states that mixed method research include quantitative and qualitative methods that are the major approaches being used today in the social and human science with their advantages and disadvantages. Employing mixed approach helped the study to neutralize biases of applying any of a single approach as well as ways to balance the weaknesses inherent in a single method with the strengths of the other method.

3.3 Population of the Study

The banking industry in Ethiopia is overseen & controlled by the National bank of Ethiopia (NBE) acting as the central bank of the country. There are 18 commercial banks registered under the NBE up to 2019, these comprises 2 state owned banks and 16 other private commercial banks. Commercial bank of Ethiopia is selected for this study. Based on geographical location CBE classified in to four districts in Addis Ababa namely North, South, West and East districts. The study focuses on North district found in the capital city of the country, Addis Ababa.

According to Mugenda (2008), target population is the total population that the study specifies in his or her research. In order to undertake this study, the study select eleven branches of CBE north district. The selection is basically based on the e banking performance of the branches as of May 2020.Therefore customers of these branches who are using e banking service are considered as target population of the study. As of May 2020 the total numbers of e banking users of these eleven branches are 253,225. (CBE, North district e-payment report)

3.4 Sampling Technique

Purposive and simple random sampling techniques are employed in this study to come up with valid outcomes. The reasons behind selecting these sampling techniques is that the study decide whom to include as a respondent for the questions that will be prepared to collect data and get a better chance to select right respondents. The study uses purposive sampling technique in the interviews. The basic reason here is that, selected individuals are those who are responsible for the issue under investigation and expected to have adequate knowledge. The sample size used for this research is 400 respondents who were banking customers of 11 selected CBE branches in North Addis Ababa District. The number of branches was limited to 11 as the EB service offered with in CBE is quite homogenous. The branches used for the study were Addisu Gebeya, Arada Giorgis, Arat Kilo, Kechene Medhanialem, Sidist Killo Campus, Semen Gebeya, 8 Kutir Mazoria, Sheger, Tayitu Bitul, Addis Ababa, and Shero Meda. The study distributes this calculated sample size to each selected branches based on proportional ratio by dividing total E-Banking users of each branch to total number of E-Banking users in the selected branches.

3.5 Sample Size

The sample size for the study calculated according to the formula recommended by Yamane's (1967) with 95% confidence and 5% acceptable sampling error. The formula is presented below:

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

Where,

n= is number of sample size

N = total number of study population

e = standard error = 5% at 95% confidence level

$$n = \frac{253{,}255}{1+253{,}255(0.05)^2}$$

$$= \frac{253{,}255}{634.14}$$

n = 399.37 (Approximately **400** individuals)

Based on the above formula, the study has 400 respondents and gather data through questionnaire.

Based on the calculated sample size, the study assign the number of respondents for each branch proportionally. Accordingly, the table below shows the number of respondents for each selected branches.

Table 3.1 Population and sample size

NO	Name of Selected Branches	Number of E-Banking Users	Sample Size
1	Addis Ababa	44,434	70
2	Addisu Gebeya	18,648	30
3	AradaGhiorgis	36,141	57
4	Arat Kilo	48,041	76
5	8 Kutir Mazoria	4,100	6
6	Sheger	16,592	26
7	Semen Gebeya	14,968	24
8	Sidist Killo Campus	29,996	47
9	Kechene medhanialem	13,747	22
10	Shero Meda	17,866	28
11	Tayitu Bitul	8,722	14
	Total	**253,225**	**400**

Source; Banks reports as of May, 2020

According to Patrick, B. (2003) the return or success rate 50% is 'adequate'; 60% response rate is 'good' and 70% rate or higher is 'very good'. This is therefore, the study uses 75% response rate is expecting and remaining 25% may be non-response rate, and sample size determine at 95% confidence level and margins of error at 5%. This is therefore, the study is go for further detail analysis after having get more than 70% response rate.

3.6 Sources of Data

The choice of particular method of collecting data depend on the purpose of collecting data, the information being collecting, the resource available for the research and the skill of the researcher (Kothari,2004). In order to achieve the condition objectives the data for this study is obtain from both primary and secondary source. The study use both primary and secondary data which obtained from primary and secondary data sources.

3.6.1 Primary Data

Primary data are helpfull to get original information from the respondents to know their feelings, opinions, attributes and perceptions towards e-banking on customer satisfaction. Therefore, primary data are collected from respondents (e-banking customer and CBE Staffs) which have direct participation in the e-banking by distributing questionnaires designed in the form of likert scale and raising interviews questions.

3.6.2 Scondary Data

Secondary data; such type of data involves different sorted data made, adjusted and field by a third party. As a result, annual report, audit report and research papers on similar topics shall be used as secondary sources of data to analyze the issue with the existing literatures.

3.7. Validity and reliability

3.7.1 Validity

Validity is referring to the extent to which an empirical adequately reflects the real meaning of the concept under consideration. And also, it refers to the degree to which a statistical instrument measures what it is intended to measure. It emphasizes the accuracy of a measurement instrument (Saunders, et al; 2009).

3.7.2 Reliability

Reliability it refers to the extent to which your data collection techniques or analysis procedure will yield consistent findings. It focuses on whether the research method and design are accurate (Saunders, et al; 2009). The reliability test is an important instrument to measure the degree of consistency of an attribute which is supposed to measure. It measures the internal consistency of the item in a scale. The normal range of cronbach's coefficient alpha value ranges between 0-1 and the higher value reflects a higher degree of internal consistency. The reliability test indicates that the extent to which the items in a questionnaire are related to each other. Cronbach's alpha is one of the most commonly accepted measures of reliability. And the most commonly accepted value of cronbach's alpha is 0.70 as it should be equal to or greater than to reach internal reliability (Eskandarpour, 2016).

No.	variables	Cronbach's Alpha	Number of items
1	Reliability	.700	5
2	Responsiveness	.789	4
3	Assurance	.851	6
4	Tangibility	.766	5
5	Empathy	.709	6
	Total	**.911**	**26**

Source: Own Survey, January, 2021

The computed Cronbach is Alpha for the 26 SERVQUAL items found to be .911. This being greater than 0.7, it shows that there is greater internal consistency of the items in the scale, and that the research instrument used was very reliable. This is therefore, all variables are acceptable for further analysis.

3.8 Ethical Consideration

The researcher will address the ethical issues and practices that directly and indirectly affect the development and evaluation of the proposal as well as overall research processes. The researcher shall take into account the following ethical activities when the study conducts the research: do not abuse the respondents, fulfilling the promises what the researcher made to respondents, completing the interview and questionnaires at the specified time, avoiding emotion, dishonest and unsuited

behaviors, ensuring to the respondents not to disclose their names, and personal information. In addition, full acknowledgment of all the reference materials used in the study.

3.9 Methods of Data Analysis

After the data gathered from the respondents that are participating in e-banking analyzed both in quantitative and qualitative terms. Quantitative data are analyzed quantitatively in frequency, percentage and mean using the statistical application software called Statistical Packages for Social Science (SPSS) version 24. Analyze and narrate qualitative data collected from interviews and questionnaires in terms of providing meanings and consequences by qualitatively referring to related literatures and previous research in similar issues using thematic analysis.

3.10 Descriptive Analysis

The descriptive statistical results are presented by tables, frequency distributions and percentages to give a condensed picture of the data. This was achieved through summary statistics, which includes the means, standard deviations values which are computed for each variable in this study.

3.11 Pearson Correlation Analysis

In this study Pearson's correlation coefficient is used to determine the relationships between independent variables which is service quality dimensions (Tangibility, reliability, responsiveness, assurance and empathy) and dependent variable which is customer satisfaction.

3.12 Multiple Regression Analysis

Multiple regression analysis is used to investigate the effect of service quality dimensions (Tangibility, reliability, responsiveness, assurance, and empathy) on customer satisfaction.

3.13 Regression Functions

The equation of multiple regressions on this study is generally built around two sets of variable, namely dependent variables (customer satisfaction) and independent variables (Tangibility, reliability, responsiveness, assurance, and empathy). The basic objective of using regression

equation on this study is to make the study more effective at describing, understanding, predicting, and controlling the stated variables.

3.14 The operationalize of Independent Variables and Dependent Variable

1. Reliability: the ability to perform the promised service dependably and accurately on time.
2. Responsiveness: willingness to help customers and to provide prompt services.
3. Tangibility: physical facilities, equipment, and appearance personnel.
4. Assurance: knowledge and courtesy of employees and their ability to convey trust and confidence.
5. Empathy: caring, individualized attention the firm provides its customer.
6. Customer satisfaction: the customers' post-purchase comparison between pre-purchase expectation and performance received.

The study measures the independent variable by using the SERVQUAL dimensions it used to measure the gap between customers' expectations for excellence and their perception of the actual service delivered. In order to improve service, you must understand customer satisfaction and customer expectations. This can be done by asking for feedback from your customers using service quality questionnaires,that is a 5 point likert scale questionnaries which distribute to the targete respondents.

3.15 Regress Customer Satisfaction on the Service Quality Dimensions

CSEB = β1 + β2 Rel + **β3** Res + **β 4** Tan + **β 5** Ass + **β6** Emp + ε

Where CSEB = Customer Satisfaction in e-banking, Rel= Reliability, Res= Responsiveness, Tan= Tangibility, Ass= Assurance, Emp= Empathy are the explanatory variables (or the repressors) **β1** is the intercept term- it gives the mean or average effect on Y of all the variables excluded from the equation, although its mechanical interpretation is the average value of customer satisfaction when the stated independent variables are set equal to zero. **B2, β3, β4, β5, and β6** refer to the coefficient of their respective independent variable which measures the change in the mean value of customer satisfaction per unit change in their respective independent variables and ε is the error term.

CHAPTER FOUR

DATA PRESENTAION, ANALYSIS AND INTERPRETATION

This chapter shows the presentations and discussions of the findings obtained from the analysis. Both descriptive and explanatorytechniques of data analysis are employed to see the characteristics of the sample, identify and discus the relationship between dependent and independent variables.

4.1 Response Rate

The study targeted a total number of 400 questionnaires distributed and 90% or 360 questionnaires were fill and returned with valid response. According to Patrick, B. (2003) the return or success rate 50% is 'adequate'; 60% response rate is 'good' and 70% rate or higher is 'very good'. This is therefore, the study uses 75% response rate is expecting and remaining 25% may be non-response rate, and sample size determine at 95% confidence level and margins of error at 5%. This is therefore, the study is go for further detail analysis after having get more than 70% response rate; therefore, the response rate is adequate for analysis and reporting with excellent response rate. The data was analyzed using SPSS version 24.

4.2 Demographic Information

Demographic information, generally describe the characteristics of the respondent gender, age, educational background, martial status, occupation, year of experiance and types of e-baning used by customers were asked. The results obtained from the structured questionnaires are present on the table below.

Table 4.1 Demographic Analysis

Demographic Character	Frequency	Percentage
Gender		
Male	209	58
Female	151	42
Total	**360**	**100**
Age		
18-25	179	50
26-35	112	31
36-45	35	10
Above 46	34	9
Total	**360**	**100**
Educational level		
Primary	58	16
High school	66	18
Diploma	114	32
Degree	109	31
Masters & above	13	3
Total	**360**	**100**
Marital status		
Single	212	59
Divorced	21	6
Married	124	34
Widow	3	1
Total	**360**	**100**
Occupation		
Unemployed	101	28
Business person	57	16
Student	93	26
Salaried	109	30
Total	**360**	**100**
Year of Experience		
Up to a year	60	17
2-3 years	72	20
4-5 years	81	22
Above 5 years	147	41
Total	**360**	**100**

Table 4.2 Types of E-Banking

Types of E-Banking		
ATM	267	74
Mobile Banking	16	4
POS	75	21
Intrernet Banking	2	1
Total	**360**	**100**

Source*:* Own survey (2021)

The result obtained from demographic characteristics of the respondents shows that 58% are males and the rest 42% are females this shows that e-banking is largely prefer by males than female. The majority of the respondents constitute 50%(or 179) lied in the 18-25 year age group. The second dominant age group was the 26-35 age group, comprise 31% or (112), follow by the 36-45 year age group with 10 %(or 35) and the respondents belongs to the last two age groups 9 %(34) from above 46 years.The result also shows more than 70.6 % of ATM users age ranges from age 18–35 indicating that this banking channel is more prefered by younger societal groups. Respondent is educational status shows: 16% (58) are Primary , High school 18% (66) diploma 31% (109), Degree 32% (114) and masters and above have 18% (3). Marital status of the respondents were observed as 59% (212) were Single,6%(21) are Divorced, Married are 34%(124) and Widow are only 1%(3).from the above result unmarieds are more users of e-banking service. In respect to occupation side the respondents were the mix of salaried (30%), business person (16%), unemployed (28%), and student (26%) from this result the salaried persons are more users of e-banking service.Regarding the duration service utilization,17% (60) of respondents have used e-banking for not more than a year, 20% (72) have used e-banking for 2 to 3 years, 22% (81) have used e-banking for 3 to 4 years and 41% (147) have used e-banking for more than 5 years. This shows that numbers of e-banking users are relatively increasing since the past four years. Types of E-Banking Regarding Types of E-Bankingservice users of ATM are 74% (267), Mobile Banking users are 4% (16),POS users are 21% (16),and Intrernet Banking users are only 1% (2).the above result shows that custmoers highly use ATM compared to other e-banking users so the banksprefer to creat awarreness and training for their customer about other e-banking product and service to get benefit and to met thier aim making of cashless socity.

4.3. Data Analysis

The researcher use two type of analysis technique which are descriptive analysis to interpret result from questionnaire using frequency table and figure by from result reflecting mean and standard deviation and inferntial technique which is Correlation and regression analysises to check and understand the relationship and magnitude between dependent variable Customer satisfaction and independent variable e-banking service quality respectivelly.

4.4. Descriptive Analysis of Service Quality Measurements

This study used SERVQUAL model to measure the customer's expectation and perception on the e–banking service provided by Commercial Bank of Ethiopia. In this model there are 26 questions presented in relatation to the service quality dimensions. These five dimentions are: tangibility, reliability, responsiveness, assurance and empathy. It used the five Liker scale to measure the performances of e-baning service. The mean scores of perception of customers in terms of service quality attributes have been demonstrate in values angel from 3.273 to 3.45. In terms of the Five dimensions the highest mean score was responsiveness (3.45) with standard deviation (SD=1.047), followed byEmpathy(3.33;SD=1.208),Reliability (3.29; SD= 1.0874), Tangibility (3.282; *SD*=1.166),and assurance (3.271;SD=1.2) in aescending order.

The response of Responsiveness was however, more satisfactory relative to the other four dimensions of service quality. Thus in addressing the e-banking service quality delivered by Commercial Bank of Ethiopia emphasis should be placed on these four dimensions (Empathy, Reliability, Tangibility , and Assurance) though there is more room for improvement in the Responsiveness dimensions.

Table 4.3 Service quality and atributes and dimentional mean score and standard devation

	N	Mean	Std. Deviation
The Bank performs its Electronic banking services without errors	360	3.62	1.163
Electronic banking services are performed within the promised time	360	3.01	1.143
Bank shows deep concern in solving my problems, related to electronic banking business operations	360	3.23	1.070
I have not had difficulties with electronic banking services such as ATM card and Mobile banking operations of this bank.	360	3.43	.941
The electronic banking service helps in keeping records correctly	360	3.16	1.120
Reliability	**360**	**3.29**	**1.0874**
Bank quickly respond to my requests on electronic banking service		**3.23**	**1.130**
The Bank is quick in eliminating potential errors on electronic banking operations.	360	3.33	1.124
The E-banking of the bank provides me with convenient options for reversing or adjusting transaction	360	3.59	.960
The bank's e-banking service offers a meaningful guarantee for customers	360	3.65	.965
Responsiveness	**360**	**3.45**	**1.047**
Bank tells me exactly when a service will be performed	360	3.41	1.179
Employees of bank have the knowledge to answer customer questions	360	3.23	1.124
Bank employees are trustworthy about ATM and Mobile service delivery.	360	3.23	1.164
The bank does not misuse my personal informations related to e-banking.	360	3.30	1.266
I feel safe in my transactions with the bank.	360	3.10	1.296
Information provided by the e-banking is clear and understandable.	360	3.36	1.241
Assurance		**3.273**	**1.2**
Bank office is visually appealing for electronic banking service.	360	3.18	1.259
The Bank has modern-looking technical equipment for electronic banking service.	360	3.21	1.215
Printed materials like Visa cards and printing receipts look attractive.	360	3.14	1.157
E-banking provides more physical facilities to the customers	360	3.41	1.036
Bank has Sufficient number of ATMs and cash limit to serve its customers.	360	3.10	1.167
Tangibility		**3.282**	**1.166**
Bank knows to advise me what would be the most proper Ebanking service for my specific needs.	360	3.11	1.256
E-banking services like Mobile and ATM do not require a lot of effort and time to get the services.	360	3.13	1.094
It is easy to find what I need on the E-banking services.	360	3.25	1.220
The bank provides financial advices via the e-banking.	360	3.23	1.229
The bank gives me Up to date contents for E-banking	360	3.68	1.261
It is quick to complete a transaction through the e-banking	360	3.60	1.190
Emphaty		**3.33**	**1.208**

Source: Own Survey, 2021

4.5 Level of Customer Satisfaction

Customer satisfaction is a measure of how products and services provided by a company inorder to meet or surpass customers expectation. The researchers, Parasuraman, Zeithaml, and Berry (1985), proposed that when perceived service quality is higher than customer expectation, then it will lead to improve in customer satisfaction.

For measuring the level of customer satisfaction in CBE e-banking users, this study comprised a question that asked the expectation and perception level of the respondents with a statement "I am totally satisfied with the overall e-banking service quality of CBE" and alternative answers of "strongly disagree, disagree, neutral, agree and strongly agree". The customer's response for the above mention statement is summarize and presented in the table 4.3 below.

Table 4.4 Overall Satisfaction Items

Over all satisfaction	Mean	Standard Devaition
I am satisfied with the E-banking service delivered by your bank.	3.75	.997
I am satisfied with the bank's internet based service.	3.75	1.006
Over all services of internet based banking is better than traditional banking service.	3.53	1.089
I am satisfied by the SMS notification services of every e-banking transactions	3.82	1.055
I am satisfied by e-banking service packages that are provided 24hrs in a day and 7 days in a week including holiday via ATM ,M-banking	3.66	1.134
I am satisfied by e-banking that make me always not to visit bank in urgent case	3.56	1.104

Source: Own Survey, 2021

The above table exhibited that from the listed item incuded in the overall satisfaction variables I am satisfied by the SMS notification services of every e-banking transactions has the highest mean 3.82 with the standard devation 1.055 and the least mean scorer is Over all services of online banking is better than traditional banking service.

4.6 Tests of Assumptions of multiple Regression Model

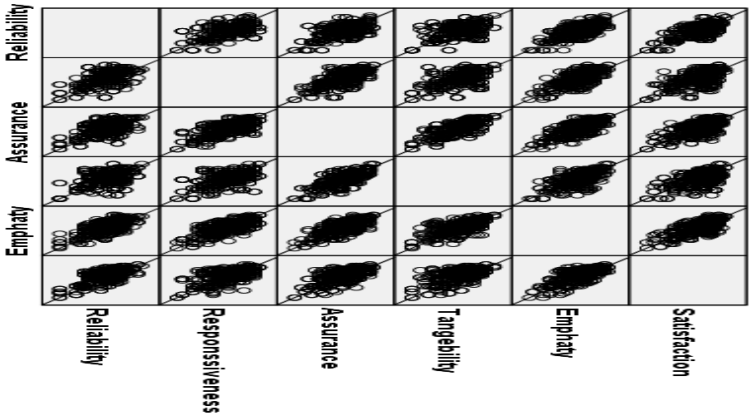
Most statistical tests rely on certain assumptions about the variables used within an analysis to ensure that the analysis is as accurate and true as possible, and therefore valid(Osborne &Waters, 2002; Stevens, 2009). Assumptions are critical in statistics because if the underlying assumptions are not valid, then the process is unreliable, unpredictable, and out of the researcher's control (Stevens, 2009). This could lead the researcher to draw conclusions that are not valid or scientifically unsupported by the data. A Multiple regression examines the relationship between a single outcome measure and several predictor or independent variables (Jaccard, Guilamo-Ramos, Johansson &Bouris, 2006). The assumptions of multiple regressions include the assumptions of linearity, normality, independence of errors, and Homoscedasticty, and Collinearity which will be discussed separately in the proceeding sections before a complete regression analysis can be performed.

4.7 Linearity

Relationships between variables will be supposed as linear when they are consistent and directly proportional to each other (Stevens, 2009; Tabachnick&Fidell, 2006). Violations of this assumption may biased result in the estimates obtained from the analysis; therefore, it may not be good to portray the accurate or true population values (Osborne & Waters, 2002; Tabachnick&Fidell, 2006). According to Hoxx (1995), the results from the analysis will underestimate the true relationship between the independent variables (predictor variables) and dependent variable if the relationship is not linear.

The linearity assumption can be test through the visual examination of residual plots (Kivilu, 2003; Osborne & Waters, 2002; Stevens, 2009). A residual scatter plot is a figure that depicts one axis for the standardized residuals and the other axis for the predicted values (Stevens, 2009). If the linearity assumption is met, the standardized residuals will scatter randomly around a horizontal line which represents the standardized residuals equaling zero (Stevens, 2009; Tabachnick&Fidell, 2006). As can be seen from the figure 4.1 the data in this research met linearity assumption.

Figure 4.1 Linearity



4.7 Normality

Screening for normality is an important step when conducting a multiple regression as assuming residuals are normally distributed (Stevens, 2009; Tabachnick&Fidell,2006).Non-normal distributions that are positively or negatively skewed, contain large kurtosis, or have extreme outliers can distort the obtained significance levels of the analysis, resulting in the standard errors becoming biased (Osborne & Waters, 2002). Though a multiple regression is generally consider quite robust to violations of normality, a small sample size can actually increase the seriousness of non-normality of a distribution (Osborne & Waters, 2002). Outliers may have stronger influence on normal distribution when the sample size is small, whereas standard errors for both skewness and kurtosis decrease with larger samples, as there will most likely be only minor deviations from normality (Tabachnick&Fidell, 2006).

Figure 4.2 Normality

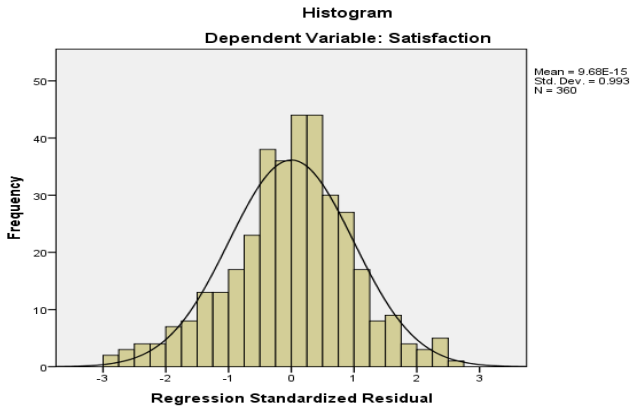


Figure 4.2: Histogram of Regression Standardized Residual

Source: Own Survey, 2020

In addition to Normal Probability plots of residuals, the histogram was use to test the normality of data. Hence, Figure 4.3 revealed that the residuals are normally distribute around its mean.

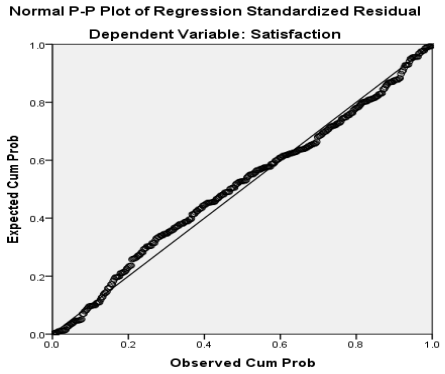


Figure 4.3: Normal P-P Plot of Regression Standardized Residual

The normality assumption can be test through the visual examination of normal probability plots (P-P plots) of the standardized residuals. In a P-plot the normal distribution is depicted a random scatter of plots around 45-degree line. Figure 4.2 showed the normality of data in this research.

4.8 Independence of Errors

A Multiple regression assumes that the errors, which are the residuals between the actual score and the estimated score obtained through the regression equation, are independent and there is no serial correlation (Stevens, 2009). Having no serial correlation between the residuals implies that the size of the residual for one variable has no impact on the size of the residual for another variable. Therefore, the independence assumption requires that the variables and residuals are independent and the subjects are responding independently of each other (Stevens, 2009). The independence assumption is a significant assumption that should be investigates prior to any interpretation of multiple regression analysis, as violation of this assumption could hold critical implications (Stevens, 2009). Even a slight violation of the independence assumption should take seriously, as it can greatly increase the risk of Type I error, resulting in the risk of falsely rejecting the null hypothesis several times greater than the level of error assumed for the test (Stevens, 2009).

The Durbin-Watson is a statistic test that can used to test for the occurrence of serial correlation between residuals. The value of Durbin-Watson (DW) statistics ranges between 0 and 4. A Durbin –Watson close to 2.0 is consistent with no serial correlation, while a number

closer to 0 means there is, probably, serial correlation. In this study, DW has the value as 1.701, which is closer to 2.0.and also The value of Durbin-Watson has lies between 1.5 and 2.5 indicates the data is not autocorrelated. Thus, there is no serial correlation between the variables that have been use in this study.

Table 4.5 Durbin-Watson Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781[a]	.609	.604	.46081	1.701

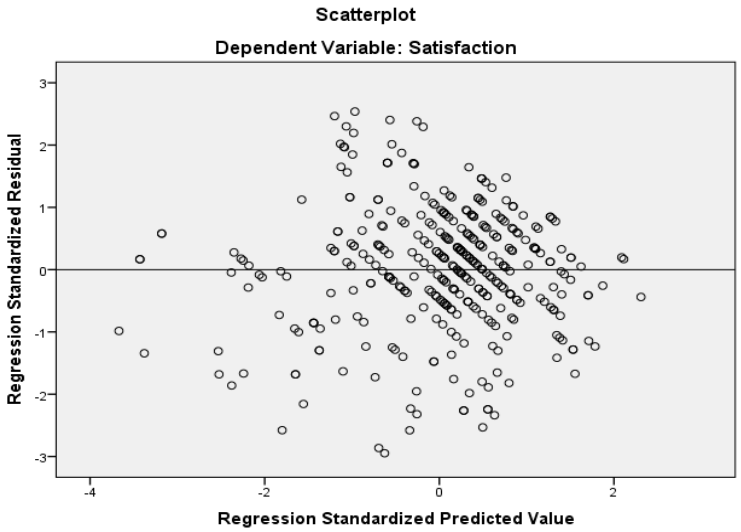
a) Predictors: (Constant), Emphaty, Tangebility, Reliability, Responssiveness, Assurance
b) Dependent Variable: Satisfaction

4.9 Homoscedasticty

Homoscedasticity works with the assumption that refers to equal variance of errors across all levels of the independent variables (Osborne & Waters, 2002). This is to mean researchers assume that errors spread consistently across variables (Keith, 2006). This is an evident when the variance around the regression line is the same for all values of the predictor variable. When Heteroscedasticity is mark it can lead to distortion of the findings and weaken the overall analysis and statistical power of the analysis, which result in an increased possibility of Type I error, erratic and untrustworthy F-test results, and erroneous conclusions (Aguinis, Petersen, & Pierce, 1999; Osborne & Waters, 2002).

It can be demonstrated by looking at a plot of the standardized residuals by the regression standardized predicted value (Osborne & Waters, 2002). Particularly, scatter plots of residuals with independent variables are the method for examining this assumption (Keith, 2006). Ideally, residuals are randomly scattered around zero (the horizontal line) providing even distribution (Osborne & Waters, 2002). Heteroscedasticity is indicated when the scatter is not even; fan and butterfly shapes are common patterns of violations. Figure depicts the Homoscedasticty of the data in this research.

Figure 4.4 Homoscedasticity



Based of the scaterplot above,it apperars that the spots are diffused and do not form a clear specific pattern.so it can be conclude that the regression model does not occur hetroskedastistics problem.

4.10 Multi-collinearity

In multiple regression model, before making a regression analysis it is important to test the multicollineartity test. The multi-collinearity test is a test to identify a strong correlation between two or more predictors in a regression model. This assumption can be assessed by examining tolerance and the variance inflation factor (VIF). And by using correlation matrx VIF values well below 10 and the tolerance statistics well above 0.2 can safely to conclude that there is no collinearity within the data (Field,2009). And also the correlation between the indpendent variable lies less than 0.8 is an indicator of absence of multi-collinearity with in the data thus the model is pass both test. A small tolerance value indicates that the variable under consideration is almost a perfect linear combination of the independent variables already in the equation and that it should not be added to the regression equation. A good regression model must not have a strong correlation among its independent variables or must not have a multi-collinearity problem and that the value of variance inflation factor (VIF) must have a value between 1 and 10 and the tolerance level should be more than 0.2

Table 4.6 Collinerity Statistics

Model	Collinerity Statistics	
	Tollerance	VIP
Reliability	.513	1.950
Responsiveness	.436	2.294
Assurance	.321	3.112
Tangebility	.422	2.371
Emphaty	.300	3.338

4.11 Correlation Analysis

Table 4.7 Correlation analysis

		Reliabiliy	Responsiveness	Assurance	Tangebility	Empathy	Customer satisfaction
Reliability	Pearson correlation	1					
	Sig.(2-tailed)						
Responsiveness	Pearson correlation	.571**	1				
	Sig.(2-tailed)	.000					
Assurance	Pearson correlation	.569**	.678**	1			
	Sig.(2-tailed)	.000	.000				
Tangebility	Pearson correlation	.435**	.540**	.729**	1		
	Sig.(2-tailed)	.000	.000	.000			
Empathy	Pearson correlation	.676**	.705**	.726**	.668**	1	
	Sig.(2-tailed)	.000	.000	.000	.000		
Customer satisfaction	Pearson correlation	.702**	.587**	.629**	.548**	.702**	1
	Sig.(2-tailed)	.000	.000	.000	.000	.000	
Source:Own survey (2021)							

Pearson's correlation coefficient (r) measures the strength and direction of a linear relationship between two variables. Values of Pearson's correlation coefficient are always between -1 and +1. A correlation coefficient of 1 specifies that two variables are perfectly related in a positive sense; a correlation coefficient of -1 indicates that two variables are perfectly related in a negative sense, and a correlation coefficient of zero (0) shows that there is no linear relationship between the two variables (Pallant, 2007). Correlation is also significant at $p < 0.01$ level (2-tailed), zero $< r < 0.1$ = little or no relationship, $0.1 < r < 0.5$ = weakly related and $0.5 < r < 0.9$ = strongly related (Pallant, 2007).

As it shown in the above table, each variable is perfectly correlated with itself indicating that r=1 along the diagonal of the table. The results indicate positive and significant relationship between variables as stated here: reliability and customer satisfaction ($r = 0.702$, $p < 0.05$), responsiveness and customer satisfaction ($r = 0.587$,$P < 0.05$), assurance and customer satisfaction ($r = 0.629$, $P < 0.05$), tangibility and customer satisfaction ($r = 0.548$,$P < 0.05$), empathy and customer satisfaction ($r = 0.702$, $p < 0.05$). The finding on table further indicates that the strongest relationship is found between reliability and customer satisfaction. All service quality dimensions such as reliability, responsiveness, assurance, tangibility, and empathy have a positive relationship with customer satisfaction.

4.12 Multiple Linear Regression Analysis

Multiple linear regression analysis is a method used to examine the relationship between two or more independent variables and one dependent variable. The aim of this analysis is to examine the dimensions of E-Banking service quality towards the customer satisfaction in CBE and to recognize which of the dimension of service quality causes the most significant effect toward customer satisfaction in CBE**.**

Table 4.8 Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781[a]	.609	.604	.46081	1.701

c) Predictors: (Constant), Emphaty, Tangebility, Reliability, Responssiveness, Assurance

d) Dependent Variable: Satisfaction

The R value (0.781) indicates that the presence of strong correlation between predictors and dependent variable. Adjusted R2 is a measure of the loss of predictive power or shrinkage in

regression. The adjusted R2 indicates us how much variance in the outcome would be considered for if the model had been derived from the source population from which the sample was taken Adjusted R-squared is always smaller than R-squared, but the difference is usually very small unless you are trying to estimate too many coefficients from too small a sample in the presence of too much noise.The model summary indicated that SERVQUAL dimensions(Emphaty, Tangebility, Reliability, Responssiveness, Assurance) explained 60.4% of the variation in customer satisfaction and the remaining 39.6 % of the variation of customer satisfaction was explained by factors that are not included in this model. Therefore, a further research should be conducted to investigate the other factors that affect customer satisfaction in commercial bank of Ethiopia particularly north addis ababa district. The R value (0.609) indicates that the presence of strong correlation between predictors and dependent variable.

Table 4.9 ANOVA

ANOVA[a]

Model	Regression	Sum of Squares	df	Mean Square	F	Sig.
1	Residual	117.197	5	23.439	110.385	.000[b]
	Total	75.169	354	.212		
	Regression	192.367	359			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Emphaty, Tangebility, Reliability, Responssiveness, Assurance

ANOVA results were used to test the overall model significance. The results presented on Table 4.6 revealed that the overall model was significant. This finding was supported by an F statistic of 110.385 and a p-value of 0.000. So for this survey data shown on the table 4.6 F is 110.385, which is significant at p <0.001 (because the value in the column labeled Sig. is less than 0.001). This result tells us that there is less than a 0.1% chance that an F-ratio this large would happen, if the null hypothesis proposed about F-ratio were true. Therefore, we can conclude that our regression model results in significantly better prediction of customer satisfaction and that the regression model overall predicts the customer satisfaction well or the model is a good fit the data.when we interpret the anova result as the five independent variables have joint and significant relationship with customer satisfaction and the model is statisticaly significant.

Table 4.10: Model Coefficients between service quality dimensions and customer satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Beta	Beta	t	Sig.	Tolerance	VIF
(Constant)	.563	.131		4.299	.000		
Reliability	.389	.046	.395	8.509	.000	.513	1.950
Responssiveness	.052	.044	.059	1.168	.244	.436	2.294
Assurance	.113	.057	.117	1.992	.047	.321	3.112
Tangebility	.089	.048	.096	1.871	.062	.422	2.371
Emphaty	.248	.062	.245	4.032	.000	.300	3.338

a. Dependent Variable: Satisfaction

As per the multiple regression result customer satisfaction is positively influence by tangibility, reliability, responsiveness, assurance and empathy. Based on the Unstandardize coefficients, reliability has a coefficient of (B= 0.389) with significant value equal 0.000(<0.05).Responssiveness has a coefficient of (B=0.052 0.244(>0.05), assurance (B=0.113, sig.=0.047 (<0.05)), tangibility (B=0.089, sig. =0.062>0.05) and empathy (B=0.248, sig. =0.000<0.05).Thus, reliability dimension has the most significant impact on customer satisfaction and responssiveness has the last rank.The reliability,assurance and empathy has a positive and significant effect on customer satisfaction though responsiveness and tangibility has a positive but insignificant influence on customer satisafaction becuase their P value is greater than the standard error(> 0.05).when we intrprat the individual variable separetly reliability (B1)=0.389 holding the other factors are constant a one uint increase in the reliability dimention would have customer satisfaction increased by 38.9 unit when the measurement is in unit.

Model specification:

CSEB = β1 + β2 Rel + **β3** Res + **β 4** Tan + **β 5** Ass + **β6** Emp + ε

CSEB = .563 +.389Rel+.052Res+.113Tan+.089Ass+.248Emp+ ε.....this is the optimal model based on the finding of this study.

4.13 Hypothesis Testing

Under this sub title, the research hypothesis will be test as per the research finding

- **Hypothesis 1**: E-Banking service reliability has no positive and significant effect on customer satisfaction. Reliability affects customer satisfaction positively with beta

coefficient 0.389 with 0.000 significant values. This implies that an increase in tangibility will affect customer satisfaction positively. This Hypothesis is reject.

- **Hypothesis 2**: Electonic Banking service Responsiveness has no positive and significant effect on customer satisfaction. Responsiveness affects customer satisfaction positively with beta coefficient 0.052 with 0.244 significant values. This implies that an increase in reliability will affect customer satisfaction positively but not significantly This Hypothesis is failed to reject.

- **Hypothesis 3**: Electonic Banking service Assurance has no positive and significant effect on customer satisfaction. Assurance affects customer satisfaction positively with beta coefficient 0.133 with 0.047 significant values. This implies that an increase in Responsiveness will affect customer satisfaction positively. This Hypothesis is reject.
- **Hypothesis 4**: Electonic Banking service Tangebility has no positive and significant effect on customer satisfaction. Tangebility affects customer satisfaction positively with beta coefficient 0.089 with 0.062 significant values. This implies that an increase in Assurance will affect customer satisfaction positively but ont significantly. This Hypothesis is failed to reject.
- **Hypothesis 5**: Electonic Banking service Empathy has no positive and significant effect on customer satisfaction. Empathy affects customer satisfaction positively with beta coefficient 0.248 with 0.000 significant values. This implies that an increase in Empathy will affect customer satisfaction positively. This Hypothesis is reject.

Descriptive analysis of opportunities and challenges of electronic banking

Table 4.11 Customers response on the opportunities of electronic banking service

Statement/Questions	**SDA**		**DA**		**N**		**A**		**SA**		**Total (%)**
Freq.	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	
Electronic banking service saved my time via improved Speed and efficiency.	34	9	23	6	61	17	148	41	94	26	100
Electronic banking has the advantage of decreasing the longer queue available in the banking hall.	38	11	46	13	17	5	144	40	115	31	100
The access and availability of mobile phones with vital functions has facilitated E-banking system for me	39	10.8	32	8.8	25	7	165	45.6	99	27.3	100
Electronic banking helped me to transfer of money by using mobile banking system without going to the branches hall	32	8.8	49	13.5	26	7.2	163	45	90	25	100
E-payment using POS terminals have made me use more cards than carry cash on hand.	29	8.0	52	14.4	29	8.0	139	38.4	111	30.7	100
E-banking made customer alert in controlling their transactions.	28	7.7	53	14.6	25	6.9	149	41.2	105	29	100
E-banking system is becoming more understandable and easier due to the establishment of ICT research and development team in the bank.	27	7.5	33	9.1	31	8.6	165	46	104	28.7	100

From question item.1, 26% strongly agreed, 41% agreed while 17% of respondents were neutral. More over 6% disagree and 9% strongly disagree with the result compilation. This implies that electronic banking service provided by commercial banks saved customers time via enhancement of speed and efficiency of the service.

From question item.2, (31) and (40%) of respondents are strongly agreed and agreed respectively with the question, 5% were neutral while 13% and 11 disagreed and strongly disagreed respectively so that it can be conclude that one of the advantage of e-banking system is decreasing the longer queue available in the banking hall of commercial banks. As per Question.3, 27.3% strongly agreed and 45.6% agreed while 7% were neutral. More over 8.8% and 10.8% were disagreed and strongly disagreed respectively. This consolidates the fact that although many respondents shared mobile phones availability with various functions facilitated e-banking system utilization. Some of them were undecided on the issue which indicates customers' lower tendency towards mobile banking. From question item 4, (25%) and (40%) of the respondents strongly agreed and agreed respectively up on the question, 7.2 % were neutral while 13.5% and 8.8% were disagreed and strongly disagreed. Therefore it can be conclude that many of respondents as customers were not either mobile banking users or were not access its function of transferring money. From question item 5, (30.7%)and (38.4%) of respondents were strongly agreed and agreed respectively under the question, 8% were neutral when 14.4% and 8% of respondents are disagreed and strongly disagreed. This indicated that even though may of customers agreed on the advantage of POS made them not to carry cash during purchasing habit. Some of them were undecided due to the researcher suggested that no awareness and habit of using e- payment in the study area. From question item 6,29 % strongly agreed, 41.2% agreed while 6.9 % were neutral. Beside this 14.6%and 7.7% of respondents were disagreed and strongly disagreed respectively. It is safe to conclude that customers became aware and alert of controlling their financial transactions or accounts using e-banking service. Based on the question 7, (28.7%) strongly agreed, (46%) agreed while (8.6%) are neutral with the research question.and also to this 9.1% and 7.5% of respondents are disagreed and strongly disagreed. This implies that customers were not informed and got awareness of the contribution of information and communication technology research development team in making e- banking system ease to use.

Table 4.12 Customers Response On The Challenges Of Electronic Banking Service

Statement/Questions	SDA		DA		N		A		SA		Total (%)
Freq.	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	
Social and cultural barriers such as High rate of illiteracy, less awarenessandnegativeperception	35	9.7	30	8.3	28	7.7	166	45.9	101	27.9	100
Infrastructural barriers like Low level of internetpenetration, weak telecommunication and frequent power interruption.	20	5.5	98	27.1	44	12.2	136	37.6	62	17.1	100
Economic factor such as high cost of internet, low incomes and heavy investment are challenge in E-banking	26	7.2	80	22.1	36	9.9	157	43.4	61	16.9	100
Management and banking issues like resistance to change in technology among staffs and customers and E-banking possess risks	34	9.4	80	22.1	49	9.9	154	42.6	43	11.9	100
Legal and security issues such as Cyber security issues and lack of suitable legal and regulatory frame works of E-payment	24	6.6	93	25.7	42	11.6	154	42.5	47	13	100
Knowledge barriers such as Lack of trust by customer, lack oftechnologicalknowledge and language barriers	32	8.8	74	20.4	43	11.9	156	43.1	55	15.2	100

Source; Own survey, 2021

From question 1, 27.9% of the e-banking users are strongly agree that are there is highest challenge, 45.9% of the e-banking users are agree the existance of higher challenge , 7.7% are indiferent the existance of the stated challenge and 8.3% and 9.7% of respondents are disagree and strongly disagree respectifly about the stated challenge considered to sum up 73.8% of respondents are agree about the challenge so the bank management and the

cncerned organ should give attension and make an improvement on social and cultural barrierashighchallengeofe-banking.

From question 2, 17.1% of the e-banking users are strongly agree that are there is highest challenge, 37.6% of the e-banking users are agree the existance of higher challenge , 12.2% are indiferent the existance of the stated challenge and 27.1% and 5.5% of respondents are disagree and strongly disagree respectifly about the stated challenge considered to sum up 44.7% of respondents are agree about the challenge so the bank management and the cncerned organ should give attension and make an improvement on Infrastructural barriers like Low level of internetpenetration, weak telecommunication and frequent power interruption.

From question 3, 16.9% of the e-banking users are strongly agree that are there is highest challenge, 43.4% of the e-banking users are agree the existance of higher challenge,9.9% are indiferent the existance of the stated challenge and 22.1% and 7.2% of respondents are disagree and strongly disagree respectifly about the stated challenge considered to sum up 63.3% of respondents are agree about the challenge so the bank management and the cncerned organ should give attension and make an improvement to retain the existing customer and extract new customer on Economic factor such as high cost of internet, low incomes and heavy investment are challenge in E-banking from the bank perespective.

From question 4, 11.9% of the e-banking users are strongly agree that are there is highest challenge, 42.6% of the e-banking users are agree the existance of higher challenge,9.9% are indiferent the existance of the stated challenge and 22.1% and 9.4% of respondents are disagree and strongly disagree respectifly about the stated challenge considered to sum up 54.5% of respondents are agree about the challenge so the bank management and the cncerned organ should give attension to creat awareness about how to use and the benefit as well to retain the existing customer and extract new customer on Management and banking issues like resistance to change in technology among staffs and customers and E-banking possess risks.

From question 5, 13% of the e-banking users are strongly agree that are there is highest challenge, 42.5% of the e-banking users are agree the existance of higher challenge,11.6% are indiferent the existance of the stated challenge and 25.7% and 6.6% of respondents are disagree and strongly disagree respectifly about the stated challenge.

From question 6, 15.2 % of the e-banking users are strongly agree that are there is highest challenge, 43.1% of the e-banking users are agree the existance of higher challenge,11.9% are indiferent the existance of the stated challenge and 20.4% and 8.8% of respondents are disagree and strongly disagree respectifly about the stated challenge considered to sum up 58.3% of respondents are agree about the challenge so the bank management and the cncerned organ should work hardly to win the confidence and trust of the customer by giving techinical and developmental training about how to use and the benefit as well as the security of thrir bank account transaction to retain the existing customer and extract new customer.

CHAPTER FIVE

SUMMARY, CONCLUSIONS ANDRECOMMENDATIONS

This chapter presents a Summary Of Findings, Conclusions, and Recommendations . Findings from this study are base on analysis in the previous chapter and in reference to the research questions in chapter one, presents the recommendations for further studies.

5.1 Summary of Major Findings

According to the descriptive analysis it can be concluded that among the majority of current e-banking users, males are the dominant user of e-banking services,in acordance to the age group the majority of curent electronic bankings are between 18-25 and 26-35, in acordance to the educational level degree holders,occupationaly,salerried are the major users, in martial status single are the major users followed by married in accordance to years of expriance 4-5years and above 5 years are the dominant and finaly the majority of the target population that uses e-banking services prefer ATM.

Based on The correlation analysis among the explanatory variables reliability, empathy and responsiveness are good predictors of level of customer satisfaction in electronic banking due to their higher correlation coefficient in relation to assurance and tangibility.

The independent variables those are the five service quality dimensions, have a positive relationship with customer satisfaction in e-banking as per the hypothesis tested and agreed. Beside for the response of question in reliability,responsiveness,assurance,Tangibility and empathy leadsto increase in customer satisfaction by 38.9%, 5.2%, 11.3%, 8.9% and 24.8% respectively which are significant at 5% level of confidence.The results of this study further showed that reliability is the most significant factor to have both positive and significant affect on customer satisfaction followed by empathy and assurance.

On the bases of the findings all independent variables have significant effect on Customer satisfaction except responsiveness and tangibility which has sig value 0.244 and 0.062 respectively which is greater than 0.05 level of significance. This result is suported by Malik et al., (2011) showed that tangibility has no contribution to customer satisfaction (as cited by Kassa, 2012). The study by Mohammad and Alhamadani (2011), found that responsiveness has a positive but insignificant effect on customer satisfaction. On the

contrary, the study of Kassa (2012) reported that responsiveness has a negative and insignificant effect on customer satisfaction.

In ranking Perspective among the opportunities item in E-banking the Electronic banking service saved my time via improved Speed and efficiency and Electronic banking has the advantage of decreasing the longer queue available in the banking hall has the highest score that the respondents response in this study.

In ranking Perspective among the challenges in E-banking the first higher challenge were infrastructural barriers like low level of internet satisfaction, weak telecommunication and frequent power interruption Security and Resistance to change in technology among users were the second and third challenge of electronic banking respectively. Economic factor are the least factor that challenge user from using Electronic banking.

5.2 Conclusion

Briefly based on study findings, most E-Banking services offered by CBE in north district include cash withdrawal, mini/statement, balance checking, transfer fund from one acount to others and recharge services.

All the service quality attributes adopted from empirical researches are valid attributes of E-banking service quality and that all the five service quality dimensions significantly associate with customer satisfaction. The result have further found that Empathy, Reliability, and assurance can be the better predicator of satisfaction level on electronic banking service delivery due to their higher value based on the unstandardized beta coefficient relatively to other Dimensions. On the bases of the findings all independent variables have significant effect on Customer satisfaction except responsiveness and tangibility which has sig value greater than 0.05 level of significance.

The study acknowledged that customers do face problems when accessing E-Banking service. Such problems include network/machine breakdown, card retention, limited amount of money to be withdrawn per day and other complications. The difficulties in transacting business electronically were the main challenges associated with electronic Banking.In relation to infrastructure (telecommunication and power), lack of centrally followed country initiative in similar manner with other African countries, strong cash habit,

technology phobia and lack of trust on it and lack of merchants‘ willingness to use in POS service are external challenge.

5.3 Recommendations

Based on the results of the study, I forward the following recommendations:responsiveness and tangibility dimension were considered as among the most important factors influencing customers satisfaction. However, the customers of the commercial bank of Ethiopia north addis ababa district target branches were found poorly satisfied in terms of the responsiveness and tangibility dimensions. One way of addressing this could be through improving the appearance of physical facilities, equipment, personnel and communication materials. This is mainly related to improving the physical appearance of e-banking with the commitment to help customers and to provide prompt service. The may refer to the help customers get when they bring forward E-banking complaints. This is to suggest the bank management inorder to focus on this determinant to maximize customer satisfaction.

The modern banking business is highly dominated by technology utilization so that commercial bank of ethiopia has to be ready to accommodate the establishement of digital economy at the national level to lower the cost of the bank and provides a chance to retain the deposit in its banking system,reduce the queue of customer at brances and work load of the staff and create convinence for customers and increase their loyality by increase E-payment

Service Efficiency and Effectiveness to ensure provision of the promised convenience, reliable, secured, and fast service to the customers. Therefore, establishing a robust payment system, efficient and effective service delivery process, streamlined support and maintenance process and having competent staffs are among the key considerations to increase service availability and reliability as well as satisfaction.

CBE E-banking Service requires integrated and collaborative approach with all stakeholders. Various stakeholders must be identified that have a critical role in the development of E-payment in the country. Changing the cash habit of the society requires involvement of various stakeholders. There is also enormous economic expansion going on which increased the size of the government payment in terms of expenditure and revenue that necessitated the need to have an efficient payments system such as Epayment services, which again requires collaborations and engagement with government organs.

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QUESTIONNAIRE

Please give your score based on service you received at the branch bank and your level of agreement in the E-banking service delivery. So that 1 means you strongly disagree with the statement, 2 means you disagree with the statement, 3 means you neither agree nor disagree (neutral), 4 means you agree with the statement and 5 means you strongly agree with the statements.

1. E-banking and customer satisfaction

No.	Description of dimensions of quality of customer satisfactions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	I am satisfied with the E-banking service provided by your bank					
2	I am satisfied with the bank's online based service quality					
3	Over all service of online banking is better than traditional banking service and my expectation					
4	I am satisfied e-banking informed me by SMS					
5	I am satisfied by e-banking give service 24hr in a day and 7 days in a week's including holiday via ATM ,M-banking					
6	I am satisfied by e-banking to always not to visit bank in urgent case					

2. Relationship between Service quality dimensions and customer satisfaction using electronic banking in CBE.

Service Quality	Description of dimensions of quality of customer satisfactions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
Reliability	The Bank performs its Electronic banking services without errors					
	Electronic banking services are performed within the promised time					
	Bank shows sincere concern in solving my problems, related to electronic banking business operations					
	The bank performs electronic banking service exactly as promised.					
	I have not had difficulties with electronic bank services such as ATM card and Mobile banking operations of this bank.					
	The electronic banking service helps in keeping records correctly					
Responsiveness	Bank quickly respond to my requests on electronic banking service					
	The Bank is quick in eliminating potential errors on electronic banking operations.					
	Bank performs the services right the first time					
	The E-banking of the bank provides me with convenient options for reversing or adjusting transaction					
	The bank's E-banking service offers a meaningful guarantee for customers					
	Response of service through E-banking is very prompt and quick.					
	Bank tells me exactly when a service will be performed					
	Employees of bank have the knowledge to answer customer questions					
	Bank employees are trustworthy about ATM and Mobile service					

Service Quality	Description of dimensions of quality of customer satisfactions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
Assurance	delivery.					
	This branch of the bank does not misuse my personal information					
	I feel safe in my transactions with the bank					
	Information provided by the bank is clear and understandable					
Tangibility	Bank office is visually appealing for electronic banking service.					
	The Bank has modern-looking technical equipment for electronic banking service.					
	Printed materials like Visa cards and printing receipts look attractive.					
	E-banking provides 24 hours, 365 days a year service to customers					
	E-banking provides more physical facilities to the customers					
	Bank has Sufficient number of ATMs and cash limit to serve its customers.					
Empathy	Bank know to advise me what would be the most proper E-banking service for my specific needs.					
	E-banking services like Mobile and ATM do not require a lot of effort and time to get the services.					
	It is easy to find what I need on the E-banking services.					
	The bank provides the Provisions of financial advices					
	The bank gives me Up to date content for E-banking					
	It is quick to complete a transaction through the bank's electronic service.					

3. Opportunities' to boost customer satisfaction through E-banking

No.	Description of dimensions of quality of customer satisfactions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	Electronic banking service saved my time via improved Speed and efficiency.					
2	Electronic banking has the advantage of decreasing the longer queue available in the banking hall.					
3	The access and availability of mobile phones with vital functions has facilitated E-banking system for me					
4	Electronic banking helped me to transfer of money by using mobile banking system without going to the branches hall.					
5	E-payment using POS terminals have made me use more cards than carry cash on hand.					
6	I obtained E-banking service within 24 hours a day and 7 days a week without interruption					
7	E-banking made customer alert in controlling their transactions.					
8	E-banking system is becoming more understandable and easier due to the establishment of ICT research and development team in the bank.					

4. Challenges in Using E-Banking to Enhance Customers' Satisfaction

No.	Description of dimensions of quality of customer satisfactions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	Social and cultural barriers such as High rate of illiteracy, less awareness and negative perception					
2	Infrastructural barriers like Low level of internet penetration, weak telecommunication and frequent power interruption.					
3	Economic factors such as High cost of internet, low income and heavy investment					
4	Management and banking issues like Resistance to change in technology among staffs and customers and E-banking possess risks					
5	Legal and security issues such as Cyber security issues and lack of suitable legal and regulatory frame works of E-payment					
6	Knowledge barriers such as Lack of trust by customer, lack of technological knowledge and language barriers					