



**ST. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**DEPARTMENT OF BUSSINESS ADMINISTRATION**

**THE EFFECT OF ELECTRONIC BANKING SERVICE QUALITY ON CUSTOMER  
LOYALTY AND THE MEDIATION EFFECT OF CUSTOMER SATISFACTION ON  
THE RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER LOYALTY:  
THE CASE OF COMMERCIAL BANK OF ETHIOPIA**

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**FEBRUARY, 2024**

**ADDIS ABABA, ETHIOPIA**

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

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## **DECLARATION**

I, Asres Birhan declare that this thesis entitled “The Effect of Electronic Banking Service Quality on Customer Loyalty: The Case of Commercial Bank of Ethiopia” has been undertaken by me under the guidance and supervision of Dr. Ephrem Assefa (Ass. Prof.).

This thesis is my original work and has not been presented for the award of any degree or diploma to any university or institutions.

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Signature: \_\_\_\_\_

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**Addis Ababa, Ethiopia**

**February, 2024**

## **ENDORSEMENT**

This thesis entitled “The Effect of Electronic Banking Service Quality on Customer Loyalty: The Case of Commercial Bank of Ethiopia” has been undertaken by Asres Birhan under my guidance and supervision as a university advisor.

**Ephrem Assefa (Ph.D)**

Signature: \_\_\_\_\_

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## LIST OF ACRONYMS

ATM	Automatic Teller Machine
CBE	Commercial Bank of Ethiopia
COVID-19	Corona Virus Disease of 2019
CRM	Customer Relationship Management
CS	Customer Satisfaction
E-Banking	Electronic Banking
E-Payment	Electronic Payment
EFT	Electronic Fund Transfer
ICT	Information Communication Technology
IB	Internet Banking
MB	Mobile Banking
POS	Point of Sale
SERVQUAL	Service Quality
TAM	Technology Acceptance Model
SPSS	Statistical Package for Statistical Analysis
URL	Uniform Resource Locator

## Abstract

The major aim of the study was to examine the effect of electronic banking service quality on customer loyalty on commercial Banks in Ethiopia. Moreover, the study tries to investigate the relationship between dimensions of service quality and customer loyalty. Bank service quality (BSQ) model of (Parasuraman, Zeithaml et al. 1988) was used to evaluate overall level of service quality and its effect on customer loyalty. The model had five factors; reliability, responsiveness, empathy, Tangibles, and assurance. Descriptive and explanatory research approaches were used. Eight branch banks of commercial bank of Ethiopia were selected randomly and 394 questionnaires were administered to customers of selected branch banks using convenience-sampling method and 394 responses were analyzed in to SPSS version 27. The correlation result indicated that there is a positive and significant relationship between all BSQ dimensions and customer loyalty. All independent variables has a significant effect on customer loyalty except Assurance has a positive but insignificant effect on customer loyalty and empathy has a negative but insignificant effect on customer loyalty. Considering the results of these finding the researcher has given recommendations that CBE needs to seek changes to remain competitive in the industry through enhancing customer satisfaction and loyalty and should focus on improving service quality all the areas which requires integrated and collaborative approach with all stakeholders.

**KEY WORDS:** CBE, E-banking, Customer satisfaction, Customer Loyalty and SERVQUAL model.

# 1 CHAPTER ONE: INTRODUCTION

## 1.1 Background Of the Study

Banks play a major role in improving economic efficiency by transferring funds from resource rich sectors to those sectors that are deficient, by possessing better productive investment opportunities. Banks also play a major role in trade and payment system by significantly reducing transaction costs and increasing convenience (G/Hiwot 2018).

Conversion from the manual based banking system to systemized processes and the overture to internet based facilities has given a new face to the banking sector (Toor, Hunain et al. 2016). The gradual change of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first in the world to have taken a lead in e-banking (Mishra RK 2009).

E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels (Shahriari 2014). With the advancement in the technology, one of the latest technologies adopted by bank is the electronic banking. One of the channels of e- banking helps bank customers to perform their financial transactions electronically over the internet through their personal computer, laptop and phone at the time convenient to them, without having to be restricted to regular bank operating hours. E-banking is an innovative distribution channel that gives less waiting time and higher spatial convince than traditional branch banking with significantly lower cost structure than traditional delivery channels (Maharjan 2021).

Electronic banking contributes most importantly to the distribution channels of banks such as automated teller machine (ATM), Phone –banking, Tele-banking, PC-banking and now internet banking. In addition, transfer of funds, viewing and checking savings account balances, paying mortgages, paying bills and purchasing financial instruments and certificates of deposits processes have improved significantly as a result of internet banking (Gizaw 2017).

Customers are the key contributor for the success and survival of any business and this is the same for banking sector also. So, need arises not only to satisfy the customers but also to retain them because it may lead to increased profitability and better performance of banks. Technology is

affecting the life of every individual and nation both qualitatively and quantitatively in the present day and internet banking is one of the technologies which is growing faster in banking practice now days. Moreover, customer are shifting from traditional banking to online banking very rapidly because of various benefits such as cost and time effectiveness, The quick expansion of information technology has entered into the lives of millions of people and introduced major changes in the worldwide economic and business atmosphere. (Morawetz 2018)

## **1.2 Background Of the Case Organization**

The history of Commercial Bank of Ethiopia (CBE) dates back to the establishment of the State Bank of Ethiopia in 1942. CBE was legally established as a share company in 1963. Since then, it has been playing significant roles in the development of the country. Currently CBE has more than 37.9 million account holders in its more than 1900 branches and the number of Mobile and Internet Banking users also reached more than 6.6 million and 37 thousand. Active ATM card holders reached more than 8.3 million and 17 million CBE Birr users (CBE 2023).

### ***1.2.1 Vision***

A world-class commercial bank financially driving Ethiopia's future.

### ***1.2.2 Mission***

They are committed to best realize stakeholders' needs without compromising the well being of the environment and society through Enhanced financial intermediation globally, supporting national development priorities, deploying highly motivated, skilled and disciplined employees as well as state-of-the-art technology. They strongly believe that winning the public confidence and developing sustainable business model are the basis of their success (Bank 24 Feb 2020).

### ***1.2.3 Core Values of the Bank***

Core values detailed below are the operating principles that guide CBE's internal conduct as well as their relationship with their customers, partners, and shareholders.

Integrity

Service Excellence

Professionalism

Empowerment

Innovative Organization

Teamwork

Respect for Diversity

Corporate Citizenshi

### **1.3 Statement Of the Problem**

The demographic characteristic of the large segment of customers are categorized under the younger generations category is pressuring banks to cope up the ever-increasing and rapidly changing demand of customers and achieve a steady growth in customer experience. These groups of customers have high acceptance to Financial Technology firms as they offer the flexibility and simplicity options which are highly appreciated by younger generations. (Sileshi 2019)

It is argued that developing nations in general have an advantage as they can learn from the knowledge and experience of developed nations (Claessens, Glaessner et al. 2001). In Africa, electronic banking has started and is growing quickly over the most of nations. For instance, recently in Ethiopia, an electronic payment platform was chosen to pay for fuel at gas stations, all gas stations switched to accepting only electronic transactions through Tele-birr or the Commercial Bank of Ethiopia's Nedaj online banking platform (Tewodros May 6, 2023).

Commercial Bank of Ethiopia (CBE), introduced ATM service for local users in 2001 with its fleet of only eight ATMs located in Addis Ababa. Moreover, CBE has had Visa membership since November 14, 2005. However, due to lack of basic infrastructure it failed to grow the fruit of its membership. Despite, being the pioneer in introducing ATM based payment system and acquired Visa membership (Worku, Tilahun et al. 2016).



Daniel described that compared to ordinary banking system electronic banking is providing the competitive advantage by lowering the cost and providing best satisfaction of customer needs (Daniel 1999). The old age people are generally shy of use of ATM because of perceived risk of failure, complexity, security, and lack of personalized service (Moutinho and Smith 2000)

Many literatures suggest that there is a strong theoretical foundation for an empirical exploration of the linkages between customer satisfaction and customer loyalty. According to these literatures, customer satisfaction with the service experience will lead to higher level of customer loyalty (Horstmann 1998). A satisfied customer is six times more likely to repurchase a product and share his experience with five or six other people (Grönroos 2000). Further unsatisfied customer can banish more business from the organization than ten highly satisfied customers do (Mohsan, Nawaz et al. 2011). With higher customer satisfaction the level of loyalty increases. Another study also found that satisfaction has mediating effect on the relationships between service quality dimensions (tangibles, reliability, responsiveness, empathy and assurance) and customer loyalty (Kheng, Mohamad et al. 2010).

A study conducted in Nigeria revealed that 47% of customer that used electronic banking products and services are satisfied with the quality of the products and efficiency of the delivery (Bello Dogarawa 2005). Another study carried out by (Philipos 2013) about customer satisfaction and electronic banking service on some selected banks of Ethiopia identified several factors which affect customer satisfaction in electronic banking service in selected banks (commercial banks of Ethiopia, Wegagen bank, and Zemen bank) of Ethiopia. These factors are machine out of order, machine out of cash, no printing statements, cards get blocked, frequent breakdown of ATM service, unreliability of ATM service, lack of sufficient technicians in all bank who solve breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of convenience of E-bank service, lack of mobile banking service, lack of reliable Telebanking, lack of credit card service, under-development of technological infrastructure, low level of relevant knowledge creation and innovation, interruption of network, lack of suitable and regulatory frame work for e-commerce,

resistance to changes in technology among customers and service providers as result of fear of risk, lack of fair distribution of E-banking service in all over Ethiopia.

Other studies have indeed found satisfaction to be a leading factor in determining loyalty (Kheng, Mohamad et al. 2010). These studies have concluded that there is a significant relationship between customer satisfaction and loyalty. They assert that high level of customer satisfaction will result in increased loyalty for the firm and is positively associated with repurchase intentions, positive words of mouth and profitability. On the basis of the above empirical literatures, customer satisfaction is indicated as a foremost determinant of customer loyalty.

Hence, different researchers addressed the impact of e-banking on customer satisfaction and loyalty in different countries and reached on different conclusion outside and within Ethiopia, a better understanding of its impact on customer satisfaction and loyalty is critical. Since the natural phenomenon of the subject is changing quickly a close evaluation of customer satisfaction to that change and monitoring from time to time is necessary to achieve the banks' broad goal and the researcher believes that previously no research has been done in this specific topic in the city to provide empirical evidence of the impact on customer satisfaction of e-banking.. However, despite the importance of e-banking in bringing customer satisfaction limited latest studies are available in Ethiopia both in terms of number and scope. Therefore, there is a necessity in conducting more studies to understand the impact of electronic banking on customer satisfaction.

According to Portela & Thanassolis, (2006), not only empirically studies of the relationship between service quality and customer loyalty in banking system are limited, but also the existing studies on bank branches efficiency in general do not account for the changing role of bank branches. Therefore, this study is aimed to examine the nexus of e-banking service quality, customer satisfaction and customer loyalty in the case of Commercial Bank of Ethiopia (CBE).

## **1.4 Research Questions**

To examine the effect of electronic banking service quality on customer loyalty in the case of commercial bank of Ethiopia, the research attempted to answer the following sub research questions

1. What is the perception of customers towards service quality in the case of CBE?
2. To what extent customers are loyal to CBE?
3. To what extent e-banking service quality dimensions affect customer satisfaction in the case of CBE?
4. To what extent e-banking service quality dimensions affect customer loyalty in using electronic banking in CBE?
5. Does customer satisfaction mediate the relationship between e-banking service quality and customer loyalty?

## **1.5 Objective Of the Study**

### ***1.5.1 General Objective***

The general objective of the study is to investigate the effect of E-banking service quality on customer loyalty and test the mediation effect of customer satisfaction in the relationship between e-banking service quality and customer loyalty in commercial bank of Ethiopia

### ***1.5.2 Specific Objective***

1. To assess the perception of customers towards service quality in the case of CBE.
2. To assess the level of customer loyalty in the case of CBE.
3. To examine relationship between e-banking service quality dimensions and customer satisfaction in using electronic banking in CBE.
4. To determine the effect of e-banking service quality dimensions on customer loyalty in the case of CBE.
5. To test the mediation effect of customer satisfaction on the relationship between e-banking service quality and customer loyalty

## **1.6 Significance Of the Study**

In marketing term, customer satisfaction is described as a measure on how services or products supplied by the organizations meet customers' expectation. The expectation of customers in service industries about quality has been increased. Good service quality increases the productivity,

market share, return on investment, and customer satisfaction. Nowadays the quality has gained more value through customer satisfaction (Sileshi 2019).

In a services context, customer loyalty is frequently defined as observed behavior, however, behavioral measures such as repeat purchasing and purchasing sequence have been criticized for a lack of a conceptual basis and for having a narrow outcome focused view of what is in fact a dynamic process (Day 1976). Therefore, the behavioral approach to loyalty may not yield a comprehensive insight into the underlying reasons for loyalty; instead it is a consumer's disposition in terms of preferences or intentions that plays an important role in determining loyalty (Bloemer, De Ruyter et al. 1999).

The measurement of both consumer satisfaction and customer loyalty is impossible unless the critical factors behind them are determined. There would be both external and internal factors that together influence the customer satisfaction in a bank. Internal factors are variables within the banking sector, which affect the satisfaction of customers. External factors are those variables from outside the bank that influence consumer satisfaction. The internal factors leading to consumer's interest and satisfaction in a banking industry includes; products delivered by the bank, management practices, and customer service. Internal factors are those factors that affecting systems from and within the bank (Nguli 2016).

The study is designed to examine the impact of e-banking on the satisfaction and loyalty of Commercial bank of Ethiopia users. It also assesses whether e-banking users of CBE are constrained by the technology, particularly on the basis of different demographic characteristics, such as different age groups, educational level, employment status and etc. (K 2012).

The findings and recommendations of the research be significantly mandatory to both private and CBE, branch managers, electronic banking department heads, IT managers, employees, National bank of Ethiopia, Ethiopian Tel communication, Ethiopian electric power authority and those bank customers will get benefits from opportunities of e-banking on customer satisfaction.

Finally, it adds value to the existing knowledge of electronic banking and customer satisfaction in financial institutions and the study can be used as a base point for further investigations in the related issues.

## 1.7 Scope (Delimitation) Of the Study

The scope of the study can be discussed in terms of conceptual scope, geographical scope, and methodological scope.

**Conceptual Scope:** this study is delimited to investigate the effect of electronic banking service quality on customer loyalty in the case of commercial bank of Ethiopia at Addis Ababa city. In this study, e-banking service quality is treated as a multidimensional construct composed of five dimensions namely reliability, assurance, responsiveness, empathy and tangibility.

**Geographical scope:** the study is delimited within Arada District of the bank which is found in Addis Ababa due to the cost and time to reach a number of branches. Addis Ababa City is selected because it is one of the most populated cities in Ethiopia and one of the largest cities in eastern Africa by population. Furthermore, Addis Ababa is regionally important economic center and it is one of the fastest growing cities in the world.

**Methodological scope:** This study is conducted based on questionnaire survey which is limited to the customers of CBE.

**Time wise:** the study is delimited between March 2023 to February 2024.

## 1.8 Limitation Of the Study

There are currently more than 1880 branches throughout the country and out of these 20 branches found under Arada district. Out of this, 120 branches are located at Addis Ababa city under 8 different districts and the remaining branches found at different cities and towns in the country. Considering the geographical view, the study is limited to branches operating in Addis Ababa city specifically Arada District branches this is due to not only time and monetary constraints but also proximity to the researcher to get intended data for the study.

The study is limited due to the fact that it is limited to small number of branches and it is difficult to generalize to the finding obtained from just 10 branches to represent all the branches of commercial bank of Ethiopia.

## **1.9 Validity and Reliability**

### **1.9.1 Validity**

Validity is the correctness and meaningfulness of information in line with research. The material that are chosen, were included in a data collection tool were appropriate to the need or gap identified in order for it to be considered valid. The validity of the instrument was examined in terms of both the questionnaire's structure and content. This is to ensure the questions were structured in an understandable way clear to all and respondents able to interpret all questions in the same way without any bias and the responses finally help answer the research questions.

### **1.9.2 Reliability**

The level of consistency or reliability that a research instrument produces after repeated tests when used numerous times is known as reliability. This assesses how easily a study may be repeated. Additionally, it alludes to the circumstance in which "the findings of a study can be replicated using same methodology. In this study, a questionnaire that were given to customers of CBE were used as the primary measurement tool.

There are two aspects of reliability issue's external reliability means that the studied variable does not fluctuate greatly over time which means that it's stable. This kind of reliability can be tested through test reliability, which means measuring the same scale twice in different time frames and see to what extent the two sets of data yield the same replies of the respondents (Bryman 2004). This method of measuring reliability is time consuming and tedious for that reason was not used in this study.

Internal consistency strategies were used in the study in order to increase the tool's reliability. This involves comparing the results of one item's score with the results of other items on the test. The study used the Cronbach alpha to gauge how consistently accurate answers are across test items, or how closely linked a group of items are to one another. The Cronbach alpha was used as a gauge of scale dependability and were interpreted as the mean of all conceivable split-half coefficients. Acceptable is defined as a Cronbach reliability coefficient of 0.70 or higher.

Table 1; Reliability of the measurement scale

Variables	No of items or statements	Reliability coefficient Cronbach alpha	Name of the scholar/s who developed the scale, year)
1. E-Banking service quality dimensions	26	-	Wael Rahhal (2015)
▪ Tangibility	5	0.748	Wael Rahhal (2015)
▪ Reliability	7	0.867	Wael Rahhal (2015)
▪ Assurance	5	0.851	Wael Rahhal (2015)
▪ Empathy	4	0.823	Wael Rahhal (2015)
▪ Responsiveness	5	0.865	Wael Rahhal (2015)
2. Customer satisfaction	1	0.949	Wael Rahhal (2015)
3. Customer loyalty	2	0.937	Bashir Ahmad Fida (2020)

## 1.10 Definition Of Terms

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

- **Mobile banking:** is a service provided by a bank that allows its customers to conduct financial transactions remotely using a mobile device. Which perform online banking tasks at everywhere, any time. Can involve communication through USSD, Internet, or an application designed for the bank services (CBE 2023).
- **Automated Teller Machine (ATM):** is unattended acceptance terminal that has electronic capacity, accepts PIN, disburses money, and may provide balance confirmation, fund transfers between accounts and other services (CBE 2023).
- **Commercial Bank of Ethiopia (CBE):** is the largest government owned Ethiopian commercial bank in that accepts deposits and channels the money into lending activities (CBE 2023).

- **Customer:** refer to legal person or natural person with whom the bank agrees to conduct business (CBE 2023).
- **Customer Satisfaction:** is referred to the general evaluation based on business activities carried out by organizations in relation to client opinions that has been collected over a period, because of the customer using the organizations goods or services. Customer satisfaction would be measured on to the degree of customer loyalty (CBE 2023).
- **Customer Loyalty:** The degree to which a customer exhibits repeat purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists (CBE 2023).
- **E-banking:** is the provision of financial banking service through electronic devices (CBE 2023).
- **E-payment:** is a financial exchange that takes place electronically between one party to the other one (CBE 2023).
- **Internet Banking (IB):** mean the internet as a remote delivery channel for banking service through a secure website operated by the bank using access devices, including personal computers, lap top and other intelligent devices (CBE 2023).

## 1.11 Organization Of the Thesis

The thesis is organized in five chapters. The first chapter contains the introduction part of the paper which comprises the background of the study, background of the company, statement of the problem, basic research questions and objectives of the study, significance of the study, and scope and delimitation of the study. The second chapter provides the relevant theoretical, empirical and conceptual information obtained from related reviewed literatures pertaining to the topic under the study. The third chapter presents the research methodology part used to carry out the research activities. This part of the research report comprises the approach and design of the research, the participants and samples of the study, sampling methods and procedures employed, data sources and data collection instruments used, the data collection procedures, the data analysis and presentation methods used. The final chapter include the tentative work plan of the study. The fourth chapter discusses the data presentation, analysis and interpretation of the research findings. Finally, the fifth chapter presents summary, conclusion and recommendations based on the findings of the study.



## 2 CHAPTER TWO: CRITICAL LITERATURE REVIEW

### 2.1 Theoretical Literature Review

#### 2.1.1 *Definition of E-Banking*

The term “Electronic Banking” or “Internet banking” is defined as a remote banking service provided by the authorized banks, or their representatives through devices operated either under the bank’s direct control or management or under the outsourcing agreement. In other words, e-banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a branch and also includes the systems that enable customers of banks, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet (Khan 2017).

Prominent change in global commercial behaviors has improved customer demand of banking services. This revolution has set a motion in the banking sector for the provision of a payment system that is compatible with the demands of the electronic. (Guru, Vaithilingam et al. 2000)

(Singhal and Padhmanabhan 2008) defined internet banking as the use of the internet deliver banking activities such as fund transfer, paying bills, viewing current and saving account balance, paying mortgage and purchasing financial instruments and certificates of deposits. (Singhal and Padhmanabhan 2008) As (Suleiman, Mat et al. 2012) postulates, in their study, customer loyalty has become a key driver in a company’s profitability and electronic banking has revolutionized the interaction between customers and the bank. As a result, companies are prompted to make customer loyalty as one of their major goals to achieving because the variable is a function of the company’s success.

According to a study in the United Kingdom and the republic of Ireland, electronic banking was defined as information or services that are provided through the internet platform by a financial institution, in this case a bank, to its customers. (Floh and Treiblmaier 2006) There has been a significant increase in demand for e-banking with customers shifting from the offline banking system. This is mainly associated with the benefits that the customers enjoy from e-banking. The

study also showed that there are four major antecedents that relate to customer loyalty in the use of e-banking. This includes customer utility, reliability, responsiveness, and empathy. (Fichten, Asuncion et al. 2004)

A study on electronic banking in Nigeria observed that decades ago, banking was a simple business; consumers saved their money with and received their financial services from banks. When customers open savings account, they received passbook from the bank with which the account would be operated; and when it is a current accounts, they received check books for the same purpose. (Timothy 2012) Today, the banking industry has moved into an era of menu-driven ultra-robust specialized software programs called banking applications.

### ***2.1.2 Benefits of Internet Banking***

By the use of e-banking services a customer can save its significant time and money. These kinds of services also bring efficiency in customer relationship management (CRM) (Khan 2017).

**2.1.2.1 Services.** Technology has made it extremely convenient for the bank and for the customer to access easily by simply logging in on the bank's website. E-services include vast services such as financial planning capabilities, functional budgeting and forecasting tools, loan calculators, investment analysis tools and equity trading platforms. Beside this most banks also provide the facility of online tax forms and tax preparation (Khan 2017).

**2.1.2.2 Convenience.** This is the single most important benefits that outweigh any shortcoming of internet banking. Making transactions and payments right from the comfort of home or office at the click of a button without even having to step out is a facility none would like to forego. Keeping a track of accounts through the internet is much faster and convenient as compared to going to the bank for the same. Even non transactional facilities like ordering check books online; updating accounts, enquiring about interest rates of various financial products is much simpler by it (Khan 2017).

**2.1.2.3 Better Rates.** This means that a portion of savings accrued by the bank can be passed on to the customers in by paying them higher rates on deposits and charging lower rates on loans. To encourage e- banking among customers most banks offer minimum or no deposit accounts and also charges lower penalties on early withdrawal of Fixed Deposits. This type of banking implies lesser physical efforts and higher benefits. The need to acquire larger spaces for offices and employee more staff to deal with the customers is significantly reduced making it financially beneficial to the banks (Khan 2017).

**2.1.2.4 Mobility.** E- Banking has a step further in the last few years in the form of mobile internet banking which accords unlimited mobility to the customer who can now handle financial transactions even while on the move (Khan 2017).

**2.1.2.5 Increased Comfort and Timesaving.** E-Banking transactions can be made 24 hours and 7days, without requiring the physical interaction with the bank (Khan 2017).

**2.1.2.6 Quick and Continuous Access to Information.** Corporations will have easier access to information as, they can check on multiple accounts at the click of a button (Khan 2017).

**2.1.2.7 Better Cash Management.** E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments are available on Internet sites of Estonian banks (Khan 2017).

**2.1.2.8 Speed.** The response of this medium of transaction is very fast; therefore, customers can actually wait till the last minute before transferring the funds (Khan 2017).

**2.1.2.9 Funds Management.** Customers can download their transactions history of different accounts and do a “what-if” analysis on their own, before affecting any transaction on the web. This leads to better funds management.

Beside the above benefits discussed E-banking also helps to view and print balance enquiry, view transaction history, transfer of funds, payment of online utility bills, online purchases etc. With the use of E-banking customer can also apply for various types of auto, mortgage, home, equity, students or personal loans (Khan 2017).

### ***2.1.3 Challenges in Digital Banking***

During COVID, the dependency on digital banking increased. Digital banking has promoted technology-based account opening, digital lending, wealth and investing. Banking is more accessible, and customer appetite for better technology is growing. However, with the growing demand and digital banking pressure, banks are being challenged to cope with the new customer behavior in various facets of digital banking compliance. Here is a quick overview.

**2.1.3.1 Shift In Banking Habits and Products Through Innovation.** With quick customer service being the primary focus, banks face challenges in providing a speedy network and facilitating customer agility on their digital platforms. With digital transactions growing popular and the volume of non-cash payments rising, creating financial solutions through interactive tools and customized products should be the main lookout for all financial services. The technology-enabled change should shift the bank's focus from data-intensive tasks to activities like product enhancement, business development, building compliance and boosting relationships with customers (Baroda 15 Dec 2022).

**2.1.3.2 Security Concerns.** With digital banking gaining momentum for customer convenience, the threat of fraud in financial transactions leaves both customers and banks exposed to swindlers. Banks are working towards spreading awareness amongst customers on the nature of threats that customers could face. Banks operate on layered security checks enabling customers to stop at any point if doubtful of a transaction. Banks advise customers never to click unknown links without checking Uniform Resource Locator (URL). For banking transactions official banking app or the official website of the bank must be used (Baroda 15 Dec 2022).

**2.1.3.3 Technical Issues.** Failed connectivity and lack of consistent and accurate data is a major concern with banks. Banks are working towards pre-empting the problems with greater demand load rising from digital technologies. Relying on technically upgraded systems as customer expectations are rising and improved and speedy banking is the minimum expectation (Baroda 15 Dec 2022)

**2.1.3.4 Lack of Personal Relationships.** Customer service is an important factor through which banks retain and gain their new client base. A bad experience with the service provider not mitigated at the right time by the relationship officer can be a damper on the bank's reputation. With technology being the first face in digital banking, non-human bots and customer care helplines are gradually replacing the personalized service that customers still love. These automated services can frustrate customers to the point of quitting (Baroda 15 Dec 2022).

**2.1.3.5 Growing Customer Expectations.** Customers are switching rapidly to innovative online products and services. Customers are looking for faster and better performance from their banking apps (Baroda 15 Dec 2022).

#### ***2.1.4 Theories of E-Banking Service Adoption***

Literature on organizational adoption of Information Communication Technologies can be classified into two groups. The first one focuses on rationalistic goal-oriented behaviour of firms, such as Technology Adoption Model (Davis 1989) Other approaches focus on institutional pressure on firms which includes Institutional theory. Rationalistic goal-oriented behaviour is often grown from the Theory of Planned Behaviour (TPB) (Ajzen, 1991), derived from the Theory of Reasoned Action (TRA) (Fishbein and Ajzen 1977) and Technology Acceptance Model (TAM) (Davis 1989). TRA can be described as one of the most influential theory to explain human behaviour's attitude towards adoption of innovation (Venkatesh and Davis 2000).

A good number of literatures have investigated the adoption of various Information System using either TAM or extended version of TAM (Venkatesh and Davis 2000). Most important extension of TAM was made by (Venkatesh and Davis 2000) by adding subjective norm construct and this modified model is known as TAM2.

#### 2.1.4.1 The Technology Acceptance Model (TAM).

Technology Adoption Model has been the foundation of many technology adoption and diffusion research and it is rooted in the Theory of Reasoned Action (Al Nahian Riyadh, Akter et al. 2009). As per TAM, the two important independent variables of actual use of technology are:

- ✓ **Perceived ease of use**, defined as ‘the degree to which a person believes that using a particular system would be free of effort’
- ✓ **Perceived usefulness**, defined as ‘the degree to which a person believes that using a particular system would enhance his or her performance’ (Al Nahian Riyadh, Akter et al. 2009)

The TAM model has now been extended to include usage intention through social influence processes and cognitive instrumental processes (Ratten 2007). An extension to the technology acceptance model (TAM) was developed by Venkatesh and Davis that outlined perceived usefulness and usage intentions as it related to the processes of social influence and cognitive instrument (Venkatesh and Davis 2000).

Venkatesh and Davis reported that perceived usefulness is based on usage intentions in many empirical TAMs. It is important to understand the determinants of the perceived usefulness construct because it drives usage intentions and how these determinants influence changes over time, with increasing system usage. Although the original TAM model was based on the determinants of perceived ease of use, the determinants of perceived usefulness enabled organizations to design organizational interventions that would increase user acceptance and usage of new systems. For this reason, Venkatesh and Davis conducted a study published in 2000 to extend TAM that examined how the perceived usefulness and usage intention constructs change with continued information system (IS) (Venkatesh and Davis 1996). Using e-banking or being customer to a specific bank is based on perceived ease of use, the determinants of perceived usefulness so these study applies the Technology acceptance model (TAM).

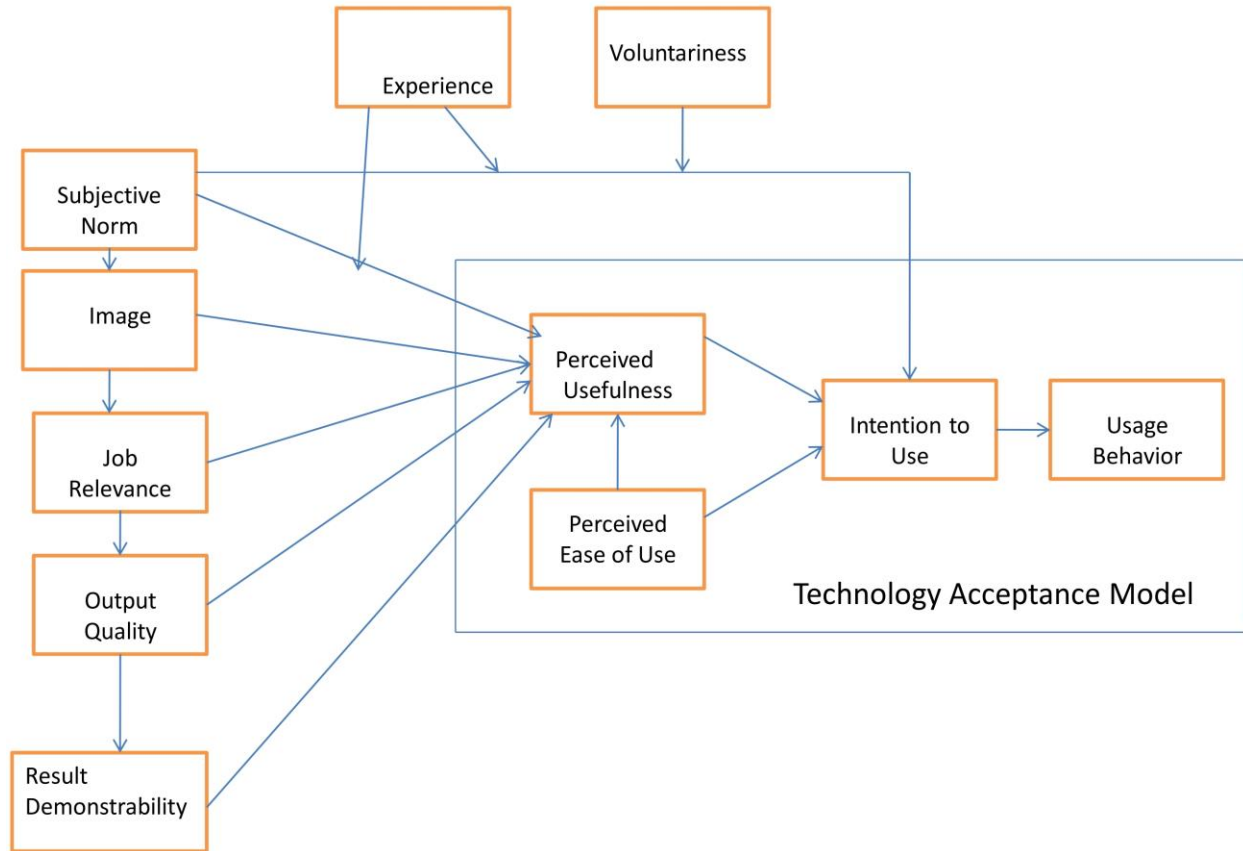


FIGURE 1: GRAPHIC OVERVIEW OF VENKATESH AND DAVIS'S PROPOSED MODEL (Adapted from (Venkatesh and Davis 2000))

#### 2.1.4.2 Institutional Intervention Theory (IIT).

In the adoption and diffusion of an innovation, influence and regulatory actions are important. (King, Gurbaxani et al. 1994) provide a list of institutions in their seminal paper and claim that potential institutional action may take two dimensions and draw a model in line with that. Institutions can exert pressure through influence and regulatory power and 'Supply push' and 'Demand pull' forces lay down the context for those actions to take place. Both 'Supply push and 'Demand pull' are required for innovation adoption. Supply push innovation comes from the supplier of innovation and demand pull generates from the users to enjoy the innovation (King, Gurbaxani et al. 1994).



#### **2.1.4.3 Cognitive Motivational Relationship (CMR) Theory.**

Cognitive Motivational Relationship (CMR) theory which is developed by (Lazarus 1991). This theory is used in this study to provide theoretical support for the association between e-banking service quality and customer loyalty to e-banking services. Based on the theory, it is concluded that how an individual feels after having experiences. In case of the banking sectors, we can conclude that feelings of the customers after getting services and support from the banks. Therefore, in a nutshell, how customers being loyal towards e-banking activities after having banking experiences is the most important issue to be considered.

#### **2.1.4.4 Innovation Diffusion Theory (IDT).**

Innovation Diffusion Theory (IDT), developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product (Health Nov 3, 2022). Innovation diffusion theory focuses on understanding how, why and at what rate innovative ideas and technologies spread in a social system (Rogers, Singhal et al. 2014). In terms of the theories of change, Innovation Diffusion theory takes a contrary approach to study changes. Instead of focusing on persuading individuals to change, it sees change as being primarily about the evolution or “reinvention” of products and behaviors so they become better fits for the needs of individuals and groups. In diffusion of innovations, it is not people who change, but the innovations themselves (Wani and Ali 2015). The concept of diffusion of innovations usually refers to the spread of ideas from one society to another or from a focus or institution within a society to other parts of that society (Rogers, Singhal et al. 2014). The whole theory of Innovation Diffusion can be divided into four main elements Innovations, Communication Systems, Social System and Time (Sahin 2006).

#### **2.1.4.5 Social Cognitive Theory.**

Social cognitive theory is built upon the foundations of individual and group psychological behavior, and is also referred to as social learning theory. Social cognitive theory is a widely accepted model of individual behavior as it examines the reasons why individuals adopt certain

behaviors (Bandura 1986). It proposes that behavior is evaluated through an individual's expectation of the outcome of their behavior, expectation of their direct experience and can be mediated through the observations of others (LaRose and Eastin 2004).

### ***2.1.5 Customer Retention Strategies***

Customer retention is increasingly being seen as an important managerial issue, especially in the context of saturated market or lower growth of the number of new customers. It has also been acknowledged as a key objective of relationship marketing, primarily because of its potential in delivering superior relationship economics, i.e. it costs less to retain than to acquire new customers.

The tangible effects of companies' commitment to retaining customers were first published by (Dawkins and Reichheld 1990) who claim that higher retention rate leads to higher net present value of customers. The attraction of customer retention strategies continued to be prominently advanced in subsequent related papers and a book (Reichheld and Sasser 1990); (Reichheld and Kenny 1990); (Reichheld 1993, Reichheld 1994, Reichheld and Teal 1996). (Reichheld and Teal 1996)

From the service marketing perspective, the way to retain customers is to improve customer service quality and satisfaction (Berry 1991). In a related study (Ennew and Binks 1996) examined the links between customer retention/defection and service quality in the context of relationships between banks and their small business customers in the UK. Their findings support the hypothesis that retention is influenced by service quality, in terms of both functional and technical, and customer relationships. They also found that trust in customer-banks relationships has the largest impact on potential defection, followed by general product features.

(Page, Pitt et al. 1996) in their retrospective study suggest that new and existing customers should be treated with different marketing mix strategies in terms of six dimensions:

1. Product and service design;
2. Pricing.
3. Sales;
4. Advertising.
5. Direct marketing;

## 6. Distribution

According to (Reichheld and Teal 1996), Success in retaining customers is attributed to a combination of strategies being pursued such as:

1. Define and measure retention; this should be done with consideration to the context of the business: the product, the industry, and the customers.
2. Looking for loyalty in the right places with a focus of getting the "right" customers and not just a lot of them.
3. Changing the channels of distribution.
4. Minimizing adverse selection of customers through creative filtering.
5. Rewarding the sales force for retaining customers, not just winning new customers.
6. Paying for continuity, not just conquests; and this may involve using coupons or vouchers to discriminate and reward customers that re-buy.
7. Designing special programs to attract and hold the most valuable customers. Basically giving differentiated attention.

### ***2.1.6 Customer Loyalty***

#### **2.1.6.1 The Concept of Customer Loyalty.**

Customer Loyalty is developed over a period of time from a consistent record of meeting, and sometimes even exceeding customer expectations (Kheng, Mohamad et al. 2010). The concept of customer loyalty also extends to service organizations who typically provide somewhat more intangible products. Yet, scholars contend the construct of service loyalty differs from brand loyalty. The case for the distinctiveness of service loyalty has been presented in several discussions:

- Service providers have the ability to create stronger loyalty bonds with their clients than do suppliers of more tangible goods (Gremler and Brown 1996).
- Loyalty is greater or more prevalent among service consumers than among goods consumers (Gremler and Brown 1996).
- Services provide more opportunities for person-to-person interactions which, in turn, often provide opportunities for loyalty to develop (Parasuraman, Zeithaml et al. 1985)

- Perceived risk is often greater when purchasing services than goods, providing an atmosphere more likely to lead to customer loyalty since loyalty is often used as a risk reducing device (Zeithaml 1981)
- With some services, switching between providers may involve certain barriers not present with brand switching for goods (Zeithaml 1981)

(Gremler and Brown 1996) offers one definition of customer loyalty that is related to our purpose in this study:

*The degree to which a customer exhibits repeat purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists.*

This definition suggests service loyalty is a matter of degree, ranging from the completely loyal customer to one who will never consider using a provider in the future (Gremler and Brown 1996).

According to this definition, an extremely loyal customer is one who

- Regularly uses a service provider,
- Really likes the organization and thinks very highly of it, and
- Does not ever consider using another service provider for this service.

Conversely, an extremely “non-loyal” person

- Will never use the provider again,
- Has negative feelings toward the organization, and
- Welcomes suggestions about other providers and is willing to try any other provider.

This three-dimensional definition is consistent with (Zeithaml, Berry et al. 1996) operationalization of the “loyalty to company” factor in their behavioral-intentions battery. The five items they use to measure loyalty include

1. Saying positive things about the company,
2. Recommending the company to someone who seeks advice,

3. Encouraging friends and relatives to do business with the company,
4. Considering the company the first choice to buy services, and
5. Doing more business with the company in the next few years.

Thus, in effect, their measure includes items from all three dimensions of the proposed service loyalty definition listed above.

### **2.1.6.2 Dimensions of Service Loyalty.**

A review of the literature suggests the service loyalty construct consists of three separate dimensions: *behavioral loyalty*, *attitudinal loyalty*, and *cognitive loyalty* (Gremler and Brown 1996).

**BEHAVIORAL LOYALTY;** Early definitions of loyalty focused almost exclusively on its behavioral dimension (Pritchard 1991). In particular, loyalty was interpreted as a form of customer behavior (such as repeat purchasing) directed toward a particular brand over time. Although current thought infers that loyalty includes more than just a behavioral dimension, some researchers continue to measure loyalty exclusively on the behavioral dimension.

**ATTITUDINAL LOYALTY;** Scholars have questioned the adequacy of using behavior as the sole indicator of loyalty. (Day 1976) in particular, criticized behavioral conceptualizations of loyalty and argued brand loyalty develops as a result of a conscious effort to evaluate competing brands. Others have suggested this attitudinal dimension includes consumers' preferences or intentions (Pritchard 1991). After (Day 1976) criticism, attitude gained increasing attention as an important dimension of loyalty. Over time, scholars began to consider customer loyalty as having two dimensions: behavioral and attitudinal (Day 1976) (Snyder 1986).

**COGNITIVE LOYALTY;** In addition to the behavioral and attitudinal dimensions, a few scholars include what has been termed a "cognitive" form of loyalty (Lee and Zeiss 1980). Some studies suggest loyalty to a brand or store means it comes up first in a consumer's mind when the need for making a decision as to what to buy or where to go arises e.g. (Newman and Werbel 1973, Bellenger, Steinberg et al. 1976).

### 2.1.6.3 Customer Loyalty and Its Measurement.

According to (Hayes 2008) there are two standard methods to measuring customer loyalty: objective approach and subjective (self-stated) approach.

*Objective measurement approach* consists of system captured metrics that include ‘hard’ numbers concerning customers’ behaviors which are useful to company. Data can be obtained from historical records and other objective sources, including purchase records (captured in a CRM system) and other online behavior. Time spent on the Web site, numbers of products/services purchased and whether or not a customer renewed their provider agreement are a few activities that measure customer’s loyalty in terms of objective approach (Hayes 2008).

On the other hand, *subjective measurement approach* includes ‘soft’ numbers concerning customer loyalty. Subjective loyalty metrics include customers’ self-reports of their feelings about the company and behavior toward the company. How customers recommend the organization to friends/ colleagues? How customers continue using ‘company overall, how customers are satisfied with the company are some of the questions to measure customer loyalty via subjective approach. . Examples of subjective loyalty data consist of customers’ ratings on standardized survey questions like, “How likely are you to recommend the company to your friends/colleagues?”, “How likely are you to continue using the company and “Overall, how satisfied are you with the Company?” (Hayes 2008).

Moreover, according to (Opzeeland 2016) there are six effective methods for measuring customer loyalty.

- 1) **Net Promoter Score (NPS):** This method indicates when customer 100% supports the company; he/she will refer the company to his/her friends.
- 2) **Repurchase Ratio:** This measures the ratio of repeat purchasers over one-time purchasers.
- 3) **Up-selling Ratio:** This tracks the ratio of customers who have bought more than one type of product divided by the customers who have bought only one. This indicates buying new products is a clear indication of customer loyalty.
- 4) **Customer Loyalty Index (CLI):** this is a standardized tool to track customer loyalty over time, and it incorporates the values of NPS, repurchasing, and up-selling.

- 5) **How much would you miss us?** This is an alternative to the NPS score that direct how much they would miss him/her if his/her company would cease to exist tomorrow.
- 6) **Customer Engagement Numbers:** Customer engagement is a strong predictor of loyalty. And customer loyalty results out of positive interactions and experiences with the organization. These nurture emotional attachments that shield customers from competitor influence.

### ***2.1.7 Customer Satisfaction***

One commonly assumed prerequisite for customer loyalty is customer satisfaction. Much of the marketing literature gives the impression satisfied customers automatically are loyal customers. The thinking is a satisfied customer, as a result of his/her satisfaction, will naturally become a loyal customer and satisfaction is the only catalyst necessary for developing such loyalty. That is, satisfaction is a necessary and sufficient condition for developing service loyalty (Gremler and Brown 1996).

Satisfaction became a popular issue in marketing during 1980s and is a doubtful topic during both business expansions and recessions. Service quality and customer satisfaction are very important concepts, which must understand by companies that want to grow while keeping their competitive edge. Customer's satisfaction is a psychological concept that involves, the feeling of well-being and pressure that results from obtaining what one hope for and expects from an operating product/service (WTO 1985).

Hallowell (1996) defined customer satisfaction as a post choice evaluative judgment of a specific transaction. It emanates from customer's perception of the value received during transacting or relationship where value equates to perceived service quality relative to price and customer acquisition costs (Hallowell 1996).

Wise firms measure customer satisfaction regularly, because it is one key to customer retention. A highly satisfied customer generally stays loyal longer, buys more as the company introduces new and upgraded products, talks favorably to others about the company and its products, pays less attention to competing brands and is less sensitive to price, offers product or service ideas to the

company, and costs less to serve than new customers because transactions can become routine (Zelege and Chauhan 2022).

### ***2.1.8 Service Quality Dimensions (Service Quality Model)***

Since of economic trends, the concept of 'quality' has dramatically changed throughout history. 'Quality' derived from the Latin word 'Qualitas', which describes to the nature of an individual or the nature of an object. In the past, Quality meant precision and perfection. Quality is such a crucial issue that it is considered as significant concept in our daily life. Quality is mainly considered as a strategic organizational tool. Moreover, the persistent need of improving service companies and upgrading their services necessitates the measuring the quality of service they provide (WARSAME, MOHAMED et al. 2018).

In the context of the internet, e-service quality is defined as a consumer's overall evaluation and judgment on the quality of the services that is delivered through the internet. Based on this, e-service quality has been conceptualized as a base for interactive information service. For this reason, (Rolland and Freeman 2010) suggested that the conceptualizations of e-service quality must be expanded to the global level and e-service quality needs consideration on all aspect of the transaction, including service delivery, customer service and support. Until today, numerous researchers have developed service quality concepts across different industries and countries (Jun and Cai 2001).

In online banking industry, (Herington and Weaven 2009) found four dimensions of e-Service Quality:

- Personal Needs
- Site Organization
- User Friendliness
- Efficiency

Similarly, exploratory research by (Parasuraman, Zeithaml et al. 1985) first identified ten overlapping dimensions of service quality which consumers use to assess the quality of a service.

The dimensions were: -



- Responsiveness
- Reliability
- Competence
- Courtesy
- Communication
- Access
- Credibility
- Understanding
- Security
- Tangibles

Most of the researchers have recognized and used the service quality measuring model in a variety of industries such as the service quality model improved by (Parasuraman, Zeithaml et al. 1988). The service quality model of (Parasuraman, Zeithaml et al. 1988) suggested a five dimensional structure of perceived service quality tangibles, reliability, responsiveness, empathy and security as the instruments for measuring the service quality. In their 1988 work, the ten dimensions reduced to five:

- Reliability,
- Responsiveness
- Tangibles
- Empathy
- Assurance

**2.1.8.1 Reliability.** It refers to consistency of performance and dependability, accuracy in billing, keeping records correctly, performing the service right at the designated time. The supplier must comply with what was promised, without the need for rework. It involves two concepts, dependability and uniformity in performance. (Wilson, Zeithaml et al. 2016) advised that customers should be specifically influenced by the reliability of new technology because they might be associated with risks such as the technology malfunctioning. Many authors have detected that reliability is significant in the determination of service quality and customer satisfaction (Parasuraman, Zeithaml et al. 1985), (Worku, Tilahun et al. 2016).

**2.1.8.2 Responsiveness.** Responsiveness is defined as "the willingness to help customers and provide prompt service" (Parasuraman, Zeithaml et al. 1988). It involves timeliness of service, for example mailing a transaction slip immediately, calling the customer back quickly, and giving prompt service and setting up appointments quickly. Furthermore, (Johnston 1997) defines responsiveness such as speed and timeliness of service delivery. This consists of processing speed and service capabilities to respond promptly to customer service requests, and wait a short and queuing time. More specifically, responsiveness is defined as the willingness or readiness of employees to provide services. It contains understanding the needs and requirements of the customer, easy operation time, individual attention provided by the staff, attention to the problem and customers' safety in their dealings (Kumar, Tat Kee et al. 2009)

**2.1.8.3 Tangibles.** The tangibles involve the firms' representatives, physical facilities, materials, and equipment as well as communication materials. Furthermore, Physical environmental conditions appeared as a clear evidence of the care and attention paid for the details offered by the service provider, (Fitzsimmons and Fitzsimmons 2006) summarize tangibles like the physical confirmation of the service. More specifically,(Parasuraman, Zeithaml et al. 1985) define the tangibility appearance of physical facilities, equipment, personnel, and written materials.

**2.1.8.4 Empathy.** A book by (Fitzsimmons and Fitzsimmons 2006) defines empathy as a provision of caring, individualized attention to customers. According to them empathy includes the following features: approachability, sensitivity, and effort to understand the customer's needs.

**2.1.8.5 Assurance.** As stated by (Fitzsimmons and Fitzsimmons 2006) assurance is the knowledge and courtesy of employees as well as their ability to convey trust and confidence. The assurance dimension includes the following features: competence to perform the service, politeness and respect for the customer, effective communication with the customer, and the general attitude that the server has the customer's best interests at heart.

## **2.2 Empirical Review of the Study**

Studies have been conducted on the relationship between e-banking service quality, customer satisfaction and customer loyalty. (Toor, Hunain et al. 2016) on their part of study on the Impact of E-Banking on Customer Satisfaction: Evidence from Banking Sector of Pakistan used the five service quality dimensions namely reliability, assurance, responsiveness, empathy and tangibles are established based on SERVIOUAL model. The results of the study indicated that Reliability, Responsiveness, Assurance, Empathy, and Tangibles have significant effect on customer satisfaction in E-banking on the Banking Sector of Pakistan.

A study on The Impact of E-banking on Customer Satisfaction in Nigeria by (Bello and Dogarawa 2005) shows that 82% of the respondents frequently visit banks before the introduction of e-banking for transaction. It is expected that introduction of electronic banking products and services will significantly reduce number of visits to the banks. However, contrary to expectations, the survey results indicated that 93% of the respondents visit their bank branch at least once every month. This same study indicates that only 47% of the respondents that use electronic banking products and services are satisfied with the quality of the products and efficiency of delivery.

A study by (Zavareh, Ariff et al. 2012) on E-Service Quality Dimensions and Their Effects on Customer Satisfaction in Internet Banking Services in Iranian banks indicated that the results of correlation analyses proved that there was positive correlation between E-Service Quality Dimensions and customer satisfaction for Iranian Internet banking customers.

The findings of (Hammoud, Bizri et al. 2018) which was done about The Impact of E-Banking Service Quality on Customer Satisfaction: Evidence From the Lebanese Banking Sector showed that service quality has a significant relationship with customer satisfaction with E-Banking services in addition to that *reliability* is the strongest dimension of service quality affecting customer satisfaction. This same study showed that the four independent variables (efficiency and ease of use, reliability, security and privacy, and responsiveness and communication) as related to the quality of E-Banking services have a significant effect on customer satisfaction in the Lebanese banking sector.

(Worku, Tilahun et al. 2016) on their part of study on the impact of electronic banking on customers' satisfaction in Ethiopian banking industry which is done on Customers of Dashen and Wogagen Banks in Gondar City, The study indicated that E-banking service highly reduced the visits of bank hall, waiting time for service, there customers who do not know the existence of fee charged for being e-banking users though they have been being charged and there also customers who do not know what e-banking means and the banks except providing the card have not given any organized training for customers in order to create awareness about e-banking. (Worku, Tilahun et al. 2016)

The result of a study by (Beshir and Zelalem 2020) on the effect of e-banking service quality on customers satisfaction and loyalty indicated that efficiency, responsiveness and Easiness has a significant positive effect on customer satisfaction; whereas reliability and Product portfolio have positive but insignificant effect on customer satisfaction.

A study conducted by (Asfaw 2017) implied that service quality and security/ privacy are the major factors that strongly lead to customer satisfaction of the e-banking customers. The study further concluded that reliability, Ease of use, time of deliver and Access are the four dimensions which have been insignificant impact on the customer satisfaction. The researcher concluded that e-banking service quality enhances the efficiency of the banks.

### **2.3 Conceptual Framework of the Study**

In this study, e-banking service quality is the independent variable, customer satisfaction as mediator variable and customer loyalty as dependent variable. E-banking service quality has five dimensions namely tangibility, responsiveness, reliability, assurance and empathy.

Customer satisfaction is the intervening Variable and customer loyalty is dependent variable that the study measure with the independent variables.

Service quality in this research is conceptualized by adapting The service quality model of (Parasuraman, Zeithaml et al. 1988) suggested a five dimensional structure of perceived service quality tangibles, reliability, responsiveness, empathy and Assurance as the instruments for measuring the service quality.

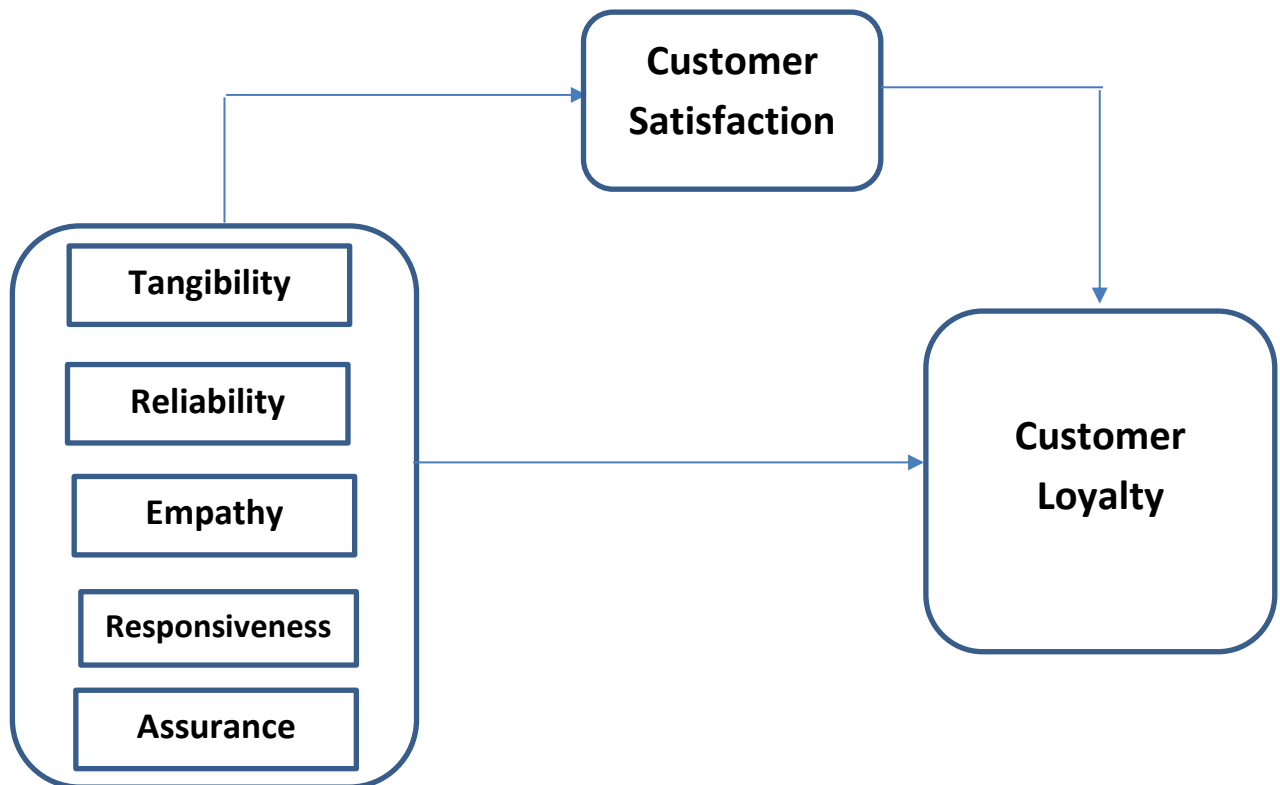


Figure 2: Conceptual Framework Source: Researcher (2023)

## 2.4 Research Hypotheses

### 2.4.1 *The Effect of Tangibility Dimension Of Service Quality on Customer Loyalty*

The tangibles involve the firms' representatives, physical facilities, materials, and equipment as well as communication materials (Fitzsimmons and Fitzsimmons 2006). A study done 6 years ago on commercial banks in Ethiopia (Asmamaw 2017) implies that Tangibles has a

positive and significant effect on customer loyalty in Ethiopian commercial banks. Thus, the following hypotheses is proposed

1. H1: Tangibility dimension positively and significantly affect customer loyalty

#### ***2.4.2 The Effect of Reliability Dimension of Service Quality on Customer Loyalty***

Reliability refers to consistency of performance and dependability, accuracy in billing, keeping records correctly, performing the service right at the designated time (Wilson, Zeithaml et al. 2016). The same study of (Asmamaw 2017) done commercial banks in Ethiopia indicates Reliability has no positive and significant effect on customer loyalty in Ethiopian commercial Banks. Thus, the following hypothesis is proposed.

2. H2: Reliability dimension positively and significantly affects customer loyalty

#### ***2.4.3 The Effect of Empathy Dimension of Service Quality on Customer Loyalty***

Empathy is a provision of caring, individualized attention to customers (Fitzsimmons and Fitzsimmons 2006). A thesis done to study effect of electronic banking service quality on customer satisfaction and loyalty case of Dashen Bank by (G/Michael 2020) reveals that empathy significantly affects customer satisfaction & loyalty.

Thus, the following hypotheses is proposed

3. H3: Empathy dimension positively and significantly affects customer loyalty

#### ***2.4.4 The Effect of Responsiveness Dimension of Service Quality on Customer Loyalty***

Responsiveness is defined as "the willingness to help customers and provide prompt service" (Parasuraman, Zeithaml et al. 1988). The result of the above study by (G/Michael 2020) shows that responsiveness has a positive and significant effect on customer satisfaction and loyalty. Thus, the following hypotheses is proposed

4. H4: Responsiveness dimension positively and significantly affects customer loyalty

#### ***2.4.5 The Effect of Assurance Dimension of Service Quality on Customer***

##### ***Loyalty***

Assurance is the knowledge and courtesy of employees as well as their ability to convey trust and confidence (Fitzsimmons and Fitzsimmons 2006). A research result done by (Asfaw 2018) to study the impact of service quality on customer satisfaction and loyalty in the Ethiopian Insurance Industry shows that assurance has a significant and positive relationship with customer satisfaction and loyalty in Ethiopian Insurance Industry. Thus, the following hypotheses is proposed

5. H5: Assurance dimension positively and significantly affects customer loyalty

#### ***2.4.6 The Effect of Customer Satisfaction on Customer Loyalty***

The degree to which a customer exhibits repeat purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists (Gremler and Brown 1996). Thus, the following hypotheses is proposed. A research done by (Chiguvi and Guruwo 2017) to study Impact of Customer Satisfaction on Customer Loyalty in the Banking Sector in Botswana revealed that there is a positive relationship between customer satisfaction and customer loyalty.

Thus, the following hypotheses is proposed

6. H6: Customer satisfaction positively and significantly affects customer loyalty

#### ***2.4.7 The Effect of Service Quality Dimensions on Customer Satisfaction***

A empirical finding of a research by (Sileshi 2019) to study the impact of electronic banking on customers' satisfaction: the case of commercial bank of Ethiopia reveals that except Tangibility all other service quality dimensions (reliability, assurance, responsiveness & empathy) have positive and significant impact on customer satisfaction in e-banking of commercial bank of Ethiopia

Thus, the following hypotheses is proposed

7. H7: E-banking service quality positively and significantly affects customer satisfaction

#### ***2.4.8 The Mediation Effect of Customer Satisfaction in the R/N Ship***

##### ***Between E-banking Service Quality and Customer Loyalty***

A research finding by (Budur and Poturak 2021) to study the mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty shows that companies must first go through satisfaction to get customer loyalty.

Thus, the following hypotheses is proposed

8. H8: Customer satisfaction mediates the relationship between e-banking service quality and customer loyalty.



## **3 CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Research Design**

This study used an explanatory research design that helps the researcher to identify the nature of the relationship between the electronic banking (independent variables) and customer loyalty (the dependent variables). Explanatory research is characterized by the prior formulation of specific research questions and hypotheses. The main aim of Explanatory research is to identify any causal link between the factors or Variables that pertain to research problem. (Doody and Bailey 2016)

### **3.2 Research Approach**

This study employed quantitative research method to identify the nature of the relationship between the electronic banking (independent variables) and customer loyalty (the dependent variables). Quantitative research design method is used to establish and study the relationship between two variables or concepts; therefore, it is used to test a theory. These variables are measured numerically, and the results are analyzed numerically through statistics or graphs.

Quantitative research is very well suited to establishing cause-and-effect relationships, to testing hypotheses and to determining the opinions, attitudes and practices of a large population, whereas qualitative research lends itself very well to developing hypotheses and theories and to describing processes such as decision making or communication processes. Researchers who adapt this method usually tend to be more deductive in their research approach and tend to follow the positivism epistemological position, where highly structured data collection techniques are used (Creswell 2014, Saunders and Townsend 2016)

### **3.3 Population and Sampling Technique**

#### ***3.3.1 Target Population***

The population of this study is composed of e-banking customers of Commercial Bank of Ethiopia. Branches of commercial bank of Ethiopia were selected from Arada district. In Addis Ababa there are eight districts and, in each district, there are five level branches, i.e., Grade five, Grade four, Grade three, Grade two branches and grade one branches. The bank determines the level of its branch on the basis of volume of transaction of the branch, the

availability of all types of the bank 's service and the total deposit they mobilized and by their customer base.

### 3.3.2 Sample Size

Accordingly, two branch from each Grade level (2 Grade five, 2 Grade four, 2 Grade three and 2 Grade two branches, and 2 Grade one) a total of ten branches were selected purposely from the Arada district by considering the time and resource limitation to contact all district and branches as well as to deal with various customers served with in the branches that give a different idea in perspectives to the issues raised on the effect of E-banking on customer loyalty in commercial bank of Ethiopia.

Respondents from the eight branches were selected by using simple random sampling to determine the sample size of the study, the sum of average daily served customer from each grade of branches taken as the total population with the confidence level of 95% and then sample size is determined using the formula given on Robert Slovin.

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

Where,

n = Number of samples,

N = Total population and

e = Margin of Error tolerance

$$Samsple\ Size\ (n) = \frac{7093}{1 + 7093(0.05)^2}$$

$$n = 7093/1+7093 (0.05)^2$$

$$n \approx 379$$

by adding the non-respondent rate that is 10% of 379 the final sample size become

$$n = 379 +10\% = 379 + 38$$

$$n = 417$$

As shown in Table 2 the sample size of each branch was calculated on the basis of proportional to the size of average daily customer served.

Table 2; Sample size of each branch that is calculated on the basis of proportional to the size of average daily customer served.

S,N	Arada District Branch Grade	Sampled Branch	Daily Average Customer	Number Of Selected Respondents
1	I	Lazarist	512	$\frac{512}{7093} \times 417 \approx 30$
		Ras Mekonen	656	$\frac{656}{7093} \times 417 \approx 39$
2	II	Tayitu Bitul	705	$\frac{705}{7093} \times 417 \approx 41$
		Tsion Condominium	563	$\frac{563}{7093} \times 417 \approx 33$
3	III	Kechene Medhanealem	614	$\frac{614}{7093} \times 417 \approx 36$
		Berhanenaselam	791	$\frac{791}{7093} \times 417 \approx 47$
4	IV	Addisu Gebeya	788	$\frac{788}{7093} \times 417 \approx 46$
		Piassa	933	$\frac{933}{7093} \times 417 \approx 55$
5	V	Addis Ababa	718	$\frac{718}{7093} \times 417 \approx 42$
		4 kilo	813	$\frac{813}{7093} \times 417 \approx 48$
Total			7093	417

### 3.3.3 Sampling Technique

This study used stratified random sampling technique to select representative samples of customers from each of the branches of the bank located in Arada sub city. The numbers of samples for each

stratum is computed by using average daily customer of each stratum divided by the target population by the sample size.

Since customers are scattered across the city, which makes it very difficult to contact each of them individually; convenience sampling techniques was used to select customer at the working hour of the bank on the counter.

### **3.4 Data Source and Data Collection Methods**

In order to collect sufficient data that can answer the research questions, the self-administered questionnaire for customers were used as the main tool for data.

#### **3.4.1 TYPES AND SOURCES OF DATA**

**3.4.1.1 Primary Data and Their Sources.** The sources of the primary data for this study were customers of Commercial bank of Ethiopia.

**3.4.1.2 Secondary Data and Their Sources.** The secondary data was used for supporting the study and to get the findings of other researchers in the area (empirical study). The sources of secondary data were library books, newspapers on business, magazines on business, annual reports of the commercial bank, reports of national bank of Ethiopia, internet sources, Fortune News Paper which focus on business reports, and other related materials were used.

### **3.5 Data Processing and Analysis**

After the data collected, it was entered to Epidata version 3.1 and analyzed by using SPSS version 27 computer software. It was checked for its completeness, cleaned, processed and analyzed accordingly. Descriptive statistics (Frequency distribution tables and statistical graphs) were used to describe the variables and inferential statistics (regression and correlation analysis) were used to determine the cause-and-effect relationship between study variables.

### **3.6 Ethical Consideration**

Confidentiality is the researcher's concern and duty to keep the respondents safe under psychological discipline therefore the respondents never mentioned about their ethnicity,

political and religious view points and their private concerns. Before gathering data, the student researcher informed survey respondents about the objective of the study and ensured that their participation was fully voluntary-based. Furthermore, all materials or sources used in this thesis are duly acknowledged.

## 4 CHAPTER 4: RESULTS AND DISCUSSIONS

### 4.1 Overview Of the Chapter

In this chapter, survey data were presented to answer the research questions and testing the hypothesis are attempted by thoroughly analysing and interpreting the quantitative data collected from eight branches of Commercial Bank of Ethiopia; Lazarist, Ras Mekonen, Tayitu Bitul, Tsion Condominium, Kechene Medhanealem, Berhanenaselam, Addisu Gebeya, Piassa, Addis Ababa, 4 kilo branches. Four hundred seventeen (417) questionnaires were administered to the customers of all the eight branch banks. Out of this, 394 (94.5%) were returned and entered in to SPSS version 27 for the statistical analysis.

### 4.2 Reliability Analysis

The researcher started the data analysis by examining the reliability of the sample data. The Cronbach Alpha score ranges from 0 to 1. The following rules of thumb is used to interpret Cronbach Alpha values:  $> .9$  – Excellent,  $> .8$  – Good,  $> .7$  – Acceptable,  $> .6$  – Questionable,  $> .5$  – Poor and  $< .5$  – Unacceptable (Gliem and Gliem 2003).

Internal validity, also called causality, examines whether the observed change in a dependent variable is indeed caused by a corresponding change in hypothesized independent variable and the study has examined both causality and association between dependent and independent variables hence, the study is less likely to be susceptible to the risk of internal validity error.

*Table 3: Reliability Table*

Variables	Cronbach's Alpha	N of Items
Reliability	.828	3
Assurance	.785	3
Responsiveness	.922	4
Empathy	.923	3
Tangibility	.817	5
Customer Loyalty	.867	7
Customer satisfaction	0.960	19

### 4.3 Profiles Of the Respondents

The questionnaire administered to the respondents has four general information questions with respect to the sex, age and educational status of the respondent and duration of being customer of Commercial Bank of Ethiopia. The demographic characteristics of sample respondents such as respondent's sex, age, educational level, and duration of being customer of Commercial Bank of Ethiopia are given in Table 3.

*Table 4; Demographic Characteristics of the Respondents*

Independent Variables	Category	Frequency	Percentage
Sex	Male	166	42.1%
	Female	228	57.9%
Age	18 – 24 years	104	26.4%
	25 – 34 years	178	45.2%
	35 - 44 years	56	14.2%
	45-54 years	50	12.7%
	55 years plus	6	1.5%
Educational status	Illiterate	0	0.0%
	Primary Education	19	4.8%
	Secondary education	68	17.3%
	Certificate	43	10.9%
	Degree	226	57.4%
	Post graduate/Masters	31	7.9%
	PhD	7	1.8%
Duration as a Customer	Less than 1 years	92	23.4%
	1-5 years	61	15.5%
	6-10 years	154	39.1%
	More than 10 years	87	22.1%

As can be seen from Table 3, out of the total respondents of the study, the majority 57.9% of them were females and the remaining 42.1% of the respondents were males. From the total of respondents 45.2% of them were aged between 25 to 34 years and 26.4% of them were aged between 18 to 24 years. Out of the total study respondents. 14.2% of them were between the age of 35 to 44, respondents between the age of 45-54 accounts 12.7% of the total respondents and the remaining 1.5% of respondents were 55 or above 55 years old. This finding suggests that most of respondents available at bank branches are aged between 18-34 years old which accounts 71.6% of the total respondent.

In terms of Educational Level, the majority of the respondents 226 (57.4%) were degree holders and also respondents those who complete secondary Education are 68 which is 17.3% of the respondents. This finding is attributed to the fact that majority of urban populations specially youth and adult age groups are getting better with educational status as such it was no surprise that most of the respondents had some level of formal education.

Most of the respondents 154 (39.1%) have been using Commercial Bank of Ethiopia for more than six years but not more than 10 years. Out of the total respondents, 87 (22.1%) have been using CBE for more than 10 years.

#### **4.4 Descriptive Analysis of E-Banking Service Quality Dimensions**

##### ***4.4.1 Descriptive Analysis of Reliability and Assurance Dimension***

As shown Below on table 4, the evaluation of reliability and assurance dimension is based on the average respondents rating of the first three and the latter four items respectively. Based the descriptive statistics points that overall average mean of the reliability dimension was computed to be 3.65 and overall average mean of the assurance dimension was computed to be 3.30 with a standard deviation of 1.158. The standard deviation shows that how diverse are the responses of customers for a given item or constructs in proportion to the mean value. According to (Abu-Baker, Abu-Zaid et al. 2019), the mean score that ranges from 1-1.80 is considered to be very low, from 1.81-2.60 is low, from 2.61-3.40 is deemed to be average/moderate, from 3.41-4.20 is good/high and from 4.21-5.00 is going to be considered as very high/excellent. As we understand from the authors mentioned above, the mean score of all independent and dependent variables were greater than 3.41. This implies that the dependent variable highly described by all independent variables it means that all the

independent variables have positive influence on the e-banking customers of the bank, which fall under good/high range as described above.

A low standard deviation means there was a lot of agreement about the answers. High SD means there was a wide range of answers, indicating disagreement (Marek 2022). The deviations in this case are relatively low in comparison with the average point, indicating the accurate representation of the observed data by the mean values at item and dimension level.

A descriptive statistics which is done by (Asfaw 2018) reveals that assurance dimension has a mean value of 3.70 which is 0.40 higher to the current study. These same study by (Asfaw 2018) also reveals that reliability dimension has a mean value of 3.55 which is 0.10 lower to the current study.

*Table 5: Descriptive analysis of reliability and assurance dimension*

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
Shows Interest	394	1	5	3.46	1.048
Maintains Records	394	1	5	3.63	1.214
Updates Records	394	1	5	3.86	1.078
Employee's Behavior	394	1	5	3.26	1.110
Feel Assure	394	1	5	3.20	1.123
Friendly Service	394	1	5	3.41	1.255
Adequate Knowledge	394	1	5	3.31	1.279
Valid N (listwise)	394	Average of all		3.45	1.158

In all eight banks highest mean score has been recorded on items about “The bank updates the records accurately” with a mean score of 3.86, The next high mean score item is “The bank maintains the records accurately” with a mean score of 3.63, The next high mean score item is “The bank shows sincere interest in solving customers’ problems” with a mean score of 3.46. The item “Customers feel assure that service requests are duly follow-up by the company” has relatively low mean score that is 3.20.



#### 4.4.2 Responsiveness Dimension Descriptive Analysis

The overall mean value of the responsiveness dimension was computed from the composite mean of four items and is listed with increasing order of their mean score. The average mean value of the overall responsiveness dimension was computed to be 3.02 with standard deviation 1.383, which fall under average/moderate range interpretation. Item wise, service-related information is easily obtainable via electronic banking (*Mean-3.22*), Employees are always willing to help the customers (*Mean-3.09*), Employees provide services promptly to the customers (*Mean-2.89*), Despite their busyness, employees respond promptly to customers' requests (*Mean-2.88*).

*Table 6: Descriptive analysis of responsiveness dimension*

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Service Information via electronic banking	394	1	5	3.22	1.528
Employees Provide Services promptly	394	1	5	2.89	1.368
Employees are Willing to help others	394	1	5	3.09	1.269
Employees respond promptly	394	1	5	2.88	1.366
Valid N (listwise)	394	Overall average		3.02	1.383

#### 4.4.3 Empathy Dimension Descriptive Analysis

The average mean value of the overall empathy dimension was computed to be 2.74 with standard deviation 1.260. This implies that customers have rated empathy dimension of service quality as low (below average). In empathy dimension the mean rating score of the item “The bank gives its customers an individual attention” has relatively high mean score of 2.84 followed by the item “Service provider understands the specific needs of the customers” with a mean score of 2.79. The item “Employees interacting customers pay personal attention to them” has a relatively low mean score value.

Table 7: Descriptive analysis of empathy dimension

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The Bank Gives Individual attention	394	1	5	2.84	1.258
Employees pay personal Attention	394	1	4	2.61	1.187
Service provider understands the specific needs of the customers	394	1	5	2.79	1.336
Valid N (listwise)	394	Overall average		2.74	1.260

#### 4.4.4 Tangibles Dimension Descriptive Analysis

As indicate below in table 7, Tangible dimension has an overall high perception of service quality with average mean score of 3.45, this mean value fall under good/high range, and the descriptive statistics result shows there is small variation among the values entered to each items with in this dimension. Item wise, the item “The bank has up-to-date equipment’s/technology” has the highest mean score which is 3.94, this mean value fall under good/high range. However, the item “Materials associated with the service are visually appealing” has relatively lowest mean score value which is 3.16, this mean value fall under average/moderate range.

Table 8: Descriptive analysis of tangible dimension

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The bank has up-to-date equipment’s/technology.	394	2	5	3.94	.943
Physical facilities at bank are visually appealing.	394	1	5	3.31	1.097
Employees are well dressed and neat in appearance	394	1	5	3.39	1.132
Materials associated with the service are visually appealing	394	1	5	3.16	1.238
The banks website and electronic banking applications are visually appealing	394	1	5	3.47	1.414
Valid N (listwise)	394	Overall average		3.45	1.165

Below table 11 shows that majority of respondents which accounts 108 (27.4%) Agree that their chances of suggesting/ advising the CBE to my friends/colleagues are great meanwhile nearly

same number of respondents 107 (27.2%) choose to be neutral on this information. However, 92 (23.4%) of respondents strongly disagree with statement. This item data shows most of customers of CBE have higher chance of suggesting CBE to other people.

From the total respondents 104 (26.4%) of them strongly disagree to have a better rating for CBE than other banks. However, 97 (24.6%) of respondents strongly agree to have a better rating for CBE than other banks, which shows majority of customers have lower rating for CBE than other banks.

Majority of respondents 96 (24.4%) of respondents strongly disagree about the statement that states “I am pride in being a customer of Commercial bank of Ethiopia”. While 92 (23.4%) of respondents strongly agree to statement which states “I am pride being a customer of Commercial bank of Ethiopia.

116 (29.4 %) of the total respondents strongly agree to the statement that they feel like they are the member of the bank. Likewise, 105 (26.6 %) of the total respondents agree to the statement that they feel like they are the member of the bank. Which shows most of customers feel like they are the member of the bank.

Out of the total 394 respondents 187 (47.5%) of them strongly agree that they wish good things to the bank and 83 (21.1%) respondents agree to the above statement. From the total respondents no one chose Disagree.

*Table 9: Frequency analysis of customer loyalty*

		Frequency	Percent	Valid Percent	Cumulative Percent
My chances of suggesting/ advising the CBE to my friends/colleagues are great	Strongly Disagree	92	23.4	23.4	23.4
	Disagree	39	9.9	9.9	33.2
	Neutral	107	27.2	27.2	60.4
	Agree	108	27.4	27.4	87.8
	Strongly Agree	48	12.2	12.2	100.0
	Total	394	100	100	
My rating for CBE is always better than other banks	Strongly Disagree	104	26.4	26.4	26.4
	Disagree	75	19.0	19.0	45.4
	Neutral	54	13.7	13.7	59.1
	Agree	64	16.2	16.2	75.4
	Strongly Agree	97	24.6	24.6	100.0
	Total	394	100.0	100.0	
I am Pride in being a customer of Commercial bank of Ethiopia.	Strongly Disagree	96	24.4	24.4	24.4
	Disagree	55	14.0	14.0	38.3
	Neutral	74	18.8	18.8	57.1
	Agree	77	19.5	19.5	76.6
	Strongly Agree	92	23.4	23.4	100.0
	Total	394	100.0	100.0	

I feel like I'm a member of the bank	Strongly Disagree	56	14.2	14.2	14.2
	Disagree	48	12.2	12.2	26.4
	Neutral	69	17.5	17.5	43.9
	Agree	105	26.6	26.6	70.6
	Strongly Agree	116	29.4	29.4	100.0
	Total	394	100.0	100.0	
I wish a good thing to Commercial bank of Ethiopia.	Strongly Disagree	72	18.3	18.3	18.3
	Disagree	-	-	-	-
	Neutral	52	13.2	13.2	31.5
	Agree	83	21.1	21.1	52.5
	Strongly Agree	187	47.5	47.5	100.0
	Total	394	100.0	100.0	
Whenever I think of using a bank service, the first bank that comes to my mind is Commercial Bank of Ethiopia	Strongly Disagree	75	19.0	19.0	19.0
	Disagree	28	7.1	7.1	26.1
	Neutral	106	26.9	26.9	53.0
	Agree	99	25.1	25.1	78.2
	Strongly Agree	86	21.8	21.8	100.0
	Total	394	100.0	100.0	
I want to stay as a customer of Commercial Bank of Ethiopia because I cherish my relationship with the Bank	Strongly Disagree	16	4.1	4.1	4.1
	Disagree	44	11.2	11.2	15.2
	Neutral	102	25.9	25.9	41.1
	Agree	49	12.4	12.4	53.6
	Strongly Agree	183	46.4	46.4	100.0
	Total	394	100.0	100.0	

Table 13 below shows the overall mean value of the Customer loyalty which was computed from the composite mean of seven items and is listed with increasing order of their mean score. The overall average of the mean value is 3.32 which is average /moderate range and a standard deviation of 1.41. Item wise, “I want to stay as a customer of Commercial Bank of Ethiopia because I cherish my relationship with the Bank” with the mean score 3.86 followed by “I wish a good thing to Commercial bank of Ethiopia” The item with the least mean score is “My rating for CBE is always better than other banks” with a mean score of 2.94.

*Table 10: Descriptive analysis of Customer Loyalty*

	N	Minimum	Maximum	Mean	Std. Deviation
My chances of suggesting/advising the CBE to my friends/colleagues are great.	394	1	5	2.95	1.340
My rating for CBE is always better than other banks	394	1	5	2.94	1.548
I am Proud in being a customer of Commercial bank of Ethiopia.	394	1	5	3.04	1.499
I feel like I'm a member of the bank	394	1	5	3.45	1.392

I wish a good thing to Commercial bank of Ethiopia	394	1	5	3.79	1.488
Whenever I think of using a bank service, the first bank that comes to my mind is Commercial Bank of Ethiopia	394	1	5	3.24	1.381
I want to stay as a customer of Commercial Bank of Ethiopia because I cherish my relationship with the Bank	394	1	5	3.86	1.233
Valid N (listwise)	394	Overall Average		3.32	1.41

## 4.5 Correlation Analysis

Like the demographic factors, the scale typed questionnaire entered to the SPSS version 27 software, to process correlation analysis. Based on the questionnaire, which was filled by the customers of selected branches of CBE.

Pearson's coefficient of correlation is also known as the product moment correlation coefficient. The value of 'r' lies between  $\pm 1$ . Positive values of r indicate positive correlation between the two variables (i.e., changes in both variables take place in the same direction), whereas negative values of 'r' indicate negative correlation i.e., changes in the two variables taking place in the opposite directions. A zero value of 'r' indicates that there is no association

### Correlations

		Reliability	Assurance	Responsiveness	Empathy	Tangibility	Customer Satisfaction	Customer Loyalty
Reliability	Pearson Correlation	1	.689**	.592**	.617**	.737**	.797**	.679**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	394	394	394	394	394	394	394
Assurance	Pearson Correlation	.689**	1	.776**	.803**	.816**	.908**	.753**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	394	394	394	394	394	394	394
Responsiveness	Pearson Correlation	.592**	.776**	1	.936**	.754**	.922**	.790**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	394	394	394	394	394	394	394
Empathy	Pearson Correlation	.617**	.803**	.936**	1	.794**	.939**	.780**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	394	394	394	394	394	394	394
Tangibility	Pearson Correlation	.737**	.816**	.754**	.794**	1	.906**	.833**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	394	394	394	394	394	394	394
CSatisfaction	Pearson Correlation	.797**	.908**	.922**	.939**	.906**	1	.855**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	394	394	394	394	394	394	394
CLoyalty	Pearson Correlation	.679**	.753**	.790**	.780**	.833**	.855**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	394	394	394	394	394	394	394

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

*Table 11: Correlation analysis between Service Quality Dimensions vs customer satisfaction and Loyalty in E-banking*

between the two variables.

Hence, it can be concluded that the banking service quality dimensions have significant and positive relationship with customer loyalty in Ethiopian commercial Banks.

In this study, all service quality dimensions have positive relationship with customer satisfaction. The correlation between reliability dimension and customer satisfaction in using E-banking is positive (0.797 at 0.01 level of significant) that leads the reliability dimension of E-banking service have significant association with the level of customer satisfaction. So that reliability in service is one of the better predictors of satisfaction level in electronic banking system.

The correlation between assurance dimension and customer satisfaction has significant is positive (0.908 at 0.01 significant Level) that leads the assurance dimension of E-banking service have significant association with the level of customer satisfaction. So that assurance dimension in e-banking service is one of the better predictors of satisfaction level in electronic banking system.

The relationship between responsiveness and customer satisfaction is positive (0.922 at 0.01 level of significant) which leads that responsiveness has a positive significant correlation in the satisfaction level of customers on electronic banking.

The correlation between empathy and customer satisfaction is positive and has higher correlation coefficient relatively which is 0.939 at 0.01 level of significant. This implied that commercial banks have respectable empathy which helps them to increase the number of electronic banking customer's satisfaction.

The correlation between **Tangibility and customer satisfaction** is positive (0.906 at 0.01 level of significant) which shows the significant correlation. This implied that commercial banks have tangible setup which helps them to increase e-banking customer's satisfaction

Furthermore, all service quality dimensions have positive relationship with customer satisfaction. Reliability dimension has positive correlation with customer loyalty with correlation coefficient which is 0.679 at 0.01 level of significant that leads the reliability dimension of E-banking service have significant association with the level of customer loyalty. So that reliability in service is one of the better predictors of customer loyalty level in electronic banking system.

Assurance dimension has positive relationship with customer loyalty and has significant correlation coefficient of 0.753 at 0.01 significant level that leads the assurance dimension of E-banking service have significant association with the level of customer loyalty. So that

assurance dimension in e-banking service is one of the better predictors of customer loyalty level in electronic banking system.

Responsiveness dimension has positive relationship with customer loyalty and has correlation coefficient of 0.790 at 0.01 level of significant which leads that responsiveness has a positive significant correlation in the customer loyalty level on electronic banking. Which leads to a generalization that responsiveness dimension has a significant impact on customer loyalty.

Empathy dimension has positive relationship with customer loyalty and has correlation coefficient of 0.780 at 0.01 level of significant. This implied that commercial banks have respectable empathy which helps them to increase electronic banking customers loyalty.

Tangibility dimension has positive relationship with customer loyalty and has the correlation coefficient of 0.833 at 0.01 level of significant which shows the significant correlation. This implied that commercial banks have tangible setup which helps them to increase e-banking customer's loyalty. Hence, it can be concluded that the banking service quality dimensions have significant and positive relationship with customer loyalty in Ethiopian commercial Banks.

## **4.6 Testing Regression Analysis Assumptions**

In the regression model used in this research the five service quality dimensions were the independent variables that are hypothesized to predict dependent variables; customer satisfaction and customer loyalty. Multicollinearity, homoscedasticity, linearity and normality assumption test and Auto correlation or Durbin-Watson test were done to satisfy the common regression analysis assumptions.

### ***4.6.1 Multicollinearity Test***

Multicollinearity exists if there is strong correlation between two or more independent variables or predictors (Field 2005). He also states that, perfect collinearity exists when at least one predictor variable is a perfect linear combination of the other. If there is perfect collinearity between predictors, it becomes impossible to obtain unique estimate of the regression coefficients because there are an infinite number of combination of coefficients that would work equally well.



The correlation coefficient above 0.8/0.9 is the cut-off point for regression analysis (Field 2005) The Pearson correlation matrix has indicated that, the inter-correlation between the service quality dimensions is below and near the cut off points. As it can be seen from the new correlation matrix on the above table 4.13 the inter-correlation between the predictor variable(multicollinearity) is kept at minimum since most of the correlation are below the cut-off point, 0.8/0.9

Moreover, collinearity statistics of tolerance and Variance Inflation Factor (VIF) were undertaken in order to identify multicollinearity problems that might not obvious on correlation matrix. Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula  $1-R^2$  for each variable. If this value is very small (less than .10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF (Variance inflation factor), indicated that whether a predictor has a linear relationship with the other predictor(s). Although there are no fast and hard rules, what value of VIF should be cause for concern, as (Field 2005) VIF value of 10 is a good value at which to worry.

As shown in the table below all independent variable have a VIF value less than 10 which implies that there is no severe multicollinearity exist in the model.

Table 12: Multicollinearity Statistics

		Coefficients <sup>a</sup>					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients			Tolerance	VIF
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	-.036	.118		-.303	.762		
	Reliability	.118	.041	.108	2.864	.004	.433	2.310
	Assurance	.031	.052	.029	.596	.552	.255	3.927
	Responsiveness	.362	.060	.428	6.008	.000	.121	8.235
	Empathy	-.081	.070	-.091	-1.167	.244	.102	9.808
	Tangibility	.565	.060	.479	9.371	.000	.236	4.237

a. Dependent Variable: CLoyalty

### 4.6.2 Homoscedasticity

Homoscedasticity is an assumption in regression analysis that the residuals at each level of the predictor variable(s) have similar variances or the spreads should be constant. This just means that the residuals at each level of the predictor(s) should have the same variance (homoscedasticity). When the variances are very unequal there is said to be heteroscedasticity

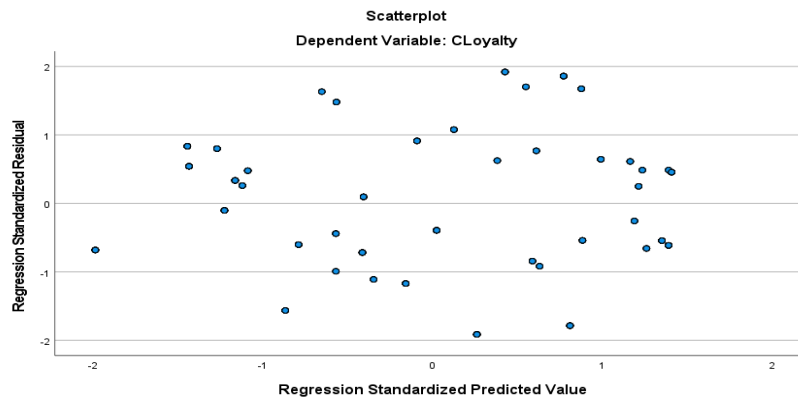


Figure 3: Scatter Plot Graph

### 4.6.3 Normality Distribution

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

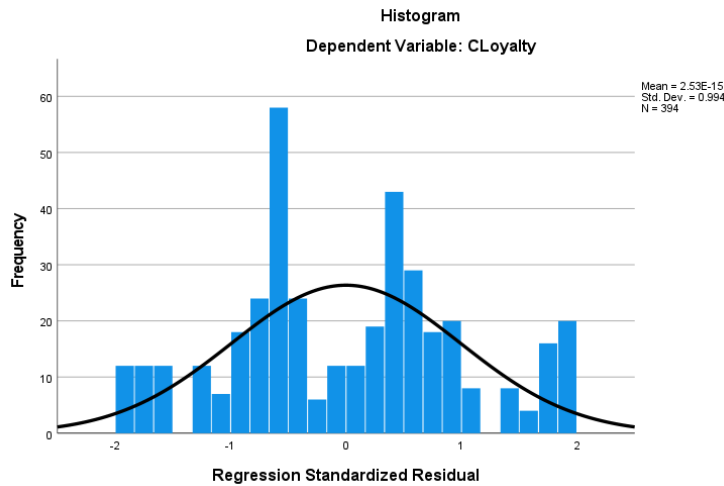


Figure 4: Histogram to show Normality

Here the histogram is fairly bell-shaped which lead to infer that the residuals are normally distributed. Thus, there is no violation of the assumption of normally distributed error term.

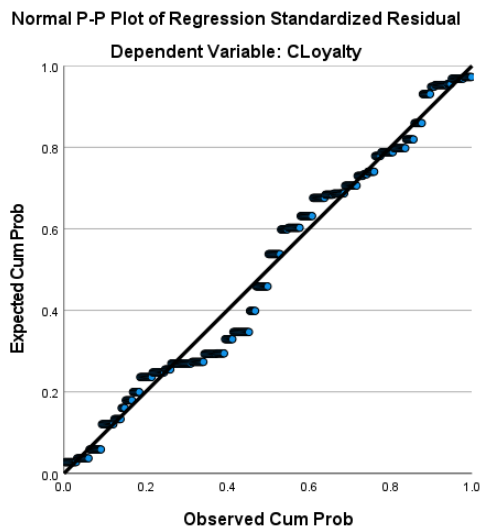


Figure 5: Linearity Assumption

#### 4.6.4 Durbin-Watson

It is a test for correlation error or a test for correlation between variables residuals. In short, this option is important for testing whether the assumption of independent error is tenable. The test statistics can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated. A value greater than 2 indicated a negative correlation between adjacent residuals and a value below 2 indicates positive correlation. The size of Durbin-Watson statistics depends on the number of predictors in the model and the number of observations. (Field 2005)

suggests that the value less than 1 or greater than 3 are definitely cause for concern; however, values closer to 2 may still be problematic depending on your sample and model.

#### 4.7 Multiple Regression Analysis

In order to test this hypothesis listed on chapter two, multiple linear regression analysis was performed. The predictor variables; Effectiveness and assurance, responsiveness, empathy and tangibles were entered into the SPSS simultaneously using enter method. Below on table 15 are multiple regression outputs of the statistical package.

As it can be seen in table 13 below model summary R=0.872 which indicates the positive relationship between customer’s loyalty in electronic banking and independent variables (reliability, assurance, responsiveness, empathy and tangible).

Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.872 <sup>a</sup>	.761	.758	.51907	1.298

a. Predictors: (Constant), Tangibility, Reliability, Responsiveness, Assurance, Empathy

b. Dependent Variable: CLoyalty

Table 14: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	333.184	5	66.637	247.319	.000 <sup>b</sup>
	Residual	104.542	388	.269		
	Total	437.725	393			

a. Dependent Variable: CLoyalty

b. Predictors: (Constant), Tangibility, Reliability, Responsiveness, Assurance, Empathy

Table 15: Coefficients

Model	Unstandardized Coefficients		Coefficients <sup>a</sup>			95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Standardized Coefficients Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	-.036	.118		-.303	.762	-.267	.196		
Reliability	.118	.041	.108	2.864	.004	.037	.200	.433	2.310
Assurance	.031	.052	.029	.596	.552	-.072	.134	.255	3.927
Responsiveness	.362	.060	.428	6.008	.000	.243	.480	.121	8.235
Empathy	-.081	.070	-.091	-1.167	.244	-.219	.056	.102	9.808
Tangibility	.565	.060	.479	9.371	.000	.447	.684	.236	4.237

a. Dependent Variable: CLoyalty

In the regression table above, we can see the contribution of each predictor or B value. This B value means that, the variation in outcome variable due to a unit change in the independent variable. Thus, the table provides the result of the model predicting customer loyalty through the variables of Reliability, Assurance, Responsiveness, Tangibles, Empathy.

Accordingly, as it can be seen on table 15, 16 and table 17, Reliability has a positive and significant effect on customer loyalty with coefficient of (Beta =0.108 and  $p < 0.05$ ). The finding is supported by the previous researchers including (Bellini, Lunardi et al. 2005, Kheng, Mahamad et al. 2010) which have a finding of Reliability has a positive relationship with customer loyalty.

Responsiveness has a positive and significant effect on customer loyalty with coefficient of (Beta=0.428,  $p < 0.05$ ), Surprisingly, these result is contrary to the findings of the (Kheng, Mahamad et al. 2010)'s study which states that the relationship between responsiveness and customer loyalty is insignificant..

Customer satisfaction has a positive and significant effect on customer loyalty with coefficient of (Beta =0.855 and  $p < 0.05$ ). Service quality has a positive and significant effect on customer loyalty with coefficient of (Beta =0.807 and  $p < 0.05$ ).

Whereas Assurance has a positive but insignificant effect on customer loyalty with coefficient of (Beta= 0.029,  $p>0.05$ ), which is contrary to the studies of (Asfaw 2018), (Kheng, Mahamad et al. 2010), and (Ndubisi 2006) which all have a finding that there is a significant relationship between assurance and customer loyalty. The finding implies that communication is not a strong indicator of overall customer loyalty.

Empathy has a negative but insignificant effect on customer loyalty with coefficient of (Beta= -0.091,  $p>0.05$ ). which is contrary to the studies of (Asfaw 2018) (Butcher, Sparks et al. 2001) and (Kheng, Mahamad et al. 2010) which have a finding of Empathy has significant positive relationship with customer loyalty. Which implies that friendship between customers and banking service employees did have a reverse influence on the development of customer loyalty.

*Table 16: Regression analysis of service quality on customer loyalty*

Model	Unstandardized Coefficients		Coefficients <sup>a</sup>			95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Standardized Coefficients	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
	Beta								
1 (Constant)	.121	.123		.986	.325	-.120	.362		
ServiceQuality	.951	.035	.807	27.040	.000	.882	1.020	1.000	1.000

a. Dependent Variable: CLoyalty

*Table 17: Regression analysis of customer satisfaction on customer loyalty*

Model	Unstandardized Coefficients		Coefficients <sup>a</sup>			95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Standardized Coefficients	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
	Beta								
1 (Constant)	.235	.098		2.387	.017	.041	.428		
CSatisfaction	.955	.029	.855	32.704	.000	.897	1.012	1.000	1.000

a. Dependent Variable: CLoyalty

Based on the regression result of the above tables, it can be possible to accept H1, H2, H4, H6 and H7 while rejecting H5 which have insignificant effect and H3 which has a negative insignificant effect.

A regression analysis which is done on a study by (Kheng, Mahamad et al. 2010) shows that tangibles have no significant impact on customer loyalty. It has been observed that there is a changing trend and

respondents treat tangibles as an important measurement. Therefore, the bank must look into upgrading the proficiency of their interior designs and display options.

#### 4.8 Mediation Effect Analysis

Firstly, the first model was presented with direct path from service quality to customer satisfaction and service quality to customer loyalty. Both links were significant at the <0.001 level with the path coefficients of 0.891 and 0.807 respectively. At this point no indirect effect was hypothesized or evaluated. (Table 20) and (Table 21)

Then, the second model was presented with customer satisfaction plays a mediating role between service quality and loyalty (Table 22). The two distinct models were made based on (Baron and Kenny 1986) four-step technique to assess the mediating effect. The two models had:

- 1) A direct path from service quality to customer satisfaction
- 2) A direct path from service quality to loyalty
- 3) A direct path from customer satisfaction to loyalty
- 4) A direct path from service quality to loyalty, and an indirect path from service quality through customer satisfaction to loyalty.

*Table 18: Linear Regression - Service Quality To Customer Satisfaction*

Model	Coefficients <sup>a</sup>								Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Tolerance	VIF	
	B	Std. Error	Beta			Lower Bound	Upper Bound			
1 (Constant)	.065	.084		.772	.440	-.101	.231			
ServiceQuality	.941	.024	.891	38.922	.000	.894	.989	1.000	1.000	

a. Dependent Variable: CSatisfaction

Table 19: Linear Regression - Service Quality To Customer Loyalty

Model	Coefficients <sup>a</sup>								Collinearity Statistics	VIF
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Tolerance		
	B	Std. Error	Beta			Lower Bound	Upper Bound			
1	(Constant)	.121	.123		.986	.325	-.120	.362		
	ServiceQuality	.951	.035	.807	27.040	.000	.882	1.020	1.000	1.000

a. Dependent Variable: CLoyalty

Table 20: Mediating Role Between Customer Satisfaction and Loyalty

Model		Coefficients <sup>a</sup>								Collinearity Statistics	VIF
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Tolerance		
		B	Std. Error	Beta			Lower Bound	Upper Bound			
1	(Constant)	.121	.123		.986	.325	-.120	.362			
	ServiceQuality	.951	.035	.807	27.040	.000	.882	1.020	1.000	1.000	
2	(Constant)	.073	.106		.688	.492	-.135	.281			
	ServiceQuality	.254	.067	.216	3.805	.000	.123	.386	.206	4.865	
	CSatisfaction	.740	.063	.663	11.689	.000	.616	.865	.206	4.865	

a. Dependent Variable: CLoyalty

Mediation is said to be existed when the direct path coefficient between the independent variable and dependent variable is decreases when the indirect path through the mediator is established in the model. The direct path is assessed without the intervention of mediator and with the intervention of mediator. The direct path standardized beta was 0.807 and change to 0.633 after the introduction of customer satisfaction as a mediator. The amount of the decrease of the relationship between satisfaction and loyalty accounted by the mediator was 0.144 which represent 9% of the direct effect.

Based on the regression result of the above table, it can be possible to accept the final hypothesis H8 which implies Customer satisfaction mediates the relationship between e-banking service quality and customer loyalty.



In this study, it is also found that customer satisfaction has mediating effect on the relationships between service quality dimensions (tangibles, reliability, responsiveness, empathy and assurance) and customer loyalty. This result is consistent with studies done by (Butcher, Sparks et al. 2001, Caruana 2002, Kheng, Mahamad et al. 2010)

#### 4.9 Result of Hypothesis Test

	Hypothesis	Decision
H1	Tangibility dimension positively and significantly affect customer loyalty	ACCEPTED
H2	Reliability dimension positively and significantly affects customer loyalty	ACCEPTED
H3	Empathy dimension positively and significantly affects customer loyalty	REJECTED
H4	Responsiveness dimension positively and significantly affects customer loyalty	ACCEPTED
H5	Assurance dimension positively and significantly affects customer loyalty	REJECTED
H6	Customer satisfaction positively and significantly affects customer loyalty	ACCEPTED
H7	E-banking service quality positively and significantly affects customer satisfaction	ACCEPTED
H8	Customer satisfaction mediates the relationship between e-banking service quality and customer loyalty	ACCEPTED

## **5 CHAPTER 5: CONCLUSION AND RECOMMENDATION**

### **5.1 Conclusion**

In this study, explanatory research design with which service quality was explained using the five Service Quality dimensions and the relationship between service quality and customer loyalty was established. The first objective of this research is to test the effect of service quality on customer loyalty. This means that the tangible dimension, reliability, responsibility have positive and significant influence for customer loyalty which is reflected by individuals. This means that better service quality will give a positive impact for customer loyalty. Whereas assurance has a positive but insignificant effect on customer loyalty. Empathy dimension in the opposite has a negative but insignificant effect on customer loyalty.

The results of this research show that the service quality has a significant correlation with customer satisfaction. According to the results of these research it can be concluded that the banking service quality dimensions have significant and positive relationship with customer loyalty in Ethiopian commercial Banks.

The result has further found that Tangibles, Assurance, Empathy and Responsiveness can be the better predictor of satisfaction level on electronic banking service delivery due to their higher in correlation coefficient relative to reliability dimensions.

On the bases of the findings all independent variables have significant effect on Customer loyalty except assurance and empathy which has p value greater than 0.05 level of significance.

By using four-step technique based on (Baron and Kenny 1986) It is also found that customer satisfaction has mediating effect on the relationships between service quality dimensions (tangibles, reliability, responsiveness, empathy and assurance) and customer loyalty.

In conclusion, the results demonstrate the importance of improving the quality-of-service delivery, which in turn enhances customer loyalty. It gives implications for differentiated marketing strategies according to the perceived value for customer satisfaction and service loyalty.

## 5.2 Recommendation

Based on the findings and conclusion of the study the researcher forwards the following recommendations:

- The banks should work to increase E-payment Service Efficiency and Effectiveness to ensure provision of the promised convenience, reliable, secured, and fast service to the customers. Therefore, establishing a robust payment system, efficient and effective service delivery process, streamlined support and maintenance process and having competent staffs are among the key considerations to increase service availability and reliability as well as satisfaction this leads to loyalty
- As service quality dimension reliability, tangibility, and responsiveness has factors that affect customer loyalty in E-banking; so CBE should give special attention to the dimensions in order to increase their customers' satisfaction level.
- CBE must improve product dependability, convenience, accessibility, responsiveness, security, awareness, simplicity of the applications and devices and on infrastructure related matters, all of which add up to create acceptance of electronic payments.
- Preparing a value proposition of each E-banking service is critical so that the front sales person can properly communicate the values to potential customers in a uniform and standard way across the bank.
- End to end performance should be the guiding principle thus the customer enrolment should target potential customer who shall use E-payment instead of cash.
- Similarly, the study depicts that enhancing quality of service is key for improving customer loyalty. The managerial implication of these finding is CBE needs to seek changes to remain competitive in the industry through enhancing customer satisfaction and loyalty should focus on improving service quality all the areas.
- Enhance the technical capacity of the staffs who are involved in support process with defining the level required for each process (E-payment, IS, District and branch Staff) based on the assigned role
- CBE E-banking Service requires integrated and collaborative approach with all stakeholders. Various stakeholders must be identified that have a critical role in the development of E-payment in the country. Changing the cash habit of the society requires involvement of various stakeholders. There is also enormous economic

expansion going on which increased the size of the government payment in terms of expenditure and revenue that necessitated the need to have an efficient payments system such as E-payment services, which again requires collaborations and engagement with government organs.

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**APPENDIX 1**  
**QUESTIONNAIRE FOR CUSTOMERS**  
**INFORMATION SHEET**

Survey questionnaire prepared to collect data on the effect of Electronic Banking service quality on customer loyalty, the case of commercial bank of Ethiopia

**QUESTIONNAIRE FOR CUSTOMERS**

I am Asres Birhan, a postgraduate student of St. Mary's University School of Graduate Studies Department of Business Administration. I am conducting this research as part of preparation for a Master's of Business Administration (MBA).

The purpose of this study is to assess your opinions about E-banking service quality that is the most important factors of satisfaction and loyalty. 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 used for academic purpose.

**General Instruction:**

1. No need to write your name
2. Your response confidentiality is maintained
3. Instruction for each part of the questionnaire is given at the beginning of the questions

**Thank You for your willingness to spare some 20 minutes from your precious  
time to participate in the study**

Name: Asres Birhan

E-mail: Asresbirhan2237@gmail.com

Tell: +251938958185

## Part I: General Background Information

Please circle the letter that best describes you.

### Part I: Demographic Information

1. Gender

- A. Male
- B. Female

2. Which age group do you fall under?

- A. 18 – 24 years
- B. 25 – 34 years
- C. 35 - 44 years
- D. 45-54 years
- E. 55 years plus

3. What is your level of education?

- |                        |                          |
|------------------------|--------------------------|
| A. Illiterate          | D. Degree                |
| B. Secondary education | E. Post graduate/Masters |
| C. Certificate         | F. PhD                   |

4. How long have you been with CBE?

- |                      |                       |
|----------------------|-----------------------|
| A. Less than 1 years | D. More than 10 years |
| B. 1–5 years         |                       |
| C. 6–10 years        |                       |

**Part II: Questions related to Service Quality: The following statements are aimed to measure your perception towards the level of agreement on the statements using the five points Likert scale. (1 = Strongly Disagree, 5 = strongly agree)**

Please put right mark (√) in the response that yours feeling resembles about the statement provided

1 Strongly Disagree      2 Disagree      3Neutral      4 Agree      5 Strongly Agree

Items		Scaling				
<i>SERVICE QUALITY</i>		1	2	3	4	5
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My attitude towards the bank's service and product is great.					
2	I am happy that my records that I have in the bank are secure.					
3	I am happy about the pleasant service of the bank.					
4	I am satisfied by stability of the service that are provided by the bank.					
5	I am satisfied by the harmonious relationship I have with the bank's service providers.					

**PART III Questions related to customer satisfaction: the following statements are aimed to measure your level of satisfaction with the service offered by the bank. Please indicate your level of agreement on the statements using the five points Likert scale. (1 = Strongly Disagree to 5 = strongly agree)**

	Statement/Questions	Very dissatisfied/ Strongly disagree	Dissatisfied/ Disagree	Indifferent / No Response	Satisfied/ Agree	Very satisfied/ Strongly Agree
		1	2	3	4	5
<b>1</b>	<b>Reliability</b>					
<b>1.1</b>	The bank shows sincere interest in solving customers' problems.					
<b>1.2</b>	The bank maintains the records accurately.					
<b>1.3</b>	The bank updates the records accurately.					
<b>2</b>	<b>Assurance</b>					



2.1	Employee's behaviour install confidence in customers.					
2.2	Customers feel assure that service requests are duly follow-up by the company.					
2.3	Employees providing service to customers are courteous and friendly.					
2.4	Employees maintain adequate knowledge to handle customer queries.					
<b>3</b>	<b>Responsiveness</b>					
3.1	Service-related information is easily obtainable via electronic banking					
3.2	Employees provide services promptly to the customers.					
3.3	Employees are always willing to help the customers.					
3.4	Despite their busyness, employees respond promptly to customers' requests.					
<b>4</b>	<b>Empathy</b>					
4.1	The bank gives its customers an individual attention.					
4.2	Employees interacting customers pay personal attention to them					
4.3	Service provider understands the specific needs of the customers					
<b>5</b>	<b>Tangibility</b>					
5.1	Service Provider has up-to-date equipment's/technology.					
5.2	Physical facilities at service provider are visually appealing.					
5.3	Employees are well dressed and neat in appearance					
5.4	Materials associated with the service (such as pamphlets or statement) are visually appealing.					
5.5	The banks website and electronic banking applications are visually appealing					

**PART IV Questions related to Customer Loyalty: The following statements are aimed to measure your degree of Loyalty for the bank. Please indicate your level of agreement on the statements using the five points Likert scale. (1 = Strongly Disagree to 5 = strongly agree)**

	Statement/Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	My chances of suggesting/advising the CBE to my friends/colleagues are great.					
2	My rating for CBE is always better than other banks					
3	I am Proud in being a customer of Commercial bank of Ethiopia.					
4	I feel like I'm a member of the bank					
5	I wish a good thing to Commercial bank of Ethiopia.					
6	Whenever I think of using a bank service, the first bank that comes to my mind is Commercial Bank of Ethiopia					
7	I want to stay as a customer of Commercial Bank of Ethiopia because I cherish my relationship with the Bank					

# THANK YOU

# አባሪ 1

## መጠይቅ ለደንበኛ

### መረጃ ገፅ

የኤሌክትሮኒክስ ባንኪንግ አገልግሎት ጥራት በደንበኞች ታማኝነት ላይ የሚያሳድረውን ተጽእኖ መረጃ ለመሰብሰብ የተዘጋጀ የዳሰሳ ጥናት በኢትዮጵያ ንግድ ባንክ ዙሪያ

## መጠይቅ ለደንበኛ

እኔ አስረስ ብርሃን ነኝ የቅድስትሚርያም ዩኒቨርሲቲ የድህረ ምረቃ ትምህርት ቤት የንግድ አስተዳደር ትምህርት ክፍል ተማሪ ስሆን ይህንን ጥናት የማድረግ ለንግድ አስተዳደር ማስተርስ (MBA) የዝግጅት አካል ነው።

የዚህ ጥናት አላማ ስለ ኢ-ባንክ አገልግሎት ጥራት ያለዎትን አስተያየት መገምገም ሲሆን ይህም ለደንበኞች እርካታ እና ታማኝነት አስፈላጊ ነው። የዚህ የዳሰሳ ጥናት ስኬት በእርስዎ ተሳትፎ እና እውነተኛ ምላሾች ላይ የተመሰረተ ነው። ስለዚህ መጠይቁን ለመመለስ ያደረጉትን እርዳታ በጣም አደንቃለሁ። እባክዎን ምላሽዎ በጥብቅ ሚስጥራዊ እና ለአካዳሚክ ዓላማ ብቻ ጥቅም ላይ እንደሚውል እርግጠኛ ይሁኑ።

አጠቃላይ መመሪያ:

1. ስምዎን መጻፍ አያስፈልግም
2. የምላሽዎ ሚስጥራዊነት ይጠበቃል
3. ለእያንዳንዱ የመጠይቁ ክፍል መመሪያ በጥያቄዎቹ መጀመሪያ ላይ ተሰጥቷል

በጥናቱ ለመሳተፍ ከውድ ጊዜዎ 20 ደቂቃ ያህል ለመሰዎት ላሳዩት ፍላጎት እናመሰግናለን።

አስረስ ብርሃን

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ስልክ ቁጥር: +251938958185

**ክፍል አንድ፡ አጠቃላይ መረጃ**

እባክዎ እርስዎን በተሻለ ሁኔታ በሚገልጽ ሰጥኑ ውስጥ v ምልክት ያስቀምጡ.

ክፍል አንድ፡ የስነ ሕዝብ አወቃቀር መረጃ

1. ጾታ

- A. ወንድ
- B. ሴት

2. በየትኛው የዕድሜ ክልል ውስጥ ይገኛሉ?

- A. 18 – 24 ዓመታት
- B. 25 – 34 ዓመታት
- C. 35-44 ዓመታት
- D. 45-54 ዓመታት
- E. 55 ዓመታት ሲደመር

3. የትምህርት ደረጃዎት ምንድን ነው?

- |                     |                   |
|---------------------|-------------------|
| A. ያልተማረ            | E. ዲግሪ            |
| B. የመጀመሪያ ደረጃ ትምህርት | F. ፖስት ተመራቂ/ማስተርስ |
| C. ሁለተኛ ደረጃ ትምህርት   | G. ፕሎችዲ           |
| D. የምስክር ወረቀት       |                   |

4. ከኢትዮጵያ ንግድ ባንክ ጋር ለምን ያህል ጊዜ ቆይተዋል?

- A. ከ1 አመት በታች
- B. 1-5 ዓመታት
- C. 6-10 ዓመታት
- D. ከ10 አመት በላይ

ክፍል II: የጥናት ጥያቄ 1: ከአገልግሎት ጥራት ጋር የተያያዙ ጥያቄዎች: የሚከተሉት መግለጫዎች አምስቱን የLikert ሚዛን ነጥቦች በመጠቀም በመግለጫዎቹ ላይ ያለውን የስምምነት ደረጃ ለመለካት ያለመ ነው። (1 = በጣም አልስማማም ፣ 5 = በጣም እስማማለሁ) ።

1. በጣም አልስማማም 2. አልስማማም 3. ገለልተኛ 4. እስማማለሁ 5. በጣም እስማማለሁ

	አይነቶች	መጠን				
		1	2	3	4	5
	የአገልግሎት ጥራት	በጣም አልስማማም	አልስማማም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
1	ለባንኩ አገልግሎት እና ምርት ያለኝ አመለካከት በጣም ጥሩ ነው.					
2	በባንክ ውስጥ ያሉኝ መረጃዎቼ አስተማማኝ በመሆናቸው ደስተኛ ነኝ					
3	በባንኩ አስደሳች አገልግሎት ደስተኛ ነኝ					
4	በባንኩ በሚሰጠው አገልግሎት ወጥነት ረክቻለሁ					
5	ከባንክ አገልግሎት አቅራቢዎች ጋር ባለኝ የተቀናጀ ግንኙነት ረክቻለሁ					

ክፍል III ከደንበኛ እርካታ ጋር የተያያዙ ጥያቄዎች: የሚከተሉት መግለጫዎች ባንኩ በሚያቀርበው አገልግሎት የእርካታ ደረጃዎን ለመለካት ያለመ ነው። እባክዎን አምስቱን የLikert ሚዛን ነጥቦች በመጠቀም በመግለጫዎቹ ላይ የስምምነት ደረጃዎን ያመልክቱ። (1 = በጣም አልስማማም ፣ 5 = በጣም እስማማለሁ) ።

	ጥያቄዎች	ምንም	አልረካሁም	ምላሽ የለኝም	ረክቻለሁ	በጣም
		አልረካሁም	አልረካሁም	ምላሽ የለኝም	ረክቻለሁ	ረክቻለሁ
		1	2	3	4	5
1	<b>አስተማማኝነት</b>					
1.1	ባንኩ የደንበኞችን ችግር ለመፍታት ስላለው ልባዊ ፍላጎት					
1.2	ባንኩ መዝገቦቹን/መረጃዎችን በትክክል ስለመያዘት					
1.3	ባንኩ መዝገቦቹን በትክክል ጊዜውን ጠብቆ ስለማዘመኑ					
2	<b>ዋስትና</b>					
2.1	የሰራተኛ ባህሪ በደንበኞች ላይ እምነትን ሰለመጫኑ.					
2.2	ደንበኞች የአገልግሎት ጥያቄዎች በኩባንያው ትክክለኛ ክትትል ስለሚደረግላቸው					

2.3	ለደንበኞች አገልግሎት በሚሰጡ ሰራተኞች ጨዋነት እና ተግባራዊነት					
2.4	ሰራተኞች የደንበኛ ጥያቄዎችን ለመመለስ ባላቸውበቂ እውቀት					
3	<b>ምላሽ ሰጪነት</b>					
3.1	ከአገልግሎት ጋር የተያያዘ መረጃ በኤሌክትሮኒክ ባንክ በኩል በቀላሉ ማግኘት በመቻሉ					
3.2	ሰራተኞች ወዲያውኑ ለደንበኞች አገልግሎት በመስጠታቸው					
3.3	ሰራተኞች ሁል ጊዜ ደንበኞቻቸውን ለመርዳት ፈቃደኞች በመሆናቸው					
3.4	ስራ ቢበዛባቸውም የባንኩ ሰራተኞች ለደንበኞች ጥያቄ ምላሽ ለመስጠት ባላቸው ፍጥነት					
4	<b>ርሀራሂ</b>					
4.1	ባንኩ ለደንበኞቹ ለየብቻ ባለው ትኩረት አሰጣጥ					
4.2	ከደንበኞች ጋር የሚገናኙ ሰራተኞች ለሁሉም የየግል ትኩረት በመስጠታቸው					
4.3	አገልግሎት ሰጪዎች የደንበኞችን ልዩ ፍላጎት በመረዳታቸው					
5	<b>ተጨባጭነት</b>					
5.1	ባንኩ ዘመናዊ መሳሪያዎች/ቴክኖሎጂ ስላሉት					
5.2	በባንኩ ውስጥ ያሉ መሳሪያዎች ለእይታ ማራኪ በመሆናቸው					
5.3	ሰራተኞቹ በደንብ የለበሱ እና ለእይታ ማራኪ በመሆናቸው					
5.4	ከአገልግሎቱ ጋር የተያያዙ ቁሳቁሶች (ለምሳሌ በራሪ ወረቀቶች ወይም መግለጫዎች) በእይታ ማራኪ በመሆናቸው					
5.5	የባንኮች ድረ-ገጽ እና የኤሌክትሮኒክስ የባንክ አፕሊኬሽኖች ለእይታ ማራኪ በመሆናቸው					

ክፍል IV ከደንበኛ ታማኝነት ጋር የተያያዙ ጥያቄዎች፡ የሚከተሉት መግለጫዎች ለባንኩ ያለዎትን የታማኝነት ደረጃ ለመለካት ያለመ ነው። እባክዎን አምስቱን የLikert ሚዛን ነጥቦች በመጠቀም በመግለጫዎቹ ላይ የስምምነት ደረጃዎን ያመልክቱ። (1 = በጣም አልስማማም ፣ 5 = በጣም እስማማለሁ) ።

	ጥያቄዎች	በጣም አልስማማም	አልስማማም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
		1	2	3	4	5
1	የኢትዮጵያ ንግድ ባንክን ለጓደኞቼ / ባልደረቦቼ የመጠቀም/ የመምከር እድሌ ብዙ ነው					
2	ለኢትዮጵያ ንግድ ባንክ ያለኝ ደረጃ ሁልጊዜ ከሌሎች ባንኮች የተሻለ ነው።					
3	የኢትዮጵያ ንግድ ባንክ ደንበኛ በመሆኔ ኩራት ይሰማኛል					
4	የባንኩ አባል እንደሆንኩ ይሰማኛል					
5	ለኢትዮጵያ ንግድ ባንክ መልካም ነገር እመኛለሁ.					
6	የባንክ አገልግሎትን ለመጠቀም ባሰብኩበት ጊዜ ሁሉ ወደ አእምሮዬ የሚመጣው የመጀመሪያው ባንክ የኢትዮጵያ ንግድ ባንክ ነው።					
7	ከባንኩ ጋር ያለኝን ግንኙነት ስለምወደው የ ባንክ ደንበኛ ሆኜ መቆየት እፈልጋለሁ።					

# አመሰግናለሁ