



**ST.MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF PROJECT MANAGEMENT**

**THE ROLE OF E-BANKING SERVICE QUALITY ON CUSTOMER
SATISFACTION □A CASE OF COMMERCIAL BANK OF ETHIOPIA**

**BY:-
SAMUEL G/HIWOT
(ID NO. SGS/0672/2007A)**

ADVISOR: - DR.WUBSHET BEKALU

**DECEMBER, 2018
ADDIS ABABA, ETHIOPIA**

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SAMUAL G/HIWOT

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MA IN PROJECT MANAGEMENT

The Role of E-Banking Service Quality on Customer Satisfaction

In commercial bank of Ethiopia

By:

Samuel G/hiwot

Approved By the Board of Examiners

1. _____

Dean, Graduate studies

Signature

Date

2. _____

Advisor

Signature

Date

3. _____

Examiner

Signature

Date

4. _____

Examiner

Signature

Date

DECEMBER, 20018

ADDIS ABABA

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Abbreviations and Acronyms

ANOVA	Analysis of Variance
ATM	Automated Teller Machine
AVR	Automated Voice Response
CBE	Commercial Bank of Ethiopia
CBK	Central Bank of Kenya
CSEB	Customer satisfaction on E-Banking quality service
IBD	International Bank Division
ICT	Information communication Technology
NBE	National bank of Ethiopia
OCC	Office of the Controller of the Currency
PC	Personal Computer
PDA	Personal Digital Assistant
PIN	Personal Identification Number
POS	Point of Sale
SMS	Short Messaging System
SPSS	Statistics Package for Social Science
SERVQUAL MODEL	Service quality model
TVET	Technical Vocational and Education of Training
VIF	Variance Inflation Factor

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Endorsement

This is to certify that Samuel G/hiwot has carried out his thesis work on the topic entitled “the role of e-banking service quality on customer satisfaction □ a case of commercial bank of Ethiopia. The work is original in nature and has been submitted to Saint Mary’s University School of Graduate Studies for examination (defense) with my supervision and approval as a University Advisor.

WubshetBekalu (PhD)
(Advisor)

Signature& Date

Declaration

I declared that this thesis is my original work towards for the achievement of degree of Masters of Art in Project Management, at Saint Mary's University, school of graduate studies. In fact, to the best of my knowledge, it contains no material previously published by another person or material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

Declared by:

Name: Samuel G/hiwot

Signature: _____

Date: _____

Place: Saint Mary's University, Addis Ababa

Abstract

The introduction of electronic banking into the banking sector is to bring customer satisfaction thereby to enhance the banks' profitability and service excellence. In today's competitive environment delivering high-quality service is the key to a sustainable competitive advantage and to maintain existing customers and to convince new ones as well.

The Commercial Bank of Ethiopia has been working by executing different strategies to expand its banking service and implementing different products and service channels to increase its customer satisfaction. The main objective of the research was to assess the role of e-banking service quality on customers' satisfaction by using the five service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy) of SERVQUAL model in Commercial Bank of Ethiopia. A sample of 120 E-payment users was taken in four CBE branches. The questioner was developed based on five dimensions of SERVQUAL model. The Interview was conducted with branch managers, E-payment officers and E-payment team leader and managers. In the methodology part, the collected data are analyzed using a descriptive statistical tool and also to analyze the effect relationship, regression analysis was implemented using STATA 14.2 and SPSS 23. The major findings of this study were tangibility and empathy of e-banking has been significant factor on customer satisfaction. The researcher concludes that there was a linear relationship between e-banking service quality dimensions and customer satisfaction. The bank must strive to fill the gaps between customers' expectation and perception in order to retain the current customer and attract new customers as well .There is the need to create awareness and educate majority of the banking population or users on e-banking especially in mobile and internet banking as a recommendation.

Keywords -electronic banking, customer satisfaction, tangibility, responsiveness, reliability, assurance, and empathy

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Banks play a major role in improving economic efficiency by channelizing funds from resource surplus sectors to those sectors that are deficient, yet possessing better productive investment opportunities. Banks also play a vital role in trade and payment system by significantly reducing transaction costs and increasing convenience.

Nowadays technology provides a tremendous impact upon service companies in general and the financial services sector is no exception. The application of information and communication technology becomes a fundamental prerequisite for local and global competitiveness in the banking industry. As a result of this technological improvement business environment in the financial sector is extremely dynamic and experience rapid changes and demands to serve their customer electronically (Worku G, 2016).

The findings from many type of research show that E-Banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. No country today has a choice whether to implement E-banking or not given the global and competitive nature of the economy.

Ethiopia is an emerging economy with a growing financial sector. Ethiopian banking system is still underdeveloped compared to the rest of the world and electronic payment systems are at an embryonic stage. The development of Ethiopian banking system has largely been affected by the dominance of cash. In Ethiopia, almost all personal consumptions and transactions made through cash. For big companies, in particular, this has resulted in problems of cost and delay, arising from the counting bundling, transporting and depositing of large volumes of cash, as well as the risk and inconvenience of dealing with counterfeiting and the treatment of damaged notes.

As (Worku G, 2016) stated, Banks have to upgrade and constantly think of new innovative customized packages and services to remain competitive. From the experience of other countries banking services, electronic payment systems are found to benefit commercial banks by extending bank customer base, reducing operating costs, enhancing customer services and improving banks competitive advantages.

The introduction of electronic banking into the banking sector is to bring customer satisfaction there by to enhance the banks' profitability and service excellence. Customer satisfaction is a

measure of how products and services supplied by a company meet or surpass customer expectation.

According to (Timothy, 2012), customer's satisfaction holds the potential for increasing an organization's customer base, increase the use of more volatile customer mix and increase the firm's reputation. Consequently, obtaining competitive advantage is secured through identification and satisfaction of customer's needs better and sooner than competitors.

In fact, in some countries, E-banking products and services are not very popular because customers do not consider them as a better alternative to traditional banking services (Balachandher, 2011). Thus, the success of E-banking depends squarely on customers' satisfaction of the E-products and E-services. E-banks need, therefore, make a lot of effort in creating awareness among existing and prospective customers about the benefits of these products and services.

Technology acquisition must be based on actual needs and the proven ability to deliver customer – friendly solutions. But with globalization, Ethiopian banks have no choice but to adopt electronic banking services to enhance effective service delivery that transcends to customer satisfaction, if they really want to stay in the business race, let alone be profitable.

Service quality is commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationships with customers(Spreng, 1996). Service quality determines whether perceived service delivery meets, exceeds or fail to meet customer expectations.

The Commercial Bank of Ethiopia (CBE), to meet its vision to become a world-class bank by 2025 has been working by executing different strategies to expand its banking service and implementing different products and service channels to increase its customer satisfaction.

The bank has launched e-banking services as part of ensuring service excellence by reducing waiting time, errors, costs, and improve customer satisfaction. In order to encourage or discourage further e-banking expansion in Ethiopia, a better understanding of its impact on customer satisfaction is critical.

CBE strives to improve the service quality by offering various new products and service channels to meet the demand of its customers. Among the products and the channels; Automated Teller Machine (ATM), Point of Sale (POS), Mobile Banking and Internet Banking are the major area that CBE is working aggressively.

The growth and survival demand deepened by the need to attract and retain customers by fulfilling customer's need, as customers are the main focus of any successful business. The service provides to customers must be based on customers need, because Success in the E-banking era is measured in the eyes of the customer. Hence the purpose of this study was to measure service quality of E-banking service and its impact on customer satisfaction in the commercial bank of Ethiopia by using SERVQUAL model.

1.2. Statement of the Problem

Though there are few type of research done about electronic banking in Ethiopia, electronic banking is a useful topic to study how to make it applicable using the available Information Communication Technology infrastructures together with the existing financial and legal frameworks so that the quality of services in Ethiopian banking sector can be enhanced for the future.

(Daniel, 1999) Described that compared to ordinary banking system electronic banking is providing the competitive advantage by lowering the cost and providing the best satisfaction of customer needs. The old age people are generally afraid of use of ATM because of perceived risk of failure, complexity, security, and lack of personalized service.

(Applegate, 1996) also described the benefit of e-banking from the customer point of view; convenient and valuable source to deal with funding because it provides convenience to access account 24/7 that is access is not limited to banking operation hours and available around the clock, wherever the customer's located.

(Fenuga, 2010) point out factors which mostly affect customer satisfaction in electronic banking service, those are machine out of service, machine out of cash, no printing statements, cards get blocked, frequent breakdown of ATM service, lack of sufficient technicians in all bank who solve breakdown of ATM machine, lack of mobile banking service, under-development of technological infrastructure, low level of relevant awareness and knowledge creation, interruption of network, lack of suitable and regulatory framework for e-commerce, resistance to changes in technology among customers and service providers as result of fear of risk.

The researcher here also investigated or assessed the impact of e-banking service quality on customer satisfaction by using the five SERVQUAL dimensions (tangibility, reliability, responsiveness, assurance and empathy). Currently commercial bank of Ethiopia shows high

progress related to e-banking service and show magnificent change on the service delivery but still, there are problems related to customer satisfaction.

Implementation of E-banking helps to improve efficiency and effectiveness of the bank operation by providing faster and most convenient service, which would undoubtedly impact significantly on the overall performance of the banks. The customers also get the benefit of quick service delivery, reduced frequency of going to banks physically and reduced cash handling (Bello, 2005). However, these developments in the Ethiopian banking industry seem not to have achieved their aims. Queues are still seen in the banking halls, bank customers still handle too much cash, and resist to use E-banking products. Therefore the researcher here wants to investigate the reason behind this problem specifically in the commercial bank of Ethiopia

The problem here was: were customers really enjoying these services? Related to this problem, empirical evidence implies that customers' reaction to a particular product depends on their level of understanding of what the product can do and what they stand to benefit from it (Balachandher, 2011). In this connection, it is relevant to find out the perception of e-banking by customers. Even though there are researches done on this topic on the commercial bank of Ethiopia, E-payment service shows a high progress from time to time, therefore the researcher wants to investigate the current situation that commercial bank of Ethiopia reached related to service quality of E-banking and its impact on customer satisfaction.

1.3. Research Questions

- What are the impacts of e-banking on customers' satisfaction?
- Does usage of e-banking has reduced the visits of branches and waiting time for customers?
- How do customers see the challenges and opportunities of e-banking service?
- Does E-banking service help the banks to improve its performance related to service excellence and brings customer satisfaction?

1.4. Objective of the Study

1.4.1. General Objectives

The main objective of this study was to examine the role of e-banking service quality on customers' satisfaction in the commercial bank of Ethiopia.

1.4.2. Specific Objectives:

- To assess whether e-banking service has reduced the visits of branches for customers.
- To identify the major challenges and opportunities of e-banking.
- To analyze the performance of a commercial bank of Ethiopia before and after the adoption of e-banking system related to service excellence and customer satisfaction
- To identify how the major e-banking SERVQUAL dimensions(Tangibility's, responsiveness, reliability, assurance and empathy affect customer satisfaction)

1.5. Research Hypothesis

Many models have been developed to measure service quality delivered by firms in numerous businesses. It is important to review service quality models because of its relation to customer satisfaction. Thus, service quality has become a major area of interest of practitioners, managers and researchers because of its impact on customer satisfaction, customer loyalty, and of course, company profitability (Zekiri, 2011). Thus, the current paper would attempt to fill the gap in the literature by applying SERVQUAL model to study the quality of E-banking services rendered by the commercial bank of Ethiopia.

The literature hypothesis for this model is;

- Ha1: Tangibility does not impact on customer satisfaction
- Ha2: Reliability does not impact on customer satisfaction
- Ha3: Responsiveness does not impact on customer satisfaction
- Ha4: Assurance does not impact on customer satisfaction
- Ha5: Empathy does not impact on customer satisfaction

1.6. Scope of the Study

In assessing the impact of e-banking on customers' satisfaction, the study would have try to assessed the perception of customers about e-banking, how they see the challenges and opportunities of e-banking in the city and whether the service meet or surpass their expectations.

First, this study would be confined only to customers' perception of service quality of e-banking in the commercial bank of Ethiopia. Second, it does not include bank customers who are never utilizing E-banking service. Third, it would also be limited to bank customers who have been using e-banking in Commercial Bank of Ethiopia.

This study would be conducted only on five branches of CBE's; Addis Ababa branch, Selassie branch, Sidist kilo branch, Arat kilo branch and Shiromeda branch. Furthermore, the researcher would ask a limited number of customers and management staffs of the above five branches. From E-payment department it would ask E-payment officers and E-payment team leaders/managers only.

1.7. Significance of the Study

This study aims to make a contribution to understand and to see the impact of e-banking on customers' satisfaction in comparison with the ordinary mortar and brick banking system, it shows the problems of e-banking service on customers' satisfaction for both Board of directors and Executive Managements of the CBE and to take corrective actions. In addition to this, other interested parties, like government, other private banks and corporate customers have concern in improving the difficulties of e-banking service on customers' satisfaction process. Moreover, this study would provide a comprehensive approach about the subject matter during the study and it intends to fill the gap in this arena and provide empirical literature on the subject matter under study. Therefore, this study will contribute to the academic knowledge on how to implement effectively e-banking Service on customers' satisfaction. Lastly, this study would serve as a stepping stone to future researchers by providing literature and also by aggravating them to conduct a research related to the subject matter as a further reference material.

1.8. Organization of the Study

This study would be arranged in five chapters. The first chapter consists of the introduction that includes: background of the study, statement of the problem associated with questions, objective of the study, significance of the study, scope of the study, limitation and organization of the study. The second chapter would consist of review of related theoretical and empirical literature review. The third chapter would cover research design and methodology, Population and Sampling Design, Data Type and Sources, Method of Data Collection and Data Analysis. The fourth chapter would cover the data analysis, interpretation and summary of the chapter. The last chapter would consist of Summary of the findings, conclusions, and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITRATURES

2.1. Theoretical Literature

2.1.1. E-payment

As cited by (Worku G, 2016), According to (Abid H, 2006) electronic banking defined as any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with stakeholders.

Stan also defined electronic payment as a system of payment whereby transaction takes place electronically without the use of cash.

E-banking is a generic term for delivery of banking services and products through electronic channels, such as mobile phone, the internet, etc. The concept and scope of e-banking are still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably.

2.1.2. E-banking Products and Services

There are many electronic banking delivery channels to provide banking service to customers. Among them, ATM, POS, Mobile banking, and internet banking are the most widely used and discussed below.

A. ATM (Automated Teller Machine)

ATM is an electronic machine in a public place, connected to a data system and related equipment and activated by a bank customer to obtain banking services without going into the banking hall. It allows customers to access banking services such as withdrawals, transfers, inquiries about account balances, requests for cheque books, account statements, direct deposits, foreign currency exchange etc. (Fenuga, 2010). Using an ATM requires an ATM card and a pass code often referred to as a PIN (Personal Identification Number). The evolution of E-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first country in the world to have taken a lead in e-banking.

E-banking has been widely used in developed countries and in developing economies (Worku G, 2016). However compared to the developed countries, E-payment service in developing countries is very much lagged. Therefore developing countries must learn from the experience of developed countries and must be competitive with the world banking industry. The ATM

was first introduced solely as a cash dispensing machine but it can now perform other banking services such as cash withdrawals, funds transfers from one account to the other and the payment of bills. Certainly, the banking industry in Ethiopia is underdeveloped and therefore there is an all immediate need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world.

Commercial Bank of Ethiopia, introduced ATM service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa. Moreover, CBE has had Visa membership since November 14, 2005. However, due to lack of appropriate infrastructure, it failed to reap the fruit of its membership.

In this regard, CBE being a pioneer in introducing ATM banking services before 17 years and has been working hard towards providing a better service to its customers. The number of CBE’s visa card holders has steadily increased over the last five years. It provides its customers with ATM banking services such as cash withdrawals, fund transfer, account transaction inquiries, bill payment, mobile top-up and foreign currency exchange. In order to see the progress on a number of ATM deployed, the past five years data are presented.

Table 1: Trends in the total number of ATMs deployed.

Year	2013/14	2014/15	2015/16	2016/17	2017/18
Total Number of ATMs	250	433	644	656	1335

Source: Own computation based on E-payment Data,2017/18

B. INTERNET BANKING

Internet banking is conducted by completing bank transactions by directly accessing the bank through the Internet. Nowadays, internet banking customers can access many different services online, which makes physical banks open even after office hours. Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution. Internet banking can be conducted either by accessing the internet with a computer or by using a phone that has internet features (Alabar& Timothy, 2012). Through CBE’s Internet Banking, many transactions can be carried out from the comfort of your home or office. The online services include:

- Viewing account balances and transactions.
- Making fund transfers between customer's own current accounts and savings accounts.
- Effecting payments to third parties, including bill payments to predefined CBE customers within Ethiopia.
- Viewing and downloading current and saving account statements.
- Requesting for Stop Payments on cheques, etc.
- Applying for a Letter of Credit.

C. POS

The Point of Sale (POS) also sometimes referred to as Point of Purchase (POP) checkout is the location where a transaction occurs. A "checkout" refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register (Shittu, 2010).

The Ethiopian payment system has been said to be cash driven. Explained that cash is the main mode of payment in Ethiopia and a large percentage of the population is unbanked.

The Point of Sale (POS) is an online system that involves the use of plastic cards in terminal on merchants' premises and enables customers to transfer funds instantaneously from their bank accounts to merchant accounts when making purchases. This type of channels in the banking industry increases and promotes the principles of cashless society.

POS systems are utilized in many different business centers, ranging from restaurants, hotels and hospitality businesses, nail/beauty salons, casinos, stadiums, supermarkets and in various retail environments. In a most basic sense, if something can be exchanged for monetary value a POS system can be used.

Commercial Bank of Ethiopia implemented different product and service channels in order to increase its customer satisfaction. Among the channels, POS is the one which increased use of cashless payment system.

The CBE takes advantages of the POS machine technology in order to enable customers to transact at their convenience while buying and selling goods and services. CBE set an objective to work aggressively in making the societies to use POS terminals by deploying the machines in different business centers. Using POS, card holders or customers can get the following services:

- cash advance
- various payments

- fund transfer
- mobile top up
- bill payment

As of March 2018, the total number of POS deployed throughout the country reached 6696.

Table 2: Trends in the total number of POS machines deployed.

Year	2013/14	2014/15	2015/16	2016/17	2017/18
Total number of POS machines	206	244	1886	4235	6696

Source: Own computation based on E-payment Data 2017/18

D. MOBILE BANKING

Mobile banking is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device. The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially in remote and rural areas. This aspect of mobile commerce is also popular in countries where banks can only be found in big cities, and customers have to travel several miles to the nearest bank (Alabar& Timothy, 2012).

Mobile banking is usually available on a 24-hour basis. From the bank's point of view, mobile banking reduces the cost of handling transactions by reducing the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions. Mobile banking does not handle transactions involving cash, and a customer needs to visit an ATM or bank branch for cash withdrawals or deposits.

Mobile phones are the most widely used medium of communication and commonly used by both the illiterates and educated people. This has enabled the mobile market industry in Africa to be the fastest growing in the world when compared with other continents. Despite the rapid growth of mobile phones, in comparison to the whole banking transactions, transactions made through mobile phones still remain very small.

Ethiopia has a great potential to expand mobile banking with its large number of population. In Ethiopia, only financial institutions either a bank or microfinance institutions licensed by the National Bank of Ethiopia are allowed to engage in mobile and agent banking services. This increases the advantage and competitiveness of banks to engage in this business. As per the information from NBE, the CBE, United Bank, Dashen Bank (ModBirr), Bank of Abyssinia,

Wegagen Bank and Lion Bank has got the permission of the NBE to start mobile banking. Recent information shows that all of these banks offer more of similar services. However, the degree of penetration and number of customer registered for this service varies across banks. The banking business experiences of the CBE show that the traditional banking service delivery is more expensive than mobile banking service. As a result, the more the numbers of customers switch to mobile banking service, the lesser will be customers going to branches leading to cost minimization. This was the expectation of the CBE while introducing its mobile banking services. Consequently, since the upgrading to an R12 version of T24 core banking system in December 2013, the number of individuals who subscribed to mobile banking service has been increased faster than that of R11. This is because, the R12 version enables customers to enjoy additional service features such as viewing exchange rates, ordering checkbooks and inquiring about their check's status using their mobile phones.

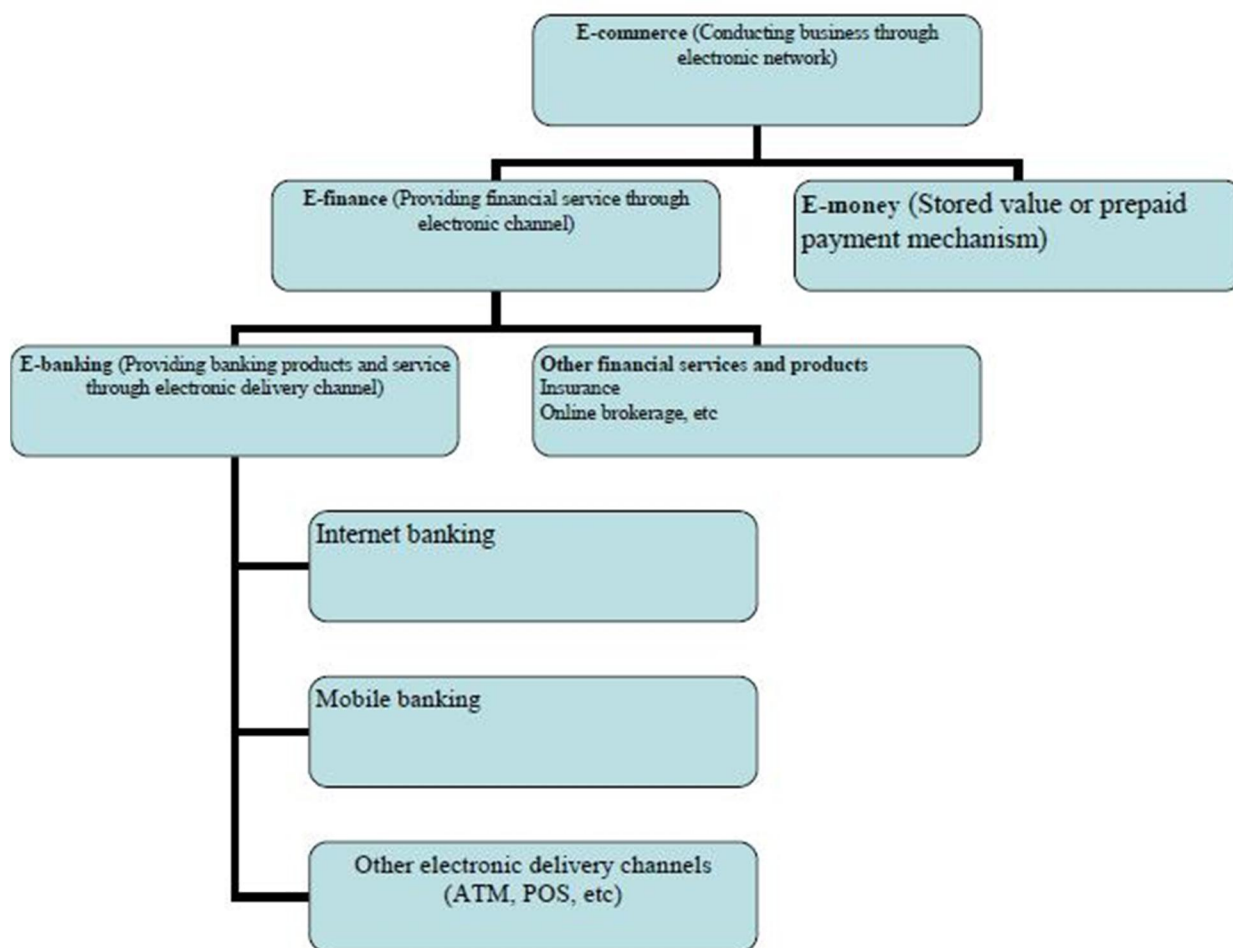


Figure 1: Flow chart of electronic banking

2.1.3. Factor Influencing E-banking Adoption

As (Sathye, 1999) defines adoption it's the acceptance and continued use of a product, service or idea. (O'Connell, 1996) demonstrated that slow growth of e-banking is caused by security concerns, lack of knowledge about the availability of such a service, electronic banking sites being not user-friendly and lack of access to computers or Internet. In addition, new technology adoption by the majority of the customers depends mainly on awareness, ease of use, cost, safety, and security. Those factors potentially affect the adoptions of e-banking are presented below.

Cost/price factor: - One of the factors influencing electronic banking is the cost or price of service. Today, cost or price is one of the major factors that influence the consumer adoption of innovation. (Gupta S. , 1988) Identify price as a major factor in brand switching. (Mazurksy, 1987) Also states that for consumers to use new technologies, it must be reasonably priced relative to alternatives. Otherwise, the acceptance of the new technology may not be viable from the standpoint of the consumers.

Customer Accessibility: - One of the major factors for adopting electronic banking is the availability of access to the service (Sathye, 1999).

Perceive Ease of Use: - is another major influence on electronic banking adoption and acceptance. It is important characteristics from customer's perspective for the adoption of innovative service.

Customer Resistance to Change: - Another factor influencing electronic banking is resistance to change. It is due to prefer personal interaction and have technology phobia.

Customer Awareness: - Customer awareness and product/service knowledge is another factor influencing Electronic Banking. Mostly consumers go through a series of process in knowledge, conviction, decision, and confirmation before they are ready to adopt a new product or service.

Security Concern: - it is one of the very important factors in determining the decision of consumers to use electronic banking. Mostly security concerns are keeping both consumers and bankers away from electronic banking.

Infrastructure: - Another factor influencing electronic banking is infrastructure. Developing countries are yet to be adequately developed in information and communication technology infrastructure which is the backbone of electronic banking. This is occasioned by poor network services resulting in failure and delays in transactions processing.

Competition: - High level of competition among the financial institutions all over the world is one of the major factors driving the supply of electronic banking services by these institutions to their customers.

2.1.4. Customer Satisfaction

The concept of quality, efficiency, productivity, growth, and survival pose a great challenge for the survival and growth of all corporate bodies. These growth and survival demands are further deepened by the need to attract and retain customers, as customers are the main focus of any successful business. Business success depends on a firm's understanding and meeting customers' needs and demands.

High customer satisfaction ratings are widely believed to be the best indicator of company's future profit. Satisfaction can be broadly characterized as a post-purchase evaluation of product quality given pre-purchase expectation (Cengiz, 2010).

Satisfaction or dissatisfaction is a measure or evaluation of a product or service's ability to meet a customer's need or expectations. If the customers of an organization are satisfied by their services the result is that, they will be loyal to them and consequently be retained by the organization, which is positive for the organization because it could also mean higher profits, higher market share, and increasing customer base (Zeithaml V. A., 1996)

2.1.4.1. Customer Satisfaction on E-payment

The success of electronic banking, as argued by many researchers, depends probably on bank service quality, customer preferences, and satisfaction. Customers want to transact their banking transactions at any time and location convenient for their lifestyle.

Historically, banks have taken the attitude that they will provide customers with the services and products that they, the banks, wish to provide. Buyer power, as evidenced by the increase in wealth and sophistication of the most profitable customers, now dictates that such customers will determine with whom they will bank, which products they will use, what pricing they will accept and which delivery channels they choose to use. Banks not recognizing these requirements could rapidly lose between 30-50% of their customers, especially the most profitable customers (Bello, 2005).

Banks are therefore being forced to adopt a strategy towards their customers that are focused on buyer-driven desires. In order to be competitive with global industry, banks need to change their process of servicing their customers. (Mols, 1998) Success in the Electronic-banking era is

measured in the eyes of the customer. The specific things that delight the customer vary from industry to industry and from product to product. But most customers want the same things. According to (Balachandher, 2011),

1. Customers are interested in quality
2. They desire good and effective service delivery
3. They want flexibility so that the specific product or service easily obtained or access.
4. They convert value by not wanting to pay a price that exceeds the value received from the product.

In fact, in some countries, E-banking products and services are not very popular because customers do not consider them as a better alternative to traditional banking service. (Balachandher, 2011). Thus, the success of E-banking depends squarely on customers' satisfaction of the E-products and E-services.

2.1.4.2. Relationship between Service Quality and Customer Satisfaction

Service quality and customer satisfaction are very important concepts, which must understand by companies that want to grow while keeping their competitive edge. In the modern competitive environments, delivering high service quality is the key for a sustainable competitive advantage. Service quality can be measured in terms of customer perception, customer expectation, customer satisfaction, and customer attitude. The relationship between customer satisfaction and service quality is the key to measure user satisfaction. One of the most widely used instruments for assessing customer satisfaction and service quality is SERVQUAL model developed by Zeithaml et.al. 1988. (Dehghn, 2006).

Due to services' four distinctive characteristics: intangibility, inseparability, heterogeneity, and Perishability, service quality becomes difficult to measure and evaluate. Therefore, customers' perceptions of service quality are drawn major concern by both business manager and researchers (Hoffman, 2002).

2.1.5. Challenge and Opportunities of E-Banking

According to (Sergeant, 2000), the benefits of E-banking are manifold and are to be seen from the point view of the banks themselves, customers and even the regulators. According to him, for banks, e-banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater

opportunities to sell cross-border. For customers, the potential benefits are more choice; greater competition and better value for money; more information; better tools to manage and compare information; and faster service.

Even though electronic banking can provide a number of benefits for customers and new business opportunities for banks, but there are challenges while giving the service. Some of the major challenges could be Low level of financial literacy of the public, level of readiness and capacity of financial institutions to provide service, infrastructure, security concern, awareness of customer, resistance to change, insufficient cash flow in rural areas limited potential agents, and presence of a few branches in rural areas.

2.2. Empirical Literature

2.2.1. Experience of E-banking in Selected Countries

The evolution of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first country in the world to have taken a lead in e-banking. E-banking has been widely used in developed countries and in developing economies; however, the spread of e-banking is much limited.

As suggested by (Claessens, 2000), developing countries, in general, have an advantage as they can learn from the experience of advanced economies. Today, almost all banks are adopting electronic banking as a means of enhancing service quality of banking services. They are providing electronic banking to their customers for increasing customers' satisfaction in banking service.

I. Experience of E-banking in Nigeria

In the past few years, Nigerian banks and generally the financial services industry embraced electronic banking, which has been made possible by the advancements in information technology (IT). Many Nigerian banks launched their websites between 1998 and 2000 with a view to starting Internet banking. Many more sophisticated electronic banking products were thereafter, introduced to improve service delivery and customer satisfaction. As (CBN, 2003) Reports that Automated Teller Machines (ATM) Cards, Telephone Banking, Personal Computer Banking and Internet Banking are now available in the banking system.

Thus, Nigerian banks today are seriously into new electronic delivery channels for banking products and services with a view to delivering better services and satisfying customers the more. Banks that cannot offer these services are increasingly losing their customers. The ATM

has made settlement of bills in the Nigerian banking system easy and saver. Almost all banks introduced the ATM in their bank premises.

In Nigeria today, banks are providing customers with —Access Terminals□ with which they (customers) can access their balances and view or print movement in their accounts. These are special services, enjoyed by special, customers, which has been impossible previously. (Abdulhakeem, 2002)

Other value added services of ATM include college fee payment, an online collection of the application fee, mobile top up, religion/trust Donation, bill settlement, insurance premium payment, and funds transfer card to account. Among others, increased ATM usage is also helped by the fact that customers have now the flexibility of using ATMs of other banks, as most of the banks are part of major interbank networks. The interbank networks have brought together ATMs of several banks so that consumers would gain access to any of the participating banks’

II. Experience of E-banking in Kenya

The payment industry in Kenya has over the last few years been transformed with the new wave of IT advancements. Currently, the use of cash has been replaced by digital cash and digital wallets. It can be rightly said that this is the fourth stage of evolution after Barter, Currency, Paper money (Cheques) and now digital cash. From the reports of Central Bank of Kenya (CBK), Kenyan banks have exponentially embraced the use of information and communication technologies in the provision of banking services which has enhanced the application of e-payments.

E-Banking has made banking transactions easier around the World and it is fast gaining acceptance in Kenya. Virtually almost all Banks in Kenya have Electronic Banking. E-banking’s greatest promise is timelier, more valuable information accessible to more people, at reduced cost of information access (De Young, 2005).

Common embodiments of E-banking include the following: Mobile/SMS Banking, Telephone Banking, and Electronic funds transfers, Self Service (PC) Banking, POS Banking (Credit and Debit cards), ATMs, Interactive TV and Branchless Banking. In Kenya, for example, there is M-Shwari which is offered by Commercial Bank of Africa in conjunction with Safaricom Kenya Limited. M-Shwari is the revolutionary new banking product for M-PESA customers that allow one to save and borrow money through the phone while earning interest on money saved. With M-Shwari, one is entitled to affordable emergency loans. It also gives an opportunity to save as

little as Ksh.1 and earns interest on the saving balance and the cash is moved into the savings account using a handset via the M-PESA Menu. It enables access micro credit product (loan) of a minimum of Ksh.100 anytime and receives a loan instantly on an M-PESA account (CBK, 2012).

III. Experience of E-banking in India

In India, most of the banks and financial institutions are offering ICT based financial products and services to improve their business efficiency and speed of services (Gupta A. a., 2013).

Now in India, all of the public sector bank branches, private and foreign banks are computerized. These banks are offering lots of ICT-based banking service to bank customers and using modern technology to internal business operations. Various foreign and new private sector banks are entering in Indian banking industry with their high-tech banking services. It leads to a competition of ICT-based banking services in Indian banking system and creates efficiency.

Payments and settlements in India are fast moving towards the electronics mode. Both business and retail transactions are increasingly being settled through electronic channels. With the spread of banking habits, more and more cash in banks is also being withdrawn as and when required as is evident in the growth of ATM transactions. Besides, there is a host of new-age channels like mobile wallets and mobile banking besides credit and debit cards that are gaining popularity among the younger generation.

2.2.2. Review of E-banking Practice in Ethiopian Commercial Banks

The findings from many type of research show that E-Banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. No country today has a choice whether to implement E-banking or not given the global and competitive nature of the economy. Banks have to upgrade and constantly think of new innovative customized packages and services to remain competitive.

Though there are few type of research done about electronic banking in Ethiopia, electronic banking is a useful topic to study how to make the service more comfortable to customers. Customers in Ethiopia are late adopters of e-banking service and its applications. It looks that electronic banking is facing difficulties in Ethiopia. Ethiopian banking system is still underdeveloped compared to the rest of the world and electronic payment systems are at an embryonic stage. Moreover, among several services of e-banking, they are limited to ATM, mobile, POS and internet banking service. (Worku G, 2016)

The development of Ethiopian banking system has largely been affected by the dominance of cash. Certainly, the banking industry in Ethiopia is underdeveloped and therefore there is an immediate need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world. With a growing number of import-export businesses, and increased international trades and international relations, the current banking system is short of providing efficient and dependable services and therefore all banks operating in Ethiopia should recognize the need for introducing electronic banking system to satisfy their customers and meet the requirements of rapidly expanding domestic and international trades, and increasing international banking services. The large population size of Ethiopia is a great potential to expand retail banking activities. In Ethiopia, only financial institutions either a bank or microfinance institutions licensed by the National Bank of Ethiopia are allowed to engage in banking services. This increases the advantage and competitiveness of banks to engage in this business.

Presently in Africa, mobile phones are the most widely used medium of communication (ITU, 2007) and commonly used by both the illiterates and educated people. This has enabled the mobile market industry in Africa to be the fastest growing in the world when compared with other continents. According to GSMA Intelligence survey for 2011-2013, Ethiopia is ranked eleventh in Africa with its 24 million mobile phone users. Compared with the 14 million subscribers two years back, the sector registered 71%. Despite the rapid growth of mobile phones, in comparison to the whole banking transactions, transactions made through mobile phones still remain very small.

As per the information from NBE, the CBE, United Bank, Dashen Bank, Bank of Abyssinia, Wegagen Bank and Lion Bank has got the permission of the NBE to start mobile banking. Recent information shows that all of these banks offer more of similar services. However, the degree of penetration and number of customer registered for this service varies across banks.

2.2.3. E-banking trend in Commercial Bank of Ethiopia

CBE strives to improve the service quality by offering various new products and service channels to meet the demand of its customers. Among the products and the channels; Automated Teller Machine (ATM), Point of Sale (POS), Mobile Banking and Internet Banking are the major area that CBE is working aggressively.

Undeniably the largest state-owned bank, Commercial Bank of Ethiopia, introduced ATM service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa. Following

the strategies, the CBE has introduced eight (8) types of payment cards and the total number of card reached 2.8 million currently. And the number of active card holders reached 1.5 million. To crest access to these card holders, the CBE has deployed 1335 ATMs and 6696 POSs within different business locations so as to tap the business opportunity. The provision of this service will eventually enhance the habit of card payment system and promote electronic payment system which in turn will contribute to the ultimate goal of creating —Cashless Society□.

Table 3: Card Types and Activation Status

Card Type	Total Cards	Active Cards	% age
Gold Domestic	2,970	1,040	35.0
Platinum Int.	173	48	27.7
VISA Classic Domestic.	2,426,891	1,368,507	56.4
Women Cards	318,023	134,694	42.4
Platinum Domestic	876	354	40.4
Classic Int.	42	25	59.5
Gold Int.	376	42	11.2
Total	2,749,351	1,504,710	54.7

Source: E-payment

Likewise the other channels, the CBE set an objective to work aggressively in making the societies to use POS terminals by deploying the machines in different business centers. The total number of POS deployed throughout the country reached 6696.

The banking business experiences of the CBE show that the traditional banking service delivery is more expensive than mobile banking service. As a result, the more the numbers of customers switch to mobile banking service, the lesser will be customers going to branches leading to cost minimization. This was the expectation of the CBE while introducing its mobile banking services. Consequently, since the upgrading to an R12 version of T24 core banking system in December 2013, the number of individuals who subscribed to mobile banking service has been increased faster than that of R11. This is because, the R12 version enables customers to enjoy additional service features such as viewing exchange rates, ordering checkbooks and inquiring about their check’s status using their mobile phones.

The number of customers who registered to use mobile banking services of the CBE steadily grows from quarter to quarter until the second quarter of 2014 where it shows a remarkable take off (111%). From October 2014 to December 2014 alone, the total number of newly recruited mobile banking users was 137,939 which make up 40% of the total mobile banking service

subscribers to date. By 2016 total number of mobile users reached 458,909. However, considering the number of mobile users and bank service subscribers, the level of mobile banking service subscriber is very low. Currently, a total number of mobile users reached 1.3 million. Despite the general increase in other e-payment services, the rate of use of internet banking is relatively low when compared to the rest of e-payment systems. Currently, a total number of internet banking users reached 20,000.

Table 4: Summary of Commercial Bank of Ethiopia Status

No of customer N	15 Million
No of branch	1186
No of ATM	1335
No of POS	6696
No of card holder	3.5 Million
No of Mobile bank users	1.3 Million
No of Internet bank users	20,000

Source: Quarter report on Reporter magazine, March 2017/18

2.2.4. Relationship between Service Quality and Customer Satisfaction

Quality and customer satisfaction have long been recognized as playing a crucial role for success and survival in today's competitive market. Regarding the relationship between customer satisfaction and service quality, Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific. In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality.

Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service (Wilson et al.,2008). Although it is stated that other factors such as price and product quality can affect customer satisfaction, perceived service quality is a component of customer satisfaction (Zeithaml&Bitner, 2003). As said by Wilson et al. (2008), service quality is a focused evaluation that reflects the customer's perception of reliability, assurance, responsiveness, empathy and tangibility while satisfaction is more inclusive and it is influenced by perceptions of service quality, product price and quality, also situational factors and personal factors. The relationship between service quality and customer satisfaction is becoming crucial with the increased level of

2.2.5. Service quality dimensions

In the banking sector higher service quality is related with higher customer satisfaction. There are no recognized standard scales to measure the perceived quality of a bank service. Service quality dimensions are the only way to analyze the service quality of the organization and easy way to find out the expectation of the customer's. One of the important issues related to service quality and the dimensions of service quality and the measurement tools of Parasuraman et al. (1988) SERVQUAL model.

1. **Reliability:** Reliability depends on handling customers' services problems and performing services right the first time and provide services at the promised time and maintaining error-free record. Reliability also consists of accurate order fulfillment, accurate record, accurate quote, accurate in billing, accurate calculation of commissions, and keep services promise.

2. **Responsiveness:** Responsiveness involves timeliness of service like posting a transaction Slip immediately, returning a phone call quickly, giving prompt service, and setting up appointments quickly. Responsiveness also refers to the motivation to help (internal) customers and provide prompt service to them. It is defined as the willingness to help customers and analyzing Customer Satisfaction by using 5 dimensions SERVQUAL Model in the content of E-Banking Service Quality of the CBE. Provide prompt service (Parasuraman et al., 1988). It is also involves understanding needs and wants of the customers, convenient operating hours, individual attention given by the staff, attention to problems and customers' safety in their transaction.

3. **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 staff, provision of financial advice, interior comfort, eases of access to account information and knowledgeable and experienced management team

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. Empathy also give individual attention; convenient operating hours, giving personal attention, best interest in heart and understand customer's specific needs.

5. **Tangibles:** Tangibles are the physical facilities, equipment, and appearance of personnel in services (Parasuraman et al., 1988). It includes all the physical evidence of the service like the

facilities, appearance of personnel, tools or equipment used to provide the service, physical representations of the services and even other customers.

2.2.6. Theoretical frame work of the study

The basic objective of this study is to investigate the effect of e-banking service quality on customer satisfaction a case in commercial bank of things. The research model for this research is given in Figure 1. The variables will be taken into account in the explanation of e-banking service quality and so on customer satisfactions are the five identified characteristics.

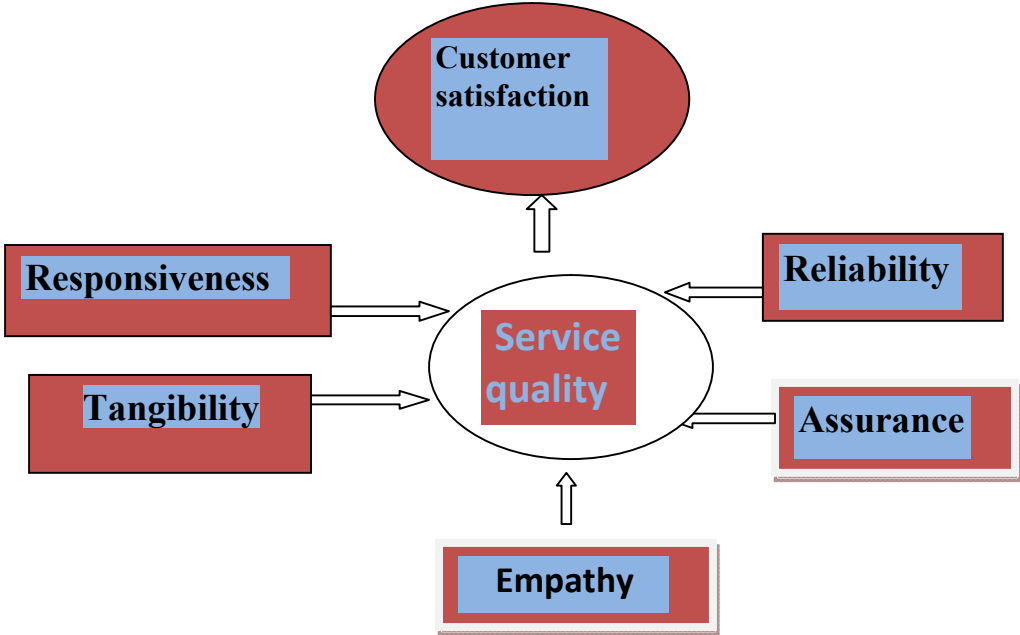


Fig2. Theoretical frame work

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter involves presenting the choice of method of collecting and analyzing data, from a practical point of view, comparing relative advantages and disadvantages of other alternative methods that may be more or less appropriate to the context of this study. This chapter presents research design, research approach, describes the research methods, sampling techniques and the instruments employed in the data gathering.

3.1. Research Design

Based on, Mouton (2001) defines research design as a plan or blueprint of someone intending to conduct research. Research design involves how the researcher has planned to carry out the research. Again, Sekaran (2003) indicated that after identifying the variables in evolving the conceptual framework, the consequent step is to design the research in a way that the data can be screened and analyzed. According to Malholtra (2004), research design is a framework or draft for conducting a given research project. It provides details of the necessary procedures for gaining the information needed to structure and to solve this research problem.

This study would made use of an explanatory research design. Because, explanatory research design is helps to identify the relationship between independent and dependents variables. And, also it used to obtain information concerning the status of the phenomena. Based on this, explanatory survey studies be in used the study because it helps to study large number of people, merely explain what people say they think and do. The use of this design is to enable the researcher determine and explain the characteristics of the variables (Creswell, J.W. 2003).

This research will use survey method; in survey method research, participants answer questions administered through interviews or questionnaires. After participants answer the questions, researchers describe the responses given.

3.2. Research Approach

There are three main research approaches: qualitative, quantitative and mixed approach that can be used for a study. The decision to use any approach depends on the nature of work, the objectives of the study, the level and nature of the research questions and the practical considerations related to the research environment among others (Shih, 1998). While quantitative is hard, objective and standardized and qualitative is soft, rich and deep (Corbetta, 2003). The mixed approach combines the two approaches together in a study.

This study will adopt mixed approach; quantitative method allows explanation of a phenomenon by collecting numerical data that are analyzed using the mathematically based method, particularly statistics whereas qualitative methods help to explain the situation in detail.

3.3. Sampling Techniques and Sample Size

The researcher was not have access to the sampling frame (list of customers) because of the security inferences for the banks as financial institutions as well as the huge number of customers contain. The sampling selection technique for this study has been the non-probability sampling. Non probability sampling may be defined as any sampling method where some elements of the population have no chance of selection, or where the probability of selection cannot be accurately determined. According to, Twumasi (2002) writes “as the name implies, the researcher, adhering to the objectives of the study, selects respondents who can answer his research questions. With good calculation and a relevant research strategy he picks the respondents he wants to be included in his sample”. Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher (Black et al, 1999). From which the types of non-probability sampling the researcher was used purposive (convenience) sampling technique. Because of the following reason; first, as the researcher observed through many previous visits to the selected branches that not all individuals present at the banking halls are necessarily the banks customers. Some indeed passer byes either sent to clear cheques or deposit cash as well as other purposes. Second, as the researcher read other related journals which conducted previously used this type of sampling technique. For instance, Prince Adiyia Kwarteng (2015), Martin Otu Offei and Kwaku Nuamah-Gyambrah (2016) etc. were used purposive sampling technique. For this reason the researcher could be intended to purposively select participants who are active customers of the selected bank branches. Therefore, the sample size of this study will be 120 customers of the bank with purposively selected among the whole customers of the population universe. Why the researcher is taking 120 customers as a sample? Because, even if the electronic banking is operated by the persons, the employees are not giving the service to the customers directly; rather the customers are obtaining the e-banking service directly from the machine or/and internet system. If the machine is not working properly for the time being, the customers might not get money through ATM and POS. For this reason the customers become dissatisfied. The same is true that if the internet connection is not working while the customers need the service it will cause for their dissatisfaction. So, the machine improper working and system fail will have an influence on satisfaction for all customers of E-banking service and its service quality. Due to

this whether you use all the customers or 120 samples will not have an effect on the research because their response will be the same for using e-banking service. 120 customers can be representative for all customers of e-banking service. The system is not biased among the customers. Therefore, sample size meant that 24 customer's was conveniently selected from each of the five (5) grade four branches.

3.4. Model specification

Basically the study assumed customer satisfaction on E payment service as dependent variable and the other five SERVQUAL variables as independent variables.

$$\text{CSEB} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mathcal{E}$$

Variables: - **CSEB** = customer satisfaction on E-Banking quality service

X₁ = tangibility

X₅ = assurance

X₂ = responsiveness

ε = error term

X₃ = reliability

β_{1...5} = Intercepts

X₄ = empathy

3.5. Data Collection Tools and Procedures

3.5.1. Types and Sources of Data

The data type for this research is Cross-Sectional Data: Cross-sectional data or cross section is a type of one-dimensional data set. It refers to collecting data would be by observing many subjects such as individuals, firms or countries/regions at the same point of time, or without regard to differences in time. The sources of the primary data for this study is e-banking customers of commercial bank of Ethiopia, branch managers of the five branches, E-payment process officers and E-payment team leaders/managers in E-payment office.

The secondary data would be in used for supporting the study and to get the findings of other researchers in the area (empirical study). The sources of secondary data used were library books, newspapers on business, magazines on business, annual reports of different commercial banks, and vision and mission strategy of commercial bank of Ethiopia, reports of the national bank of Ethiopia, internet sources, and other related materials.

3.5.2. Questionnaire Design

In order for the survey to be both reliable and valid, it is important that the questions are constructed properly. Questions would be written so they are clear and easy to comprehend.

The questionnaire would have four parts. The first part was about the demographic characteristics of respondents. The second and third parts of the questionnaire would have a design to obtain information on customers' expectations and perception of service quality delivery of the bank and frequency of visiting branch before and after E-payment respectively. The respondents are requiring to rate their expectations and perception of bank's services on the level of importance on a predefined five-point Likert Scale: 1-strongly disagree, 2-disagree, 3-neutral, 4-agree and, 5-strongly agree. A Likert scale is an ordered scale from which respondents choose one option that best aligns with their view. It is often used to measure respondents' attitudes by asking the extent to which they agree or disagree with a particular question or statement. The services of the Bank were assessed on the SERVQUAL variables:

3.6. Data Analysis

Data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence, to address the initial proposition of a study (Yin, 1994). Mainly, the quantitative data is acquiring through questionnaires will be summarized mainly by using SPSS version 20 spread sheet. The data was analyzed using two statistical techniques. These techniques were descriptive and inferential statistics. The general questions were analyzed by using descriptive statistics, such as percentage, frequencies. And the e-banking concerned questions should be analyzed using inferential statistics, such as multiple linear regression analysis, ANOVA and analysis of variance and the hypothesis were tested using t-test. The use of multiple regression analysis was to help test the conceptual framework or model. The data gathered from the survey which through the questionnaires administered has been recorded and coded into Statistical Package for Social Science (SPSS) software version 20. The questionnaires survey data has been analyzed by multiple linear regression analysis, ANOVA and the value of R². In analyzing the data gathered from the survey (questionnaire), and reliability would be primarily calculated using SPSS by Cronbach's Alpha, and content validity of the questionnaire was also established by reviewing existing literature.

Table 5. The Summary of the Questionnaire's Information

Questionnaires sections	Numbers of questionnaires
General question	17
Tangibility	4
Reliability	6
Responsiveness	6
Assurance	5
Empathy	5
Customer satisfaction	3
Total	46

Source: own survey, 2017/18

In order to evaluate its validity, the questionnaire was provided to an expert, of the field; it was evaluate regarding content and comprehensibility and necessary alterations were made. Therefore, the questionnaire is adequately valid in accordance with the research objective as viewed by the expert and in accordance with the reviewed literature.

3.7. Ethical Consideration

The study has been conducted using some ethical considerations. Each respondent to the study would be first informed about the purpose and objective of the study and the questionnaires to be administered. After explaining the objective of the study, respondents have been assured of secrecy and confidentiality before being managed with the questionnaire.

CHAPTER FOUR:

DATA ANALYSIS, INTERPRETATION AND FINDINGS

4.1. Introductions

This chapter presents the result of the fieldwork conducted by the researcher. The result is mainly the responses of the questionnaire administered to the customers of commercial bank of Ethiopia in its five branches (Addis Ababa branch, Selassie branch, Kidste Mariam branch ,Genetetsige and Shiromeda branch) that are located in Addis Ababa. Statistical Package for Social Scientists (SPSS) version 20 and STATA 14 software was used to perform the analysis.

The questionnaire was prepared and distributed to 120 customers of commercial bank of Ethiopia in Addis Ababa. Out of the 120 questionnaires administered, 110 were collected and were valid for analysis. The remaining questioners were excluding during data clearing due to incompleteness. The valid questionnaires which formed the analysis yielded 91.66 per cent response rate.

In order to have all inclusive information for the study, the researcher conduct interview with branch managers of the five branches, E-payment process officers and E-payment team leaders/managers in E-payment office. The result of the interview also presents in this chapter.

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4.2. Demographics of Respondents

There is conflicting evidence with regard to the influence of demographic factors on E-payment service. For instance, (Worku G, 2016) could find significant relationships between personal respondents' demographic traits and their tendency to use E-banking services. In this research, there is no significant relationship between demographics of respondent and level of satisfaction on E-banking services.

4.2.1. Gender of the Respondents

Table 6: Gender of the Respondent

Gender of the Respondent	Frequency(N)	Percent
Male	80	72.72
Female	30	27.28
Total	110	100

Source: primary data, 2017/18

As the above table 7 age categorization of the 112 respondents showed that, 81 representing 72.72 % were males and 31 representing 27.28% were females. This means that the highest users of e-banking in Ethiopia based on the survey of CBE selected branches are males. Based on the objective of this study, the types of customers were male and female in the category of gender. But among these male and female customers of e-banking service in the surveyed bank most of them were males. According to the researcher males were near to usage of e-banking technology than females. For instance, when we see the previous researcher on the same topic or title most of their findings were males were took e-banking service than females the researchers like, Parasuraman et al (1985), Bambore PL (2013), Kwashie W. (2012) of Ghana etc.

4.2.2. Age of the Respondent

Table 7: Age of the Respondent

Age of the Respondent	Frequency N	Percent
18 to 29	97	88.18
30 to 49	11	10.00
50 to 69	2	1.79
Above 69	None	None
Total	110	100

Source:primary data, 2017 /18

The above table shows that 88.18 per cent of the respondents were between —18-29□, 10.73 per cent of the respondents were between —30-49□, and 1.79 per cent of the respondents were between —50-69□. Generally, out of 112 respondents, 98.21 per cent of them are age between —18-49□. From the sample respondents, there were no respondents whose age were 69 and above. This implies that the more customers used e-banking are youngsters. When we connect it with the objective of the study we could identify the types of customers based on the age group. In this case, the bank should have to go the elderly and other age groups in order to duplicate its service. Here, the researcher would have understood one thing; that was youngsters are egger or keen to change or to use technology immediately without any additional means of motive.

4.2.3. Education Level of the Respondent

Table 8: Education Level of the Respondent

Qualification	Frequency	Percent
No formal education	3	2.67
Basic education	6	5.36
TVET	2	1.79
Diploma	13	13.40
Degree	65	59.09
Masters and above	21	19.08
Total	110	100%

Source: primary data, 2017/18

In terms of education, as the above table noted that from the total respondents of sampled e banking users 3 of the respondent was without any formal education. The most represented educational levels were those with a Bachelor degree which was made up of 65 respondents or 59.09% of the respondents. This was followed by 21 respondents representing 19.08% who were with a master's degree and above, and 15 respondents representing 13.40% who were with a diploma. 6 respondents of the study which accounts for 5.36% were a holder of basic education. The least represented educational level were those with TVET who were 2 in number or 1.79% of the respondents. Based on the objective of the study, the customers using e-banking in the sampled bank were mostly first degree and second degree types of customers with respect to education.

4.2.4. Occupation of the respondent

Table 9: Occupation level of the respondents

occupation		Frequency	Percent
Valid	Self- employee	15	13.63
	Business men	20	18.18
	Private employees	21	19.09
	Gov't employees	46	41.81
	Total	110	100

Source own survey 2017/18

As indicated in the above table 8 the highest numbers of e-banking users were government employees accounted for 46 or 41.81 % from the total respondents. The second largest users were private employees represented 30 in number or 19.09%. The fourth and the fifth were business man and self-employees accounted for 21 or 18.18 % and 15 or 13.6 % respectively. This shows that the high proportions of e-banking service were used by government employees followed by private employees. This implies that most of the customers using e-banking service were the government employees and the next private employees. The reason for this might be Commercial bank of Ethiopia is one of the big banks in the country and it is the first bank to introduce e-banking technologies.

4.2.5. Income Level

Table 10: Income level of the respondents

Level of income		Frequency	Percent
Valid	< 2000 Br	10	9.09
	2001-10000 Br	66	60
	Above 10000 Br	34	30.91
	Total		100

As indicated in table 10 above, 10 of the respondents or 9.09% of the respondents earned Less than br. 2,000; 67 or 59.82% earned between br.2,001-10,000; and 34 respondents or 30.91% earned above br.10,000. A large number of respondents or customers have been with the monthly salary of between Birr 2,001-10,000. This implies that, they were middle income group of customers; because CBE doesn't ask that much high requirement to open an account. Any persons who possess the minimum age requirement can open an account in Commercial bank of Ethiopia with the minimum amount of 25 Br.

4.2.6. Types of E-banking Service used by the Respondent

Table 11: Type of E-payment Service used by the Respondent

Types of E-payment	Frequency	Percent
ATM	48	43.63
POS and ATM	4	3.63
Mobile Banking	9	8.04
Internet Banking	4	3.57
ATM and Mobile Banking	25	22.72
ATM, POS and Mobile B	14	12.50
All	6	5.35
Total	110	100

Source:primary data, 2017/18

As represented in the above table 11, 48 or 43.63% of the respondents were the users of ATM, 3 or 2.68 % were uses POS, 9 or 8.04 % of the respondents were using MB, 4 or 3.57 % of the respondents uses IB and 25 or 22.32 % were the users of ATM, & MB as well as 14 or 12.50 % were uses ATM, POS and MB, and finally 6 or 5.35 % were the users of all types of e-banking in CBE. This implies that the large numbers of the respondents were the users of ATM, the second large numbers of customers were used ATM and MB; the third, the fourth and the fifth were ATM ,POS and MB, all e-banking services and IB respectively. Large numbers of customers have been using ATM e-banking service rather than other e-banking services. The reason for this was ATM service simply accessible for any types of customers easily.

4.2.7. Experience Level of the Respondent

Table 12: Experience Level of the Respondent

Experience level	Frequency	Percent
1 to 5 years	55	50.00
6 to 10 years	43	39.09
11 to 15 years	7	6.36
16 to 20 years	2	1.78
Above 20	3	2.72
Total	110	100

Source: primary data, 2017/18

The above tale shows that, above, 50.00 per cent of the respondent had served in the bank for a period of 1-5 years, 39.09 per cent were between 6-10 years, 6.26 per cent were between 11-15

years, 1.78 per cent were between 16-20 and 2.68 per cent were above 20 years. This implies that almost all respondents had taken reasonably enough time in service and thus the data they provided was believed to be reliable.

4.3. Frequency of Visit Branch Before and After E-payment

Table 13: Frequency of Visit Branch before E-payment

Visit of branch before introduction of e-payment	Frequency	Percent
Rarely	24	21.82
Frequently	53	48.18
Very frequently	33	30.00
Total	110	100

Source: Primary data 2017/18

Table 14: Frequency of Visit Branches after E-payment

Visit of branch after introduction of E-payment	Frequency	Percent
Never	17	15.45
Once	44	40.00
Twice	27	24.54
Thrice and more	22	20.00
Total	110	100

Source: primary data, 2017/18

The above two tables depict those who visit the branch rarely in a month accounts 21.43 per cent before the introduction of e-banking service but those respondents who visit the branch never, once and twice in month accounts 80.36 per cent after using e-banking service. This implies after the introduction of E-payment the number of customers who visit the branch is significantly decreased. Those Customers frequently and very frequently visit branches in a month accounts 78.57 per cent before the introduction of E-banking service but those respondents who visit the branch thrice and more in a month accounts only 19.64 per cent after the introduction of E-banking service. This justified that there is no question that implementation of E-banking has a good impact on reducing the visit of branches by customers.

It is expected that introduction of electronic banking products and services significantly reducing a number of visits to the banks. One of the implications of electronic banking is that it should reduce the need to visit bank branches. In fact, the electronic banking delivery channels are often

considered as potential substitutes for brick and mortar bank branches. However the interview responses did not support this result, even if CBE needs to create the awareness of cashless society, customers still find it useful to visit their bank branches regularly every month to perform some banking transactions. This is due to mostly customer's used E-banking products only for cash withdrawals and rarely for funds transfer.

4.4. Regression Result and Implications

In this section the reliability test, the model assumption test, the descriptive statistics of mean and standard deviation, result of variance, and hypothesis testing has been analyzed in good manner in accordance with the previous studies.

4.4.1. Cronbach's Alpha Test of Reliability

According to, Anderson, (2008) reliability is essentially the dependability of an instrument to test what it was designed to test. Reliability refers to the consistency and dependability of a measuring instrument; using it repeatedly should give us the same or similar results every time (Anderson, I., Gaile-Sarkane, E., 2008).

Table 15: Cronbach's Alpha Test

Cronbach's Alpha Score		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of items
.968	.968	46

Source: survey, 2017/18

According to, Nunnally and Bernstein, (1994) the closer the Cronbach's alpha is to 1, the higher the internal consistency reliability of the research instrument. The Cronbach's Alpha score ranges from 0 to 1. The Cronbach's Alpha score greater than 0.70; show that high internal reliability of the scaled item (Nunnally and Bernstein, 1994). In spite of this argument Garson (2002) indicated that the cut off point for the Cronbach's Alpha should be between 0.8 and 0.6 (Garson, 2002). Additionally, the Cronbach's Alpha increases when the number of items in the scale is increased which means that the Cronbach's Alpha score decreased (Garson, 2002). From table 17 above indicated that the cumulative Cronbach's alpha scores were above 0.70 or it approaches to 1, meaning that they are highly reliable. This means that it fulfill the argument mentioned by Nunnally and Bernstein. The above reliability result shows that, the instrument in which the researcher was used essentially very much measured the dependent variable. When we

see the reliability result that means 0.968 this means that it was close to 1 according to Nunnally and Bernstein it was strongly fit to the variable conducted.

4.4.2. Descriptive Statistics Analysis

This type of analysis helps to know the overall mean and standard deviation of each variable used in the study.

Table 16: Descriptive Statistics

Variables	Mean	Std. Deviation	N
Customer satisfaction	3.1425	.56842	110
Tangibility	3.3423	.53974	110
Reliability	3.2549	.54791	110
Responsiveness	3.4132	.51435	110
Empathy	3.1324	.58641	110
Assurance	3.5246	.49826	110

Source: own survey, 2017/18

As we see from the above descriptive statistics table it contains the means and standard deviations value. According to, Best (1997) the mean score that ranges from 1-1.80 is considered to be lowest, from 1.81-2.61 is lower, from 2.62-3.41 is deemed to be average/moderate, from 3.42-4.21 is good/high and from 4.22-5 is going to be considered as very good/excellent. Besides this, the decision rules used in any analysis fall in the average mean less than 3 was considered as low, average mean equal to 3 has to be considered as medium and the average mean greater than 3 was deemed as high throughout the study (Best and Khan, 1995). As we understand from the above table 17 based on the mean measurement of the mentioned authors, the mean score of all independent and dependent variables were greater than 3. This implies that the dependent variable highly described by the independent variables. Means that the independent variables have been influence the e-banking customers positively. This leads to customer delight. The reason for this may the customers have been got high service quality, the bank might have good facility and personnel, the employees of the bank have been good service providing and treatment, and also the bank management system has been better. This leads to the improvement of banking profitability while the customers are being delighted.

4.4.3. Multiple Regression Analysis

On the basis of six dimensions as given in the objective, the six alternatives hypotheses have been formed. It has been investigated that whether these dimensions have a significant impact on the customer satisfaction of the internet users or not.

The null hypotheses were:

- Ha1 Tangibility: does not impact on customer satisfaction
- Ha2: Reliability of use does not impact on customer satisfaction
- Ha3: Responsiveness does not impact on customer satisfaction
- Ha4: Assurance does not impact on customer satisfaction
- Ha5: Empathy does not impact on customer satisfaction

The hypotheses formulated above have been tested empirically by employing regression model.

The regression model is as follows: $Y = \beta_0 + \beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5 + \epsilon$. Where the dependent variable is satisfaction of the customers denoted by Y and the independent

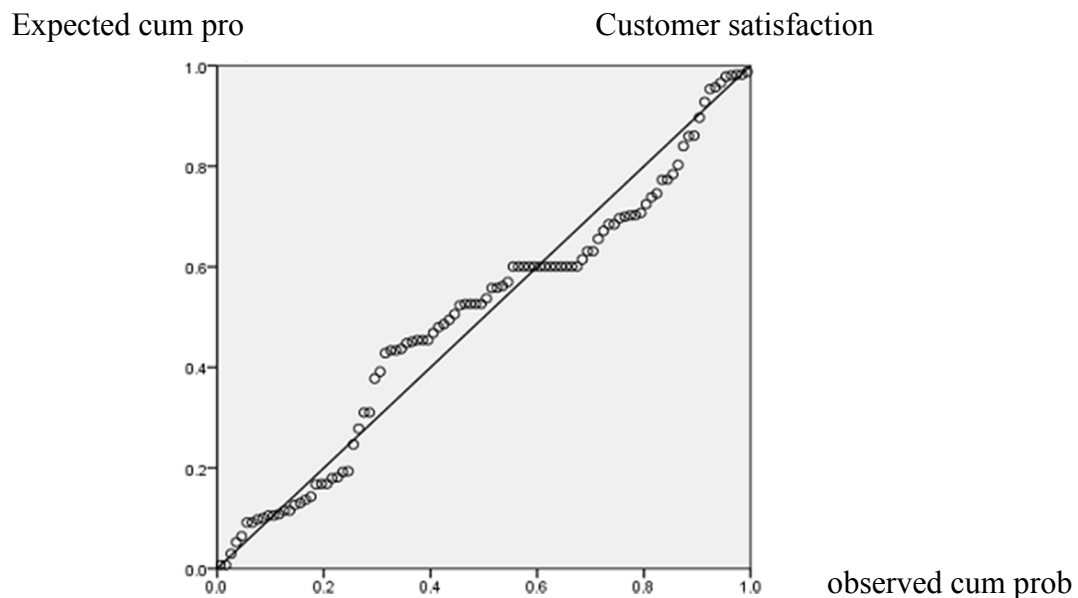
Variables are: Tangibility (β_1), Reliability (β_2), Responsiveness (β_3), Assurance (β_4),

Empathy (β_5). The error term (ϵ) contains the extraneous variables aside from independent variables that determine the value of the dependent variable (Y) for a specific observation. Enter regression method has been used to evaluate the data. Regression technique has been employed using weighted average scores. Regression results have been shown in below Tables.

4.4.4. Model assumption testing

We have this below the normality and linearity of the dependent and independent variable in below with normal p-plot of regression.

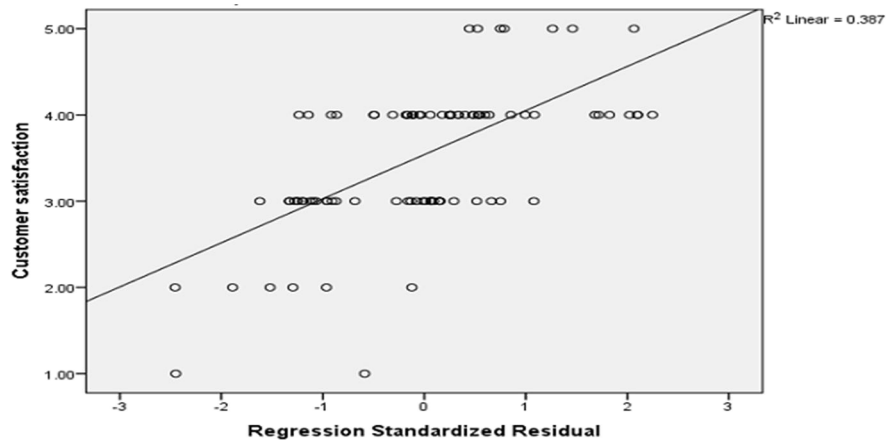
Standard pp plot of regression (normality of the model):-normality of independent variables with respect to dependent variable.



Own survey 2017/18

Linearity of the model (positive relation b/ dependent and independent variables)

Dep .v Customer satisfaction



own survey 2018

4.4.5. Hypothesis Testing

4.4.5.1. Pearson Correlation analysis

To determine the relationship between service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy) and customer satisfaction, Pearson correlation was computed. Table below presents the results of Pearson correlation on the relationship between service quality dimension and customer satisfaction.

Table 17 .The relationship between service quality dimensions and customer satisfaction

		Customer satisfaction
Tangibility	Pearson correlation	.832**
	Sig. (2 tailed)	.000
	N	.342
Reliability	Pearson correlation	.756**
	Sig. (2 tailed)	.000
	N	342
Responsiveness	Pearson correlation	-.596
	Sig. (2 tailed)	.080
	N	342

Assurance	Pearson correlation	.669**
	Sig. (2 tailed)	.000
	N	.342
Empathy	Pearson correlation	.786**
	Sig. (2 tailed)	.000
	N	.342

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

Source own survey, 2018/19

The results in table indicate that, there is positive and significant relationship between tangibility and customer satisfaction ($r = 0.832$, $p < 0.01$), reliability and customer satisfaction ($r = 0.756$, $P < 0.01$), assurance and customer satisfaction ($r = 0.669$, $P < 0.01$), empathy and customer satisfaction ($r = 0.786$, < 0.01). However, the results also indicate that, there is a negative and insignificant relationship between responsiveness and customer satisfaction ($r = -0.596$, $p > 0.01$). The finding on table 4.7 above further indicates that the highest relationship is found between tangibility and customer satisfaction ($r = 0.832$, $p < 0.01$). Unlike responsiveness four service quality dimensions (tangibility, reliability, assurance and empathy) has a positive relationship with customer satisfaction.

4.4.6. Multiple Regression Analysis

Multiple regression analysis was employed to examine the effect of customer service quality dimensions on customer satisfaction. Multicollinearity Test: in multiple regression analysis, multicollinearity refers to the correlation among the independent variables. According to (Kline, 1998) multicollinearity is not a threat if a correlation value is less than 80%. Before conducting the multiple regression analysis, the researcher examined the result of multiple correlations among the independent variables and found that, the pair wise correlation between the independent variables is less than 80%, as shown in appendices A. The following subsections present the results of multiple regression analysis.

Table 18. Regress Customer satisfaction on service quality dimensions

variables	Unstandardized coefficient		standardized coefficient	T	Sig
	B	std.err	B		
Constant	-.713	.236		-3.002	.003
Tangibility	.347	.082	.379	5.375	.000*
Reliability	.315	.098	.312	4.352	.000**
Responsiveness	-.096	.113	-.078	-.851	.355
Assurance	.362	.074	.287	4.262	.000**
Empathy	.416	.103	.326	3.908	.000**

R square .804

** P < 0.01

Own survey 2018/19

Hypothesis testing is based on standardized coefficients beta and P-value to test whether the hypotheses are rejected or not.

Hypothesis 1

Hol: Tangibility will not have a positive and significant effect on customer satisfaction.

Ha1: Tangibility will have a positive and significant effect on customer satisfaction.

The results of multiple regressions, as presented in table above, revealed that tangibility has a positive and significant effect on customer satisfaction with a beta value (beta = 0.379), at 99% confidence level (p < 0.01). Therefore, the researcher may reject the null hypothesis and it is accepted that, tangibility has a positive and significant effect on customer satisfaction.

Hypothesis 2

Ho2: Reliability will not have a positive and significant effect on customer satisfaction.

Ha2: Reliability will have a positive and significant effect on customer satisfaction.

The results of table showed that the standardized coefficient beta and p value of reliability were positive and significant (beta = 0.312, p < 0.01). Thus, the researcher may reject the null hypothesis and it is accepted that, reliability has a positive and significant effect on customer satisfaction.

Hypothesis 3

Ho3: Responsiveness will not have a positive and significant effect on customer satisfaction.

Ha3: Responsiveness will have a positive and significant effect on customer satisfaction.

As shown in table , p-value is not significant ($p > 0.01$), and the beta value of responsiveness was negative (bata = -0.078). Therefore, the researcher fails to reject the null hypothesis and responsiveness has a negative and insignificant effect on customer satisfaction.

Hypothesis 4

Ho4: Assurance will not have a positive and significant effect on customer satisfaction.

Ha4: Assurance will have a positive and significant effect on customer satisfaction.

The table further shows that, assurance has a positive and significant effect on customer satisfaction with a beta value (beta = 0.287), at 99% confidence level ($p < 0.01$). Therefore, the researcher may reject the null hypothesis and assurance has a positive and significant effect on customer satisfaction.

Hypothesis 5

Ho5: Empathy will not have a positive and significant effect on customer satisfaction.

Ha5: Empathy will have a positive and significant effect on customer satisfaction.

Furthermore, table 4.8 also indicates that, the standardized beta and p - value of empathy were positive (beta = 0.326), and significant at 99% confidence level ($P < 0.01$). As a result, the researcher may reject the null hypothesis. So empathy has a positive and significant effect on customer satisfaction. In overall, the results revealed that all independent variables accounted for 80% of the variance in customer satisfaction ($R^2 = 0.804$). Thus, 80% of the variation in customer satisfaction can be explained by the five service quality dimensions and other unexplored variables may explain the variation in customer satisfaction which accounts for about 20%, shown in table 4.8. Moreover, from the findings of this study, researcher found out that not all of the service quality dimensions have positive effects on customer satisfaction. Out of the five service quality dimensions four dimensions (tangibility, reliability, assurance, and empathy) have positive and significant effects on customer satisfaction. On the other hand, responsiveness has a negative and insignificant influence on customer satisfaction. The findings of this study also indicated that tangibility is the most important factor to have positive and significant effect on customer satisfaction, followed by empathy, assurance and reliability.

Finally, the Model Equation:

$$\text{Customer satisfaction} = -0.713 + 0.379(\text{Tangibility}) + 0.312(\text{Reliability}) - 0.078(\text{Responsiveness}) + 0.287(\text{Assurance}) + 0.326(\text{Empathy}) + 0.3436$$

4.4.7. Regressing customer satisfaction on the service quality dimensions

The result of this study indicates that tangibility has a positive and significant effect on customer satisfaction. This finding is supported by Munusamy et al., (2010), found that tangibility has a positive and significant effect on customer satisfaction. This finding is also supported by Al Hawary et al., (2011) reported that tangibility has a positive and significant effect on customer satisfaction. On the contrary, Malik et al., (2011) reported that tangibility has no contribution to customer satisfaction. The finding of this study also indicates that reliability has a positive and significant effect on customer satisfaction. This finding is supported by Al-Hawary et al., (2011) reported that reliability has a positive and significant effect on customer satisfaction. This result also supported by Malik et al., (2011), found that reliability has a significant and positive effect on customer satisfaction. On the other hand, Munusamy et al., (2010) reported that reliability has a negative and insignificant effect on customer satisfaction. However, the finding of this study indicates that responsiveness has a negative and insignificant effect on customer satisfaction. This result is different with the study by Mohammad and Alhamadani (2011), found that responsiveness has a positive and insignificant effect on customer satisfaction. This finding is also different with the study by Al-Hawary et al., (2011) reported that responsiveness has a positive and significant effect on customer satisfaction. Moreover, the result of this study also indicates that assurance has a positive and significant effect on customer satisfaction. This finding is supported by Malik et al., (2011), reported that assurance has a positive and significant effect on customer satisfaction. This result is also supported by Al-Hawary et al., (2011) found that assurance a positive and significant effect on customer satisfaction. The finding of this study further indicates that empathy has a positive and significant effect on customer satisfaction. This finding is supported by Mohammad and Alhamadani (2011), reported that empathy has a positive and significant effect on customer satisfaction. On the contrary Munusamy et al., (2010) found that empathy has a negative effect on customer satisfaction. In overall, the results revealed that all independent variables accounted for 80% of the variance in customer satisfaction ($R^2 = 0.804$). Thus, 80% of the variation in customer satisfaction can be explained by the five service quality dimensions and other unexplored variables may explain the variation in customer

satisfaction which accounts for about 20%. Moreover, from the findings of this study, researcher found out that not all of the service quality dimensions have positive effects on customer satisfaction. Out of the five service quality dimensions four dimensions (tangibility, reliability, assurance, and empathy) have positive and significant effects on customer satisfaction. On the other hand, responsiveness has a negative and insignificant effect on customer satisfaction. The results of this study further indicate that tangibility is the most important factor to have a positive and significant effect on customer satisfaction.

4.5. Analysis of Results Found from Interviews

This section of the paper deals with results found through interviews conducted with CBE branch managers, CBE E-payment team leaders/managers, and E-payment officers. The intention of the interview was to have a clear picture of the E-payment services render by CBE and what major problems are there which leads to customer dissatisfaction. Therefore, the relevant ideas and issues are systematically collected, presented and analyzed as follows.

The kind of banking services that are being provided by CBE to its ATM banking customers are:-

- Money Withdrawal
- Printing out Account Transactions
- FundTransfer
- ForeignCurrencyExchange

The Kinds of CBE's Visa Cards Currently on Use Table

Kinds of CBE's VISA card currently on use

Table 19.

No.	Kinds of VISA Cards	Target Customers	Major Benefits
1	Normal Classic Card	All Customer of the CBE	Quick banking services
2	Woman Classic Card	Women Customers of the CBE	Quick ATM banking services for Woman discount Purchase of items from selected merchants
3	Gold Card-Local	For local customers whose level is gold	Higher amount limit on local ATM banking service
4	Gold Card International	For International Customers whose level is gold	International ATM Banking service privilege
5	Premium Card - Local	For local customers whose level is Premium	Highest amount limit on local ATM banking services
6	Premium Card - International	For International Customers whose level is Premium	Higher level International ATM banking services Privilege
7	Selam Card	For interest-free customers of the CBE	Quick banking services for IFB customers of the CBE
8	Infinity	For very special purpose	Infinite level of ATM services

Source: E-payment of CBE

There are major issues regarding ATM that creates customer complain and end up in customer dissatisfaction on the service.

Regarding the time it takes for the E-payment process of the CBE to produce the visa cards and pin codes after the request is lodged by branches, it is found that there is no standard time or number of days set for it. However, there is an improvement on it in recent times.

Even if it takes less than a week to produce the cards in the E-payment process, the repeated answers from branch managers are that it takes two weeks to two months, sometimes above two months and may lose at all on odd occasions. This shows that there are irregularities in the production and distribution of visa cards, which may contribute to the poor performance of the bank in terms of the share of active visa cards from the total visa card production in each year. In relation to the reasons why it takes prolonged time for the production and distribution of visa cards and pin codes to branches are; Printing machine damage, Miscommunication of information between branches and the E-payment process and for outlying branches, in addition to the above troubles, sending of the visa cards through a third body (Ethiopian Postal Service) is raised as another difficulty

The other issue raised about visa cards is the case that some visa cards and pin codes which are already produced and given to customers are produced over again for the second or third time and distributed to branches. This happens when there are prolonged delays in the delivery of visa cards to customers, and then branches re-fill visa card forms and send to e-payment, which leads to the repeated production of visa cards for the same customer & account numbers.

In the context of the CBE, inactive Visa cards are the ones which are either not delivered to customers by branches or delivered to customers but never been used on ATM/POS even once for at most six months. Among the kinds of Visa cards, Normal classic and Woman classic visa cards are the foremost in terms of exposure to be inactive.

The E-payment process along with CBE branches currently consider one-time usage of the visa card as a threshold to group it into the number of active visa cards. This is one of the reasons why there is unpleasant practice in most of the CBE branches, if not all, that they persuade/coerce new visa card receivers to use their card once on the POS machine (usually

not on ATMs) placed in branches so that the number of active visa cards boosts for the branch (Primarily to achieve the PMS targets set by Districts and cascaded to branches). But a card that is used only once on POS or ATM should not be taken as an active one unless the user makes use of it on a continual basis. Consequently, the essence of what is active or inactive visa cards should be decided by the top management of the bank and informed to all CBE branches and the E-payment process to act accordingly.

The major reasons for frequent stoppage of ATM machines are; Network interruption, hardware faults, non-replenishment of cash notes when cash in ATMs is drained, filling ATMs with deteriorated cash notes and technical problem in relation to the usage of ATMs

The kind of banking services that are being provided by CBE to its mobile banking customers are:-

- balance inquiry
- money transfer(either to self or other account or beneficiary)
- check book order
- ATM locator and exchange rate

Results of the interview made with CBE branch managers, CBE E-payment team leaders/managers, and E-payment officers revealed that the following problems are common while giving mobile banking service to their customers.

The CBE's mobile banking platform bases on customers' ID, which makes it difficult for branches to recruit potential customers whose saving/current accounts, are maintained with another branch. This makes customers to feel like customers of a certain branch instead of customers of the CBE, thereby create dissatisfaction and low rate of adoption. Customers complained about not getting enough information and guidance on how to actually use the services. There is no user guide to hand over to mobile banking customers, some customers complained that their account balance is not updated; it lags two to three days behind. This is due to poor connectivity; they mention that it is beyond the banks capacity, they frequently face difficulty when trying to use mobile banking service after working hours and training offered by the Bank with regard to mobile banking service is not sufficient. As a result, frontline employees are tied up in explaining each and everything to customers. There is a problem while demonstrating the service to new recruits as the service is frequently gets interrupted leading to rejection of the service. First-time impression matters as far as customers' early adoption of the service is concerned. Customers also complained that the four digit pin is not strong enough.

While transferring money through a mobile phone for beneficiaries who do not have an account in CBE, Sometimes secret code is not sent to the remitter and the beneficiary. As a result, customers are required to come to branches to have the code reissued and some customers don't know that they need to come to the branch to have the service reissued if they change their cell phones.

The kind of banking services that are being provided by CBE to its POS banking customers are:-

- cash advance
- various payments
- fund transfer
- mobile top up
- bill payment

Results of the interview made with CBE branch managers, CBE E-payment team leaders/managers, and E-payment officers revealed that the following problems are common while giving POS banking service to their customers.

The Bank didn't procure standardize and quality POS machine relative to other private banks which receives any types of a card like master card, lack of user manual to customers to refresh their knowledge by themselves, slow network connection.

The established technical team for support by e-payment sub-process and districts is more of marketing specialist; so that they can't solve mechanical and network problems that the merchants are facing; and they work only for meeting their target only (deployment and merchant sign up). But it demands extra efforts to ensuring the functionality of the POS machines and increasing the usage rate in terms of number of users and transaction volume.

No public education about the advantage and benefits of using POS while making transactions;
Poor internal communication on card payment (especially the branches with e-payment).

Merchant Customer Side Difficulties

The merchant POS users have trust in traditional payment system made by cash this is due to; technological fear, lack of awareness of the product, correlation of the POS service with taxation as CBE is the government bank, cashier who did take the training have resign or shifted, some of them do not take the training at all and sales persons in cafeterias, hotels, restaurants and in other service giving centers discourage the customers to pay using POS they

believe that they only get tips if the customers pay cash etc. are possible causes. Due to this mostly merchants place the POS machines out of the sight of customers and unplugged the cable of the machines.

Sometimes sales person/merchant face a problem of transaction locking while receiving payments by using CBE POS. And they receive the payment on cash at that moment, but the customer account was debited even if there is transaction locking/ network problem. This creates disagreement with their customer; they also claimed that they couldn't get a common contact person from CBE (Contact person changes frequently)

The kind of banking services that are being provided by CBE to its Internet banking customers are: - .

- Viewing account balances and transactions.
- Making fund transfers between customer's own current accounts and savings accounts.
- Effecting payments to third parties, including bill payments to predefined CBE customers within Ethiopia.
- Viewing and downloading current and saving account statements.
- Requesting for Stop Payments on cheques, etc.
- Applying for a Letter of Credit.

Through CBE's Internet Banking, many transactions can be carried out from the comfort of your home or office. Currently, commercial bank of Ethiopia has 20,000 internet user customers and this figure is very low compared to the other E-payment services. Some of the major problems while giving internet service are; Lack of trust on the service, Technological fear /resistance, Lack of awareness of the product (both customers and employees) and Low access of internet etc.

4.6. Interpretations and findings

The objective of this study was to examine the role of e-banking service quality on customer satisfaction with in CBE. Demographic factors such as gender, age, occupation, education qualification, monthly income and types of e-banking service have been used to know the general characteristics of the respondents. According to this study the research used 72.32% male and 27.68 % of female were users of e-banking service. This implies that the majority of e-banking users in CBE are males.

As presented in the age analysis shows that the age statistics indicated that the least age groups were those above 69 which were represented none of the respondents sampled for the study. Additionally, the highest age groups from the study were those between 18-29 years. These age groups were made up of 87.48 % of the respondents. The highest age group was followed by those between 30-49 years and 50-69 years old. This age group represents 10.73% and 1.79% of the respondents respectively. This result indicated that the user of e-banking service in CBE more of youngsters.

In terms of education, noted that from the total respondents of sampled e-banking users 3 of the respondent was without any formal education. The most represented educational levels were those with a Bachelor degree which was made up of 58% of the respondents. This was followed respondents representing 18.78 % who were with a master's degree and above, and respondents representing 13.40 % who were with a diploma. 6 respondents of the study which accounts for 5.36 % were a holder of basic education. The least represented educational level were those with TVET who were 1.79 % of the respondents. With regard to the education qualification of respondents, the majority were first degree holder with 58% which is followed by Master's Degree holder which accounted 18.78 %. This implies that the reason large number of customers were BA degree and Master's degree that e-banking service needs to more understanding especially internet banking. When we see the occupation of the respondents, most of them were working in government sector which accounted 41.07 % and followed by 26.79 % working in private sector. This means that most of the customers that CBE have government employees. The reason why this result was recorded based on the view point of the researcher most of the peoples using banking service in CBE because of it is the leading bank in introduction of banking technologies and it has public image. In terms of the monthly income of the respondents, the majority had income of between Birr 2,001-10,000 which accounted 59.82 % and followed by 3.36 % having income in above birr 10,000. In regarding to the types of e-banking that most of customer's are using ATM accounted 45.54 % followed by ATM, and MB accounted 22.32 % and, ATM ,POS and MB accounted 12.50 %. As we understand from this result most of the customers of CBE are using ATM, POS and MB respectively. This implies that it is ease to using ATM and Mobile banking rather than internet banking due to different reasons like using ATM may not need online internet network, it may not requires further understanding and much cost.

Regarding visit of branch before and after the introduction of e-banking; those who visit the branch rarely in a month accounts 21.43 per cent before the introduction of e-banking service

but those respondents who visit the branch never, once and twice in month accounts 80.36 per cent after using e-banking service. This implies after the introduction of E-payment the number of customers who visit the branch is significantly decreased. Those Customers frequently and very frequently visit branches in a month accounts 78.57 per cent before the introduction of E-banking service but those respondents who visit the branch thrice and more in a month accounts only 19.64 per cent after the introduction of E-banking service. This justified that there is no question that implementation of E-banking has a good impact on reducing the visit of branches by customers.

It is expected that introduction of electronic banking products and services significantly reducing a number of visits to the banks. One of the implications of electronic banking is that it should reduce the need to visit bank branches. In fact, the electronic banking delivery channels are often considered as potential substitutes for brick and mortar bank branches. However the interview responses did not support this result, even if CBE needs to create the awareness of cashless society, customers still find it useful to visit their bank branches regularly every month to perform some banking transactions. This is due to mostly customer's used E-banking products only for cash withdrawals and rarely for funds transfer.

When we see the experience level of the respondent, 50.89 per cent of the respondent had served in the bank for a period of 1-5 years, 38.39 per cent were between 6-10 years, 6.26 per cent were between 11-15 years, 1.78 per cent were between 16-20 and 2.68 per cent were above 20 years. This implies that almost all respondents had taken reasonably enough time in service and thus the data they provided was believed to be reliable.

This study have been also found that two main outcomes by using inferential statistic. That means the first finding was there is a strong impact of e banking service quality on customer satisfaction and customers give a high concern on tangibility, reliability empathy, and assurance dimension from the given bank e-banking service. The second outcome of this study, there was no significant effect of responsiveness, on customer satisfaction. According to the finding for the sampled banks in Ghana empirical work of Parasuraman et al (1985) these dimensions have been a strong significant effect on customer satisfaction. So, this study doesn't conform to the result of Parasuraman (1985).

Furthering the discussion, the regression result of this study showed a positive relationship between all the e banking service quality variable and customer satisfaction. This confirms the model used for the study. The model indicates that there is a positive or linear relationship between satisfaction and e banking service quality. When we come to the responsiveness of e-

banking service quality as an influence of customer satisfaction, based on the data gathered from the given respondents it was insignificant for their measurement of the bank on their satisfaction level. Based on the respondents view point, they were not that much satisfied with the reliability of the bank. The reason for this dissatisfaction might be disseminations of their banking information, account mugger, the PIN of all e-banking services are not responsive and other reasons. This result was to the contrary of the bank slogan of “the bank always you rely on”. In this regard for the bank responsiveness is the primary question to answer if not their profitability fall in quotation; due to customer’s dissatisfaction.

According to the previous research conducted by Deribe et al (2012), Anderson, I., Gaile-Sarkane, E. (2008) and Parasuraman (1995) have been found that it has significance effect on customer satisfaction. In this regard this result has been opposite to their study. This also leads to decreasing banks profitability while customers have not trustworthiness. Regarding to, responsiveness using in the bank according to the respondents point of view it was insignificant impact on their satisfaction or with the variable of ‘responsiveness’ in e-banking has not been well provided by the bank. For instance, employees were not responsive regarding the use of ATM, POS and MB service; in this regard the customer did not get sufficient information about the above services, in this case the customers are dissatisfied.

The degree of significance varied from variable to variable. The results show that without the exception of responsiveness, all the other variables were significant at 10% significance level. The reason for this result was because customers of e-banking were of the indicated that they did not have enough services over e-banking activities. In this case findings of this study runs contrarily to that of Bateson (1985) and Bowen (1986) who indicated that **responsiveness**, Reliability, and assurance, are significant on customer satisfaction.

CHAPTER FIVE:

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

Chapter five which is the final chapter is the summary, conclusion and recommendation of this study. The chapter provides a summary and implication of the main findings of this study as presented in chapter four. The limitation of this study also presented next to the conclusion. The chapter ends with the recommendation for the various institutions of concerns and finally area of future research.

5.1. Summary and Implications of the Main Findings of the Study

The main findings of this study can be summarized into three main subjects. These themes are the testing of the hypothesis, the analysis of the demographic data and the reliability test. The demographic analysis shows that more males use the e-banking services than their female counterparts. Additionally, when it comes to age group, the modal age of users of e-banking users of the banks in Ethiopia was 18-29 year or in their youthful age. Educationally, majority hold a Bachelor degree from various fields of studies. In addition to the above, the most earned income of users of e-banking activities was between Birr 2001-10,000. In Cronbach's Alpha test for the reliability of the data shows that in good way met the Nunnally and Bernstein's criteria of 0.7. That means it was 0.968. The major finding of the first hypothesis shows that the tangibility and empathy determinant was positively impacted to the customer satisfaction and was significant at 0.05 significant levels. The second hypothesis shows that responsiveness, ease assurance and reliability of services were positively related, but insignificant at 5% and doesn't led to customer satisfaction. Finally, the result shows that, there was the linear relationship between e banking service quality and customer satisfaction.

Several factors influences customer satisfactions with e-banking in worldwide, but the case of Ethiopia is quite different. The finding of the study shows that demographic variables influenced customer satisfaction with the various e-banking services of the banks visited. The age of the respondents influences their satisfaction with the e-banking services provided by the various banks especially the surveyed branches visited. Age was significance because; the young or the youth are must more interested than adult and elderly in using technology for their banking services. This is because the youth by their nature are usually breast with modern technology, egger to change and especially the used of internet in the banking industry. Additionally, the age range of the respondents to the study shows that majority of the

respondents administered with the questionnaire were youthful and preferred the use of the e-banking for banking purposes rather than the elderly who were mostly not abreast with technology most especial the internet facilities provided by the various banks concerned. In addition to the above, the educational level of respondents influences their choice of product offered by the banks involved in the study. That was the findings of the study as education of the respondents influenced their adoption of e-banking banking especially in internet banking. Literacy was a major factor, since for an individual to use the e-banking facilities provided by their banks there was a need for patrons to understand what written. Since all respondents or patrons of this study are, literate e-banking played a major role in their usage of e-banking services.

The services offered by the banks, which use internet banking, have reliable banking services than those that do not have these services. But, still the use of internet banking is not that much enough with compared to ATM, POS and MB. The correlation result show that there is a positive and significant relationship between tangibility and customer satisfaction, reliability and customer satisfaction, assurance and customer satisfaction, empathy and customer satisfaction. However, the results indicate that, there is negative and insignificant relationship between responsiveness and customer satisfaction. The finding also indicates that the highest relationship was found between tangibility and customer satisfaction, while the lowest relationship was found between responsiveness and customer satisfaction. Furthermore, the multiple regression results showed that except responsiveness the four service quality dimensions (tangibility, reliability, assurance and empathy) have positive and significant effect on customer satisfaction. The R square value of 0.804, demonstrates that 80.4% of variation in customer satisfaction can be accounted by the service quality dimensions. The findings of this Study also indicated that tangibility is the most important factor to have positive effect on customer satisfaction, followed by empathy, assurance and reliability.

5.1.1. Conclusion of the Study

Based on the result of the study the researcher concludes that males were more users of e-banking than females. Youngsters were the highest users of e-banking than elderly. In addition it could conclude that the middle income level group and government employees were the highest users of e-banking in CBE selected five branches. Among, the types of e-banking services the large number of customers was using ATM, POS and MB banking respectively. It was conclude that the independent variables were highly described the dependent variable. The finding of the study also indicates that, customers were most satisfied with the assurance

dimensions of service quality. However, customers were less satisfied with reliability and empathy dimensions of service quality. The correlation result shows that, unlike responsiveness the four service quality dimensions (tangibility, assurance, empathy and reliability) are positively and significantly related with customer satisfaction. In terms of the stated research hypotheses the following specific empirical findings emerged from the investigation: The four service quality dimensions including tangibility, reliability, assurance and empathy have positive and significant effect on customer satisfaction. The findings of this study also indicated that tangibility is the most important factor to have a positive and significant effect on customer satisfaction. In addition to this, except responsiveness the four service quality dimensions significantly explain the variations in customer satisfaction.

5.1.2. Limitations of the Study

The main limitation encountered in the study was inadequate sample even if the customers are to the same parameter. The sample used for the study was not sufficient hence making generalization of the findings very difficult to make. To make healthy generalizations from this study, it is important to calculate an appropriate sample size which is representative of this study and which is adequate enough to make healthy generalizations. Furthermore, instead of using customers of all the banks sampled only a selected few were used for this study, this can affect the results of the study. Another limitation faced by the researcher was the time and resource constraint.

Another limitation of this study also unwillingness of respondents to fill the questionnaires. Most of the respondents were not interested to fill the questionnaires because they are being boring to read it and they seem it needs too much time spent. These three constraints affected the way in which the research was conducted. The time constraints affected the choosing of the sample size as well as the quality and quantity of the research work. A crucial limitation of this study is the reluctant and refusal of some sampled respondents to respond to the questionnaires administered to them. The final limitation to this study is that most of the respondents have either little or no knowledge on the e-banking service or how such service worked.

5.2. Recommendation of the Study

This study has important implication for both academics and Managers of the various banks visited as well as uncovered banks in Ethiopia in general. Banking managers should not only lay emphasis on the bank' objectives and goals but must also focus on the needs of the customers and enhance customers productivity. E-banking conveniences enable both customers

and employees of the organization to be more effective and productive in receiving, providing and delivering services. Given the insignificant valued obtained on the responsiveness, the use of e-banking services of the various banks it is essentially recommended that banks take a critical look at those variables since they can affect the profitability and the switching intent of the customers. This may applied through giving professional training to the employees regarding those concepts and so the employees well service to their customers.

It is also recommended that banks invest in understanding the needs of customers of e-banking through different awareness creation mechanism like by distributing well framed e-banking manual, and try as much as possible to meet their various needs associated with the services provided by e-banking especially about POS and Internet banking. There is the need to create awareness and educate majority of the banking population or users on e-banking especially in mobile and internet banking. This was because most of the customers administered with the questionnaires rejected or refused to answer the questionnaire because they did not know about the services nor had minimal education of internet banking services. Web-site of the bank should contain relevant information explained in an easy to understand language and should be visually attractive and regularly updated because service quality is main determinant for measuring the customer satisfaction efficiently. In case of any problem, the bank employees may speak themselves with the customer through telephone or any other mode of communication.

5.3. Area for Future Research

Although this study has been expensive as possible there is the need the other dimensions of services quality associated with internet banking and assess its impact of customer satisfaction. This will enables strength the generalization of the findings to the Ethiopian economy. This study was limited to customer satisfaction and e-banking service quality, but there is a need for further researchers to examine the effect of customer satisfaction or dissatisfaction on the switching cost of banks offering e-banking or the switching intent of customers of these banks. Finally, further studies should research into the relationship between the heterogeneity of the various customers of e-banking and issues of electronic payment such as funds transfer, security and bills payment.

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Appendix A
SAINT MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF PROJECT MANAGEMENT

Dear Respondents,

The purpose of this study is to examine your opinions about e-banking service quality that is the most important factors of satisfaction. The success of this survey depends on your participation and truthful responses. I would therefore greatly appreciate your assistance in answering the questionnaire. Please be assured that your response will be kept strictly confidential and only be used for academic purpose. Individual participants will not be identified in the analysis as only aggregated results will be analyzed and interpreted. Thank you for sharing your valuable time in filling this questionnaire.

Part I: Personal Information

Please put a tick (√) mark corresponding to your response.

1. Gender : Male Female
2. Age: 18 to 29 30 to 49 50 to 69 Above 69
3. Education level
- | | |
|--|--|
| No formal education <input type="checkbox"/> | Basic education <input type="checkbox"/> |
| TVET <input type="checkbox"/> | Diploma <input type="checkbox"/> |
| Degree <input type="checkbox"/> | Masters and above <input type="checkbox"/> |

4. Income level:
- | | | |
|--|--|---|
| Less than Br 2000 <input type="checkbox"/> | Br 2001-10000 <input type="checkbox"/> | Br 10000 and above <input type="checkbox"/> |
|--|--|---|

5. Which type of E-banking service do you use?

- | | | | |
|---|---|---|--|
| ATM <input type="checkbox"/> | Mobile banking <input type="checkbox"/> | Internet banking <input type="checkbox"/> | |
| ATM and Mobile banking <input type="checkbox"/> | | All Type <input type="checkbox"/> | |

6. Types of customers

- | | | | |
|--|---------------------------------------|---|---|
| Self-employee <input type="checkbox"/> | business men <input type="checkbox"/> | private employee <input type="checkbox"/> | govnt employee <input type="checkbox"/> |
|--|---------------------------------------|---|---|

7. For how many years are you customer of commercial bank of Ethiopia? _____

Part II: Survey of your expectations and perceptions towards service quality of Commercial Bank of Ethiopia

Based upon your experience as user of E-banking service in commercial bank of Ethiopia, please visualize what would look like, the excellent types of services that it would provide, and your actual service perception of E-banking service. Based on this please show the extent by put a tick (√) under the numbers (**5-Strongly Agree, 4-Agree, 3- Neutral, 2-Disagree, 1-Strongly Disagree**)

There is no any right or wrong answers-all that we are interested in is the number that truly reflects your feeling regarding quality of E-banking service in commercial bank of Ethiopia.

Dimensions	Service quality features					
		Strongly disagree 1.	disagree 2.	neutral 3.	agree 4.	Strongly agree 5.
Tangibility's (Physical facilities equipment and personnel)	1. The e-banking physical facilities are visually appealing					
	2. I am satisfied with the technological up-to-date equipment's of the bank					
	3. The e-banking physical facilities of bank are modern.					
	Service quality features	Strongly disagree	Disagree	neutral	agree	Strongly agree

	4. My Bank's E-Banking facility makes accurate promise about the service they deliver					
Responsiveness (Willingness to help customers)	5. I always get the detail of my account through SMS/Email on my Cellular phone?					
	6. The Helpline services of the bank are efficient					
	7. The language in e banking displays is easy to understand					
	8. I am always informed by the bank when the services will be performed?					
	9. E-banking provide knowledgeable staff to solve problem					
	10. Response of service through e-banking is very prompt and quick					
	Service quality features	Strongly disagree	disagree	neutral	agree	Strongly agree

	11. The use of e banking is reliable					
Reliability (the ability to adopt the expected service dependably)	12. Feel safe when using e banking					
	13. I prefer using E-banking instead of visiting branch for making my transaction					
	14. E-banking provide security for transaction data and privacy					
	15. I am satisfied with the service charges of my bank					
	16. I have always found ATM booths in working order					
	17. E-banking performs the service right the first time					
	Service quality features	Strongly disagree	Disagree	neutral	agree	Strongly agree

Assurance (knowledge and courtesy of employees)	18. Employees of your bank are consistently courteous with you					
	19. The behavior of employees in your bank instills confidence in you					
	20. The staff of your bank makes you feel safe in transaction					
	21. The employees of your bank have the knowledge to answer your questions					
Empathy (caring and understanding of customers)	22. employees of your bank are able to communicate effectively with you					
	23. The employees of your bank understand your specific needs					
	24. Your bank has operating hours convenient to all their customers					
	25. The staff of your bank shows personal attention to you					
	Service quality features	Strongly disagree	Disagreed	neutral	agree	Strongly agree
	26. The employees of your bank have their customer's best interest at heart					

	27. Staff can describe step to use and condition to use clearly					
Satisfaction	28. You are satisfied with the e-banking service provided by your bank					
	29. You are satisfied with the banks online based service quality					
	30. Over all service of e-banking is better than your expectation					

Part III: We need your response about the frequency of visiting branches in order to assess the frequency of visiting branches before and after adoption of E-banking service.

1. Before the introduction of E-banking service, how frequently in a month do you visit the bank for transaction?

Rarely Frequently very frequently

2. After the introduction of E-banking service, how many times in a month do you now visit the bank for transaction

Never once twice more

APPENDIX-B

Interview Guidelines: Points for Discussion with CBE branch managers, CBE E-payment team leaders/managers and E-payment officers

1. **Personal information:**

Age ___ sex _____ responsibility or position in the bank _____ years of experience in the bank _____

2. When did the bank start implementing E-payment service? Do you think the service shows high progress and in what aspect? Current information about E-payment service like number of ATM, mobile banking and internet banking users and functions that the service provides?

3. Key priorities

What are key priorities of E-payment service, currently CBE focused on customer satisfaction or new product introduction or service quality or market share or what? From the five SERVQUAL features for which feature is CBE gives priorities?

4. Intelligence and information sharing

As we know there is a dynamic change in E-payment service, so in this continuously changing environment how can you share the new technology with employees and customers? Do you think your employees are updated or have a good knowledge about the service?

5. In terms of location did the service limited to city branches only or addresses outline branches too?

6. Do you think customers are used E-payment service as CBE's desire or not? How do you evaluate the progress in the past few years?

7. What do you think the major hindrances CBE faced in rendering E-banking service?