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Management**

**Assessment of E- Banking Service Quality on Customer
Satisfaction in Commercial Bank of Ethiopia**

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Declaration

I, the under signed, declare that a thesis entitle ‘Assessment of E- Banking Service Quality on Customer Satisfaction in Commercial Bank of Ethiopia’, is my Original work submitted for MA Degree in Public Administration and Development Management. It has not been presented to any other University for award of a degree, diploma or certificate.

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This is to certify that the thesis prepared by Girum Kebede entitled Assessment of E-Banking Service Quality on Customer Satisfaction in Commercial Bank of Ethiopia in Addis Ababa area, which is submitted in partial fulfillment of the requirements for the Degree of Master in Public Management and Policy (MPMP), complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Acronyms and Abbreviations

ATM	Automated Teller Machines
CBE	Commercial Bank of Ethiopia
IB	Internet Banking
ICT	Information Communication Technology
KYC	Know Your Customer
KYE	Know Your Employee
MB	Mobile Banking
NBE	National Bank of Ethiopia
POS	Point of Sales Transfer Terminals
SERVQUAL	Service Quality
SWIFT	Society for Worldwide Interbank Financial Telecommunication

Abstract

The major objective of this study was an assessment of E- Banking Service Quality in the selected district of commercial bank of Ethiopia in Addis Ababa area. Purposive sampling was used to select branches. Moreover, random sampling was applied to select respondents. Data collection instrument which was used in this study was questionnaire and interviews. The research design was mixed approach and various statistical tools like chi- square test, frequency, percentage, Cronbach's Alpha was applied and the following findings were identified. The respondents confirmed the presence of trust in E-banking services. E-banking was reliable with CBE. E-banking has impact on customer satisfaction. Moreover, assessment was made on quality service of e-banking in the context of five dimensions of service quality which are reliability, responsiveness, assurance, empathy and tangibles. In order to describe further the researcher designed hypothetical statement to be tested by chi- square and all the hypothetical statements failed to be accepted and alternative hypothetical statements were accepted. List of recommendations has been presented based on the finding of the survey conducted. The CBE should improve provision of ATM, internet banking and POS services to satisfy all customers in standard and functional manner. It should also decrease the down time of the network at all levels, retain the existing e- banking customers and to improve e- banking service quality, the bank should continuously maintain error - free transactions through e-banking. Moreover, the bank management should improve e- banking quality service so as to satisfy customers' needs and pay attention to e-banking customer complaints in order to satisfy the customer expectation. The management of the bank should regularly run research activities in order to keep a regular track of customer satisfaction level of e-banking services quality and conduct further on the impact of e-banking service quality dimensions on technological trust and usage by customers of commercial bank of Ethiopia.

Key words: Commercial Bank of Ethiopia, E- banking, service quality dimension, reliability, responsiveness, assurance, empathy, tangibles and customer perception

Chapter One: Introduction

1.1. Background of the Study

E-Banking is the provision of banking service to customers through the internet [Haunsi, et al, 2013, Ayana, 2014; and Nimako, 2013]. E- Banking is the means in which customers can access their bank account via electronic [internet banking, mobile banking, ATM and POS] using a personal computer or mobile phone and web browser [Nimako et al, 2013].

E-Banking used various delivery platforms with different terminal devices such as personal computer, and mobile phone with browser or desktop software, telephone or digital television. Based on the above, therefore, E-Banking could be classified in to personal computer banking, internet banking, TV-based banking and telephone based banking [Nimako et al, 2013].

The banking industry is experiencing change customer driven and technological advancement. E- Banking is emerged as the most critical form of customer interaction and causing changes financial markets. Banks all over the world are struggling to decrease costs and increase profit margins in order to sustain in this competitive environment. Internet is becoming a critical channel for selling virtually all goods and services [Roche, 2014]. Because of this, internet sector, internet banking becomes and most effective channel for the banks as well as for customers [Roche, 2014]. Ethiopian Banks operated with some exceptions providing services to customers by using traditional using traditional system causing dissatisfaction to customers. E- banking literature's states the problems related to E-banking, to mention some, low level of internet penetration, under developed telecommunication infrastructure, lack of legal regulatory framework for e-banking, risks related with security issue, low level of e-banking awareness, etc.

1.2. The Importance of E-banking

With the advancement in telecommunication, electronic banking systems are rapidly replacing the traditional modes of payment that involved personal contact between buyers and sellers. Electronic banking systems entail online financial transactions that utilize some form of a digital financial device, such as e-tokens, e-cash and checks. Stefan et al., (2000).

1.3. E-banking systems present a number of benefits to both individuals and businesses.

Electronic banking systems allow financial institutions, businesses and the government to offer a variety of payment options to their customers. These systems include automated teller machines, debit cards, credit cards, mobile banking and payment of bills through the phone. Traditional business payment systems depend mainly on a limited number of the business outlets situated in different locations. This limits the client coverage. (IJRBM, Vol. 1, Issue 1, June 2013.)

E-banking systems result in reduced costs for both businesses and individuals. Businesses save on operational and processing expenses mainly due to reduction in technological costs, for example, the use of the Internet and the acquisition of computers and other machines. Expenditures in paper and postage are cut down along with time spent in executing personal transactions. Customers also save on time spent in dealing with personal transactions as in traditional payment systems.

The use of e-banking cancels out the use of drafting checks, transmitting cash and invoices for both businesses and customers. This allows for faster execution of transactions, for example, you do not have to wait for the 30 days required in invoicing transactions. Credit cards also allow for customers to partake in transactions without immediate cash.

The traditional payment systems mainly involved clients sending their confidential information via post or physically visiting the transaction site. This presented a number of security risks for example; your mail may get lost or fall into the wrong hands.

Additionally, places where financial transactions take place are targets for criminal attacks.

E-banking systems offer the main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main advantages of e-banking for corporate customers are as follows :(IJRBM Vol. 1, Issue 1, and June 2013.)

- Reduced costs in accessing and using the banking services.
- Increased comfort and timesaving - transactions can be made 24 hours a day, without requiring the physical interaction with the bank.
- 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.
- Better cash management- e-banking facilities speed up cash cycle and increases efficiency of business processes.
- Convenience- All the banking transactions can be performed from the comfort of the home or office or from the place a customer wants to.
- Speed - The response of the medium is very fast; therefore customers can actually wait till the last minute before concluding a fund transfer.
- Funds management- Customers can download their history of different accounts and do a "what-if" analysis on their own PC before affecting any transaction on the web. This will lead to better funds management. (Alexa J osphine, 2005).

Incorporating an electronic banking service with the traditional banking environment is a must and an issue of survival in the competitive banking industry. CBE, as a huge bank, was aware and entered in the e-banking service ahead of any bank in the country. Commercial bank of Ethiopia has gone through various reforms in order to satisfy its customers. Along with customer satisfaction, the Bank has brought impact on the development of the country. This is mainly exhibited on the financial support availed to the country's mega projects. This support is derived from the bank's mission statement i.e. Supporting National Development Priorities. This mission is realized through clear

and practical strategies. The good strategy that the bank draws in 2010/11 shows the major areas that the bank should excel in order to meet its mission.

Those strategies developed for the five-year explicitly driving force for the bank's overall achievement during the strategic implementation period that was presented under two pillars of excellence. These were Business Growth & Service Excellence. Different initiatives were also deployed so as to achieve the targets stated in the strategic document. Finalizing the IT projects were among the initiatives taken as a tool for the attainments of the targets. E-banking was one of the products that the IT project had delivered.

E-banking is a means of making payments over an electronic network such as the Internet. Whereas Commercial Bank of Ethiopia defines e-banking service as a service conveyed through the support of technologies namely ATM, POS, Mobile Banking, Internet Banking and Agent banking. Even though the bank was a pioneer in rendering technology supported service the status of the service is not that much developed like the other wings of the bank. In order to utilize the benefit of the e-banking service, the bank has developed and implemented a strategy survives for the last five years.

Based on the strategy the bank has set to accomplish three major goals that would magnify the results of the effective implementation of the e-banking strategy. These major targets were creating a cashless society, mobilizing resources and bringing service excellence. All the goals revealed in the strategy document are supportive to each other. Means creating cashless society have a positive impact on both resource mobilization and service excellence. However, all the targets indicated on the document are not achieved as expected. This is mainly due to reasons from the bank itself and outside the banks regulation.

Since the e-banking service was new to the bank and on the other hand the process of acquiring, deploying and maintaining e-banking technologies were not carried as the business demands. The poor infrastructure supply especially the telecom service coined with the minimal awareness of the society negatively affects the goal i.e. creating the cashless society. The internal and external problems questioned the reliability of the

service which in turn elongated the creation of the cashless society. Since the formation of cashless society delayed both resource mobilization and service excellence would affect greatly. Therefore, the study on Assessment of E- Banking Service Quality on Customer Satisfaction in Commercial Bank of Ethiopia shall address the problems highlighted internally and externally so as to benefit from e-banking service quality and the technology deployment.

1.4. Background of the organization

The history of the Commercial Bank of Ethiopia (CBE) dates back to the establishment of the State Bank of Ethiopia in 1942. CBE was legally established as a share company in 1963. In 1974, CBE merged with the privately owned Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country. Pioneer to introduce modern banking to the country. It has more than 1000 branches stretched across the country. The leading African bank with assets of 311 billion Birr as on September 30th 2015. Plays a catalytic role in the economic progress and development of the country. The first bank in Ethiopia to introduce ATM service for local users. Currently CBE has more than 11 million account holders and the number of Mobile and Internet Banking users also reached more than 460,000 as of September 30, 2015. Active ATM card holders reached close to a million. It has strong correspondent relationship with more than 50 renowned foreign banks like Commerz Bank A.G., Royal Bank of Canada, City Bank, HSBC Bank, CBE has a SWIFT bilateral arrangement with more than 700 others banks across the world. CBE combines a wide capital base with more than 22,000 talented and committed employees. Pioneer to introduce Western Union Money Transfer Services in Ethiopia early 1990s and currently working with other 20 money transfer agents like Money Gram, Atlantic International (Bole), Xpress Money. CBE has opened four branches in South Sudan and has been in the business since June 2009. CBE has reliable and long-standing relationships with many internationally acclaimed banks throughout the world.

1.5. Statement of the Problem

The use of information and communication technologies is brought a change of the way of undertaking business transactions. ICT is creating opportunities to deliver new products and services. It is also supporting management processes including planning, controlling and coordination. ICT is contributed to banking sector to make it more competitive, increase customer base, reduce transaction costs, improve the quality and timelines of response, enhance opportunities for advertising and branding, facilitate self-service and service customization, and improve customer communication and customer relationship management [Nimako, 2013].

The internet was basically a media for communication but now it is more of a business tool. E-banking (Internet banking, ATM and Mobile banking) is becoming increasingly popular, and competing banks have limited avenues to exploit in terms of establishing a differentiation [Mahfooz, 2013].

Service quality is the main factor that determines the success of electronic commerce. There are various dimensions of service quality. Some of the dimensions of service quality can be categorized into functional dimensions (the process), technical (the outcome) and image. The functional dimensions are the most common dimensions that are discussed in the service quality models. The service quality models are reliability, assurance, tangible, empathy, and responsive [Roche, 2014].

According yang et al, (2003) service quality dimensions that are driven /measured by a bank responsiveness in the following aspects which include prompt delivery, credibility that includes confidence and good reputation; ease of use that includes user friendly, easy of navigation; reliability that includes accurate order, keeping promises , convenience that includes convenient shopping in time and place, communication that includes up to date information; access that includes the accessibility through every channel and lastly and competence that includes representative knowledge to resolve problems [Yang et al, 2003]. According to Surehandar et.al, 2002) banks were ranked on several criteria such as operation ratio, profitability ratio, productivity ratio, financial parameters ,net profits,

total assets, advances and total deposits .These ranking were essentially based on financial aspects rather than on the nature and level of service delivered.

Provision of quality of service by banking sector is very important and profitability of their business is closely connected to the quality of service they render [Mahfooz, 2013]. Internet banking allows banking from anywhere and is used for transactions; payment etc over the internet through a bank, a credit unions or society's securing website.

At the present time, every bank provides the service of internet banking. Providing services through internet is not enough but providing the quality service is the main things. There are many factors that make service good enough for the customs, some of the factors that determine quality of internet banking service which includes web design, security, trust, product diversification, credibility, collaboration, access and communication [Hasan, 2012]. Commercial Bank of Ethiopia (CBE) is the largest state owned bank currently (2016) CBE has, 1017 branches throughout the country. The introduction of e-banking has opened a new horizon in front of markets, and financial sections, however there shall be quality, efficiency, improvement, seedling up, connection, possibly reducing costs related remain high demand.

Electronic Banking is the only choice as a goal for development by avoiding time, and space limitations, During the past decades money (the most liquid asset) flow were banks working hours, branches and location, services mix, and now electronic banking. Moreover, electronic banking refers to such facilities for customers to access banking service safely, without physical presentation (P.kasurivatna, 2004) and requires higher quality, lower price, enhancement of in market, unlimited space of market, extension, competition, management, connectivity, controlling etc...

On the other hand, E- Banking has several challenges perhaps quality, and security are few to mention, in fact customers awareness and willingness to make use of e-banking is also a major challenge, this much remain to be done In this regard so as to bring about balanced users satisfaction. E-banking quality, not limited to CBE, the quality of delivering service (Speed, reliability etc.) is determinate to customer's satisfaction by being efficient and effective.

The strategic positioning of an e-banking operation must establish its own unique competitive advantages over its traditional competitors and sustain its customers (Klinereman 2000, 2001). Quality service is undeniable in that good service quality has impact on business performance. Delivering a good level of service to customers is essential for achieving success and surviving in the competitive world. Furthermore, providing high quality of services and products enhances the reputation of the firm, attracts new customers through word-of-mouth, and increases profitability (Julian and Ramaseshan, 1994).

Service quality is recognized as a key strategic issue for organizations operating in service sectors. Organizations achieving a higher level of service quality have high levels of customer satisfaction, which is an antecedent of sustainable competitive advantage (Lewis and Mitchell, 1990; Meuter et al., 2000; Guo, Duff and Hair, 2008).

Moreover, studies undertaken by researchers in the field indicate that having a service quality strategy has a strong correlation with financial performance, manufacturing costs, customer loyalty, customer retention, word-of-mouth referral, price insensitivity, sales growth, responsiveness to demand, a successful marketing strategy, development of an organizations strategy, having better understanding of the customer, matching service delivery with expectations of the customer, providing strong customer orientation, and enhancing IT capability. (Cronin and Taylor, 1992; Cronin, Brady and Hult, 2000; Norreklit, 2000; Rao and Kelkar, 1997; Zhu and Nakata, 2007; Metters and Marucheck, 2007; Stading and Altay, 2007), several factors will be listed to highlight the importance of service quality.

Quality service considered as critical foundation of best practice in service quality in the organization and the following are the importance of E-banking which include achieving customer satisfaction, achieving customer loyalty and retention, enhancing financial performance, ensuring the success of the marketing strategy, ensuring service interaction is well developed, focusing on easily doing business with customers and enhancing information technology capacity to improve customer orientation .At present there are different approaches to e-banking, including, but not limited to internet banking, or virtual banking.

Hence, the study on this subject is imperative for the largest commercial bank in this country. This will help it revisit its policy in the planning and implementation of its E-banking service endeavors. The researcher of this study was motivated to do research on the topic working in the sector for the last 17 years. Besides, studies on this subject is very little and thus this research exercise is designed to bridge this knowledge gap and thus, this study has tried to assess E-banking quality service on customer satisfaction in commercial banks of Ethiopia.

1.6. Objectives of the study

1.6.1. General objective

The general objective of the study is assessing E-banking quality service of commercial bank of Ethiopia.

1.6.2. Specific Objectives

The specific objectives of the study are the following

- ❖ Identify the challenges the bank face with regard to E-banking service
- ❖ Identify the major service quality dimensions that satisfy the customers using E-banking.
- ❖ Determine the level of significance of service quality dimensions on E-banking service
- ❖ Propose policy recommendation that improve e-banking service quality.

1.7. Research Questions

Research question in which the study tried to give answer are given below.

- ❖ What are the types of E-banking service available by commercial bank of Ethiopia?
- ❖ What are the major E-banking service qualities dimensions that create customer satisfaction in E-banking?
- ❖ How significantly to service quality dimensions affect E-banking service quality?
- ❖ What could be the possible recommendation to improve E-banking service quality at CBE?

1.8. Hypothesis of the Study

H₁. There is a positive impact of reliability on service quality of E-banking.

H₂. There is a positive impact of responsiveness on service quality of E-banking.

H₃. There is a positive impact of assurance on service quality of E-banking.

H₄. There is a positive impact of empathy on service quality of E-banking.

H₅. There is a positive impact of tangibles on quality service of E- banking.

1.9. Significance of the Study

The results of the study may generate awareness among the concerned people about e banking service quality of commercial bank of Ethiopia. It attempted to assess drawbacks and problems encountered in the E-banking service quality .It also serve as there are several studies undertaken and pave the way for those who want to make further studies in the area.

1.10. Scope (Delimitation) of the Study

This study will concentrate on the assessment of E-banking service quality in commercial banks of Ethiopia .So its scope is delimited to E- banking service quality and only to those selected braches from in Addis Ababa area.

1.11. Organization of the Study

The study was organized in five chapters. Chapter one deals about Background of the study. Introduction, statement of the problem, objective, research methods and methodology, scope, limitation and significance of the study. Chapter two, deals about literature review which emphasizes on correlation between the existing studies, researches, reports, etc. that would act as a basis for the proposed study. It is specific and up to the requirement of the proposed study. Chapter three deals about research methodology which elaborates and identifies all possible analysis based on the available data gathered. Besides, formal procedures of different analytical tools should be used to give a thorough analysis. Chapter four deals about data analysis and interpretation of the study and finally chapter five emphases on conclusion and recommendations of the study.

Chapter Two: Review of Related Literature

2.1. Concepts and Definition of E-banking

E-Banking could be conceptualized within the context of electronic banking. Though it has been variously defined according to Daniel. E (1999), electronic banking is the delivery of banks 'information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as personal computer and mobile phone with browser or desktop software, telephone or digital television. Electronic banking, therefore, could be categorized into PC banking, Internet banking, TV-based banking, and Telephone-based banking. It is a construct that consists of several distribution channels. Internet banking is the situation where — customers can access their bank account via the internet using a PC or mobile phone and web-browser (Zeithaml, V.A.,Parasuraman A, and Malhotra A,2002).

According to Allen (2001cited in DrigăImola and Isac Claudia, 2014), e-banking refers to the supply of information or services by a bank to its customers, via a computer or television. Keivani et al. (20122001cited in DrigăImola and Isac Claudia, 2014) describes electronic banking as “anumbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution”. Most specialists agree that e-banking ensures 24-hour-a-day, 7-day-a-week accessibility through a type of advanced information system. A common definition for electronic banking comes from the Basel Committee on Banking Supervision: “E-banking includes the provision of retail and small value banking products and services through electronic channels as well as large vale electronic payments and other wholesale banking services delivered electronically”(BCBS, 19982001cited in DrigăImola and Isac Claudia,2014). Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al, 2004). Such service also saves the time and money of the bank with an added benefit of minimizing the likelihood of committing errors by bank tellers (Jayawardhena, 2000). Robinson, 2000 believes that the supply of e-banking services enables banks to establish and extend their relationship with the customers. There are other numerous advantages to banks offered by online banking such as mass customization to suit the likes of each user, innovation of new products and services,

more effective marketing and communication at lower costs (Tuchilla, 2000), development of non-core products such as insurance and stockbrokerage as an expansion strategy, improved market image, better and quicker response to market evolution (Jayawardhena and Foley, 2000).

2.2. Concepts of E-banking Service Quality

It is a common assertion among management and marketing theorists that service quality is essential to business services [Nimako, 2013]. Many financial institutions are directing their strategies towards increasing customer satisfaction and loyalty through improved service quality. The state of customer satisfaction with internet banking service quality has not received much attention. “Satisfaction is a person’s feeling of pleasure or disappointment resulting from comparing a product’s performance (outcome) in relation to his or her expectations. Internet banking is the situation where “customers can access their bank account via the internet using a PC or mobile phone and web browser [Zeithamal, V.A.; parasuraman, A. and Alhotra, A., 2002].

Many past studies have developed various models for understanding relevant e-service quality dimensions relevant to internet banking. Josephet,al,(2007) proposed six dimensions of on line bank service quality including convenience /accuracy, feedback /complaint management efficiency, queue management, accessibilities and customization. Zeithmal et al, (2002) forwarded attributes of internet service quality include access, ease of navigation, efficiency, flexibility, reliability, personalization, security, responsiveness, assurance site aesthetics and price knowledge.

2.3. Significance or Benefits of E-Banking

There are plenty of perks offered by banks to customers who adopt internet banking over the traditional visit physically to the nearest branch office.

Convenience: This is the single most important benefits that outweigh any shortcoming of E- 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 etc become much simpler on the internet [Johnson, 2005].

Better Rates: The banks stand to gain significantly by the use of internet banking as it implies lesser physical effort from their end. The need to acquire larger spaces for offices and employ more staff to deal with the customers is significantly reduced making it financially beneficial to the banks. This means that a portion of savings accrued can be passed on to the customers in terms of higher rates on deposits and lower rates on loans. To encourage E- banking most banks offer minimum or no deposit accounts for online banking and lower penalties on early withdrawal of Fixed Deposits [Ozuru, H. N; Chikwe, J. E and IdikaUduma ,2010].

Services: Technology has made it extremely convenient for the bank as well as the customer to access to a host of wonderful services by simply logging in. These services include financial planning capabilities, functional budgeting and forecasting tools, loan calculators, investment analysis tools and equity trading platforms which are available as simple applications on the bank's website. Additionally most banks also provide the facility of online tax forms and tax preparation.

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 [Chaffey, D; Mayer, R; Johnson, K and Ellis Chadwick, F, 2006]. Another important benefit of the concept of E- banking is that it is good for the environment as it cuts down the usage of paper, reduces pollution as people do not have to travel physically and also does not add emissions.

The other main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main advantages of e-banking are the following (Bank Away, 2001; Gurău, 2002):

- Reduced costs in accessing and using the banking services.

- Increased comfort and timesaving - transactions can be made 24 hours a day, without requiring the physical interaction with the bank.
- 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.
- 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. For example, it is possible to manage company's short-term cash via Internet banks in Estonia (investments in over-night, short- and long term deposits, in commercial papers, in bonds and equities, in money market funds).
- Reduced costs- This is in terms of the cost of availing and using the various banking products and services.
- Speed - The response of the medium is very fast; therefore customers can actually wait till the last minute before concluding a fund transfer. Funds management- Customers can download their history of different accounts and do a "what-if" analysis on their own PC before affecting any transaction on the web. This will lead to better funds management.

2.4. Challenges in E-Banking

However the current trend of exclusively using the online mode to make all kinds of transactions has a few pitfalls which may prove costly in the long run unless guarded against from the beginning.

Relationships: Online transactions take a toll on the relationship with the banker which the traditional visit to the branch office used to foster. Personal relationship with the staff at the banks comes handy when requesting for faster loan approval or a special service which may not be available to the public. The manager has many discretionary powers such as waiving of penal interest or service fees which were often taken advantage of by better acquaintance with the staff. Additionally personal contact also meant that the banker would provide essential financial advice and insights which are beneficial to the customer [Fisher – French, 2007].

Complex Transactions: There are many complex transactions which cannot be sorted out unless there is a face to face discussion with the manager that is not possible through internet banking. Solving specific issues and complaints requires physical visit to the bank and cannot be achieved through the internet. Online communication is neither clear nor pin pointed to help resolve many complex service issues. Certain services such as the notarization and bank signature guarantee cannot be accomplished online [Larpsiri , R and M Speece,2004].

Security: This is the biggest pitfall of the internet banking scheme which needs to be guarded against by the common customer. Despite the host of sophisticated encryption software is designed to protect your account there is always a scope of hacking by smart elements in the cyber world. Hacker attacks, phishing, malware and other unauthorized activity are not uncommon on the net. Identity theft is yet another area of grave concern for those who rely exclusively on internet banking. Most banks have made it mandatory to display scanned copies of cleared checks online to prevent identity theft. It is essential to check bank's security policies and protections while opening an account and commencing the usage of online banking facilities [Larpsiri, R and M Speece, 2004].

E-Banking is definitely a significant move in the right direction as far as the convenience of the customer as well as the banker are concerned but it must be applied with adequate precaution to avoid falling prey to unscrupulous elements poaching the internet. The ability to adopt global technology to local requirements: An adequate level of infrastructure and human capacity building are required before developing countries can adopt the global technology for their local requirements. For example, the review of the migration plan of Society for Worldwide Interbank Financial Telecommunications (SWIFT) to the internet shows that to date full migration has not occurred in many developing countries due to the lack of adequate infrastructure, working capital, and required technical expertise. Broadly accepted e-payment systems are another such example. Many corporate and consumers in some developing countries either do not trust or do not have access to the necessary infrastructure to be able to process e-payments.

- The ability to strengthen public support for e-finance: Historically, most e-finance initiatives in developing countries have been the result of cooperative efforts

between the private and public sectors. If the public sector does not have the necessary means to implement the projects it is essential that cooperative efforts between public and private sectors, along with the multilateral agencies like the World Bank, be developed to facilitate public support for e finance related initiatives.

- Confidentiality, integrity and authentication are very important features of the banking sector and were very successfully managed the world over in pre-internet times. Communication across an open and thus insecure channel such as the internet might not be the best base for bank-client relations as trust might partially be lost [Grethen 2001 cited in Chavan, Jayshree, 2013].
- E-Banking has created many new challenges for bank management and regulatory and supervisory authorities. They originate not just from increased potential for cross border transactions but also for domestic transactions based on technology applications which raise many security related issues [Hawkins 2002 cited in Chavan, Jayshree, 2013]. The Basel Committee on Banking Supervision's Electronic Banking Group (EBG) (2001) has defined risk management principles for electronic banking. They primarily focus on how to extend, adapt, and tailor the existing risk-management framework to the electronic banking setting. It is necessary to know whether the efforts undertaken by the RBI are sufficient to ensure a reasonable level of security.
- Fifth, there are some serious implications of international e-banking. It is a common argument that low transaction costs potentially make it much easier to conduct cross-border banking electronically. For many banks, cross border operations offer an opportunity to reap economies of scale. But cross-border finance also needs a higher degree of cross-border supervision. Such cooperation may need to extend to similar supervisory rules and disclosure requirements (for efficiency and to avoid regulatory arbitrage) and some harmonizing of legal, accounting and taxation arrangements. The real question here is whether India at the present juncture is adequately prepared to face the consequences of cross border e-banking? [Sushant Kumar 2001 cited in Chavan, Jayshree, 2013].

- The flip side of this technological boom is that electronic banking is not only susceptible to, but may exacerbate, some of the same risks—particularly governance, legal, operational, and reputational—inherent in traditional banking. In addition, it poses new challenges. In response, many national regulators have already modified their regulations to achieve their main objectives: ensuring the safety and soundness of the domestic banking system, promoting market discipline, and protecting customer rights and the public trust in the banking system [Jayshree Chavan, 2013].
- New methods for conducting transactions, new instruments, and new service providers will require legal definition, recognition, and permission. For example, it will be essential to define an electronic signature and give it the same legal status as the handwritten signature. Existing legal definitions and permissions—such as the legal definition of a bank and the concept of a national border—will also need to be rethought.

2.5. Conceptual Framework

The basic objective of this study is to assess e-banking service quality. The research conceptual framework and concepts of Customer Satisfaction are given below in details. The independent variables taken into account in the explanation of service quality are the five identified characteristics also depicted here under

2.5.1. Concepts of Customer Satisfaction

Kotler and Armstrong (1996) define customer satisfaction as “the person’s state of mind resulting from comparing a product’s perceived performance against his/her expectations”. Customer satisfaction also refers to customer reaction to the state of fulfillment, and customer judgment of the fulfilled state (Oliver, 1997 as cited in Kim, Park and Jeong, 2004). Accordingly, as service giving organizations are preoccupied with service quality, customer satisfaction can be directly observed from their profitability and sustainability in the business.

Angelova and Zekiri, (2011:233) explain customer satisfaction as the outcome felt by those that have experienced a company’s performance in fulfilling their expectations.

Pine & Gilmore (1998) indicated that customer satisfaction has a positive effect on organization's profitability, loyalty and customer retention. Furthermore, they asserted that leading edge companies will find that the next competitive background lies in producing experiences. It is no longer the service alone that creates customer satisfaction it is rather the experience connected with the service. The idea here is to engage customers in a way that creates a memorable event. While prior economic offerings such as products and services are external to buyers, experiences are inherently personal, embedded in the customer's emotional, physical, intellectual, or even spiritual levels.

Therefore, the concept of customer satisfaction is related to the concepts of value, quality, complaining behaviour and loyalty of customers to an organization's products/services. It is also a measure of how products and services supplied by a company meet customer expectation. Considering the availability alternatives and growing competition among banks, there is a need to know how their products and services are perceived and rated vis-a-vis others in the industry. Cengiz, (2010) noted that assessing the performance of an organization's products or services on the basis of how they are perceived by the customer is critical, i.e. whether perceptions are misplaced, lag behind current expectation or are very accurate, because understanding these perceptions provide a critical understanding of future customer behaviour. This shows that customer satisfaction is crucial for the success of any business. The question is then what factors contribute towards customer satisfaction.

2.5.2. Factors Affecting Customer Satisfaction

There are different factors that affect the perception of customers towards an organization. These factors are mainly attributed to either organization philosophy, characteristics of employee or products and services offered by a firm. The following section attempts to associate some of the factors that have a direct or indirect impact on customer satisfaction.

Marketing Philosophy: The marketing philosophy that a company adopts has important implication on customer satisfaction. The marketing philosophy has evolved overtime from product orientation through product and sales orientation to marketing era,

signifying a shift from product and sales led to customer led (Rahaman, Abdullah & Rahaman, 2011). The difference lies on the way that a company sees customer satisfaction; as a goal or a means for profit. Those companies which emphasize customer satisfaction as a means for profit adopt traditional organizational structure. This structure suggests that activities of a company are designed and flow from top to bottom.

On the other hand, organizations that see customer satisfaction as a goal and a marketing tool invert the above structure and adopt a more customer oriented organizational structure. Under this scenario, activities of a company are tailored to meet the needs and wants of customers. In this case, the structure of the organization gives more emphasis to the forefront employees as they have direct contact to customer and consequently determine the fate of a company.

Service Quality and Service Encounters: The success of service providers depends on the quality of relationship maintained with its customers, which brings customer satisfaction and loyalty, which in turn positively influence organizational outcomes such as performance superiority (Portel & Thanassoulis, 2005), increasing sales profit (Levesque & Dougal, 1996), improving customer relations, enhance corporate image and promote customer loyalty (Newman, 2001; Szymigin & Carrigan, 2001; Caruna, 2002; Ehigie, 2006) cited in Kheng et al (2010). In a competitive environment, where banks are operating, there are nearly homogenous products delivered to customers. This fact usually forces banks to compete through the provision of quality services (Kheng, L., Mahamad, O., Ramayah T. & Mosahab, R. 2010).

Expectation and Perception: Satisfaction can be seen as a person's feeling of pleasure or disappointment resulting from comparing perceived performance with outcome of one's satisfaction. The definition suggests that satisfaction is a function of perceived performance and expectation (Mburu, VanZyl & Cullen, 2013). Customers' expectation is explained as a match or mismatch of expected performance against what they actually experienced. At the time when actual performance (experience) exceeds expected performance, the result is positive and vice-versa. According to Angelova and Zekiri, (2011:239) the extent to which a product or service fulfils customer's desire plays an important role informing feelings of satisfaction because of the impact of confirmation on

satisfaction. Expectation is, therefore, a key factor in determining the level of customer satisfaction.

Perception is another factor that affects satisfaction positively or negatively. Angelova and Zekiri, (2011:240) define perception as “an opinion about something that is observed, and it varies from customer to customer, as every customer has different beliefs towards certain services and products that play an important role in determining customer satisfaction”. Kotler and Armstrong, (1996) stated that customer satisfaction is the result of comparing perceived performance or outcome against his/her expectations. However, perception is subjective in that it can give insight for service providing organizations to develop and design their marketing strategy.

Loyalty: The concept of customer loyalty is understood as a combination of customers’ favorable attitude and the behavior of repurchase (Kim, Park & Jeong, 2004). According to Kheng et al (2010), loyalty is developed over a period of time through a consistent service encounter. Loyalty refers to the extent to which a customer exhibits repeated purchase behavior, possessing a positive attitudinal disposition toward the service provider, and considers this provider when the need for this service arises. Service quality and customer satisfaction are often said to have relation with customer loyalty through repurchase intentions (Durvasula et al, 2005).

However, some researchers contended that while customer satisfaction positively enhances customer loyalty (Cohen, Gan, Yong & Choong, 2006), it is not always a sufficient condition, and, in some cases, fails to produce the expected effect. Hence, they suggest analyzing other potential factors such as switching barrier (Colgate & Lang, 2001; Jones et al., 2002; Lee & Cunningham, 2001) cited in Kim et al (2004). Their study confirmed that switching barrier as directly affecting customer loyalty, and its influence on customer loyalty through an interaction with customer satisfaction.

2.5.3. Customer Satisfaction Models

Customer satisfaction has been widely studied in multiple areas of marketing (Durvasula S., Lysonski S., & Mehta S., 2005) as it is a driver of success and a reason for companies’ existence. As a result, service giving organizations often tries to maintain their

trustworthiness with their customers via enhancing product and service quality. Several customer satisfaction models have been developed to study customer satisfaction. The essences of two of these models are discussed below.

2.5.3.1. American Customer Satisfaction Index

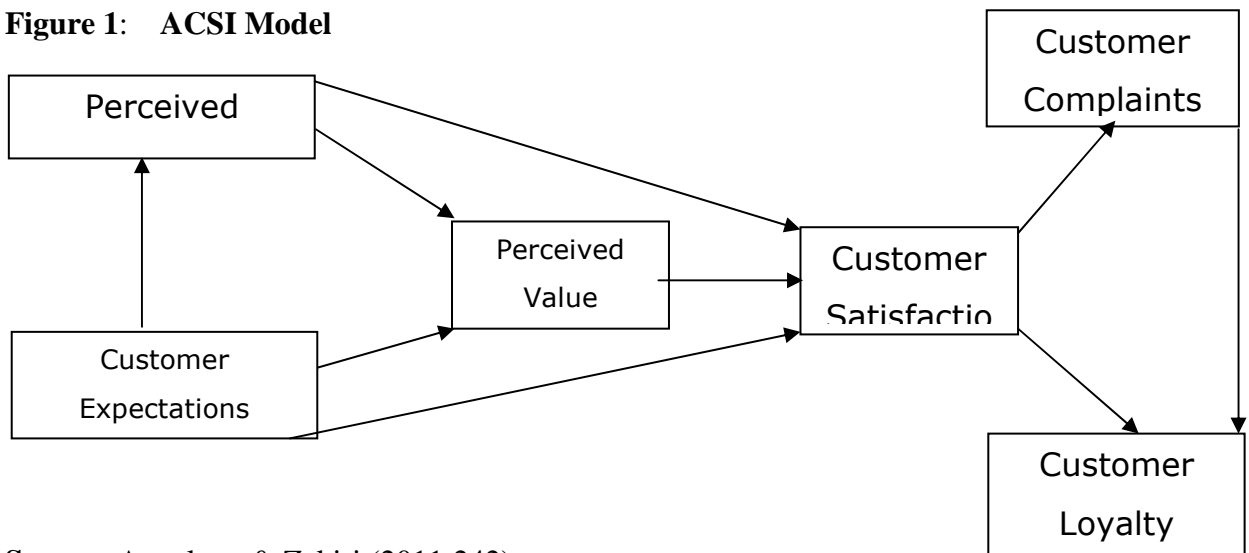
The American Customer Satisfaction Index (ACSI) is a model used as the national indicator of customer evaluations of the quality of goods and services available to the USA. (Angelova & Zekiri, 2011:241). The index shows that overall customer satisfaction has three antecedents: Perceived quality, perceived value, and customer expectations.

Perceived Quality refers to customers' evaluation of recent consumption experience, and is expected to have direct and positive effect on overall customer satisfaction.

Perceived Value is the perceived level of product quality relative to the price paid. Although price is often very important to customer's first purchase, it usually has somewhat smaller impact on the satisfaction of repeat purchases.

Customer Expectation measures customer's anticipation of quality of company's products or services. Expectations represent both prior consumption experience, which includes some experiential information like advertising and word-of-mouth, and a forecast of the company's ability to deliver quality in the future.

Figure 1: ACSI Model



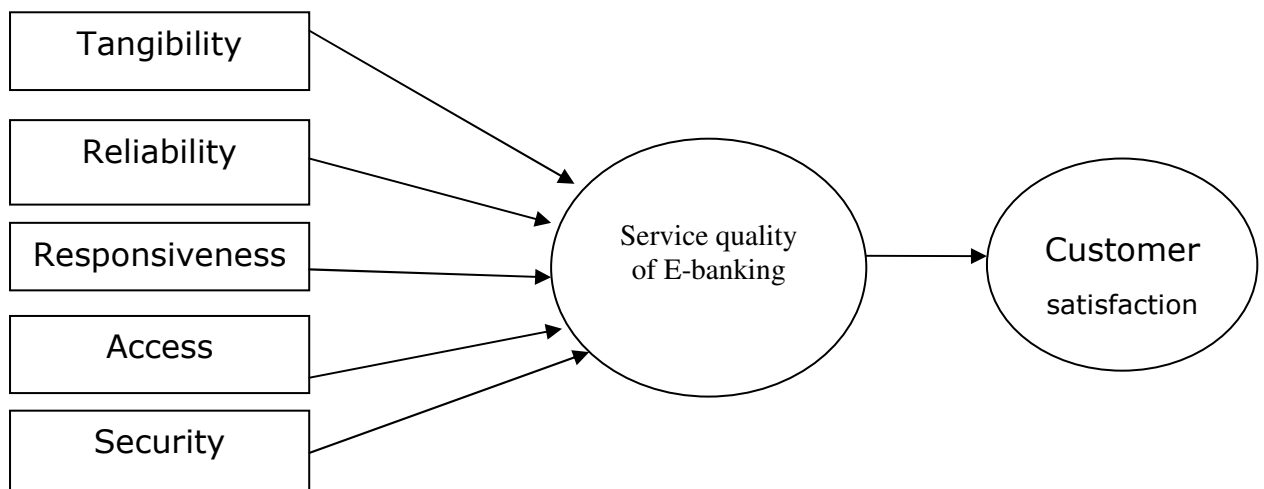
Source: Angelova & Zekiri (2011:242)

This model is a cause-and-effect model with indices for drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction (ACSI) in the centre, and outcomes of satisfaction on the right side (customer complaints and customer loyalty). This model is helpful to identify indicators of customer satisfaction in all sectors of an economy and is not specifically designed to service sector.

2.5.3.2. The SERVEQUAL Model

This model has five constructs that are antecedents to service quality, which is the basis for customer satisfaction. It measures the gap between customers' expectation and perceived service quality i.e. the satisfaction experienced. The overall essence of the model is depicted graphically below.

Figure 2: SERVEQUAL Model



Source: Rahaman, Abdullah & Rahaman A. (2011), based on Ravichandran k, 2010

On the basis of the above diagram, individual variables of the five service quality dimensions of the SERVEQUAL model can be defined as stated below (Parasuraman & Zeithaml, 1988).

- Tangibles: Physical facilities, equipment and appearance of personnel.
- Reliability: Ability to perform the promised service dependably and accurately.
- Responsiveness: Willingness to help customers and provide prompt service.
- Security: It is freedom from danger, risk or doubt. It entails physical safety, financial security and confidentiality of customer's personal and financial

information. It is found that secured and safe environment is preferred by clients (Flavian et al. 2004; and Parasuraman et al. 1985).

- Access: It is described as how conveniently a customer can get access to a bank service. It means approachability and ease of contact. Greater accessibility increases customers' satisfaction (Flavian et al. 2004).

Despite its popularity, the SERVEQUAL model had received several criticisms regarding its universal applicability and operational difficulty it poses while calculating the difference between expectation and perceptions (Siddiki, 2011). However, it remains one of the widely used models to measure service quality. This study, therefore, adapts the SERVEQUAL model in determining the customer satisfaction level of E- banking service quality.

This model is selected over ACSI in that all features and constructs of the ACSI model are incorporated in the SERVEQUAL model. It expresses customer satisfaction as a function of service quality, which in turn is a function of perceived performance and expectation of customers. Moreover, SERVEQUAL is specifically designed for service sectors, which makes it more preferable for this study. Then, the researcher hypothesize that all those attributes have a positive impact on the perceived quality of the service.

CHAPTER THREE: Methodology of the Study

3.1. Research Method

The researcher prefers to use a qualitative and quantitative study approach. In the qualitative research approach, knowledge is constructed inductively. The main emphasis is placed on understanding of the social world through the examination of the interpretation of that world by its participants in a constructivist perspective. A qualitative finding mainly involves verbal statements and emerging open-ended data in constructing meanings and knowledge. It involves participating in or immersing oneself in the social world where people and their institutions are located and interact with each other, and examining the way they interact together, the meaning they give to their interactions and the world they are living in.

3.2. Research Instrument (Data Collection Instrument)

The main research instrument used for this study was the questionnaire. The questionnaire used for the study is divided broadly into two sections. These are the demographic section and the characteristics of service quality section. Under the demographic section, variables such as age of the respondent, gender, marital status, and highest educational level were asked. In the second section, a hypothetical statement on service quality was given. The sections were also grouped into the various dimensions of service quality outlined in the conceptual framework. The sections contain reliability, empathy, assurance, tangibles, and used a five-point Likert Scale where respondents were asked to indicate the extent to which they agree/disagree with various statements. The Five-Point Likert's scale having the ratings of "strongly disagree" (1) and "strongly agree" (5) were used.

3.3. Data Source

The study is mainly based on the primary data source and the secondary also. For general concept development about the short survey in primary sources and questionnaire used for collecting data about e-banking quality service of commercial banks of

Ethiopia. The types of primary data that are used in this research involve both open-ended interview and questionnaire delivered to existing customers of the bank. The interview will be conducted from the branch managers of CBE. The questions in the questionnaires were tested in a pilot test for both validity and reliability. The test was undertaken on 5 managerial and 30 non managerial respondents' and the questionnaire was found to meet the requirements in all cases. The interview is prepared to gather data from the respondents in a detail manner to support the data collected from the questionnaire and also to give respondents freedom in expressing their idea.

3.4. Population, Sampling Method and Sample Size

CBE is a pioneer for the country to introduce the e- banking service. It has currently organized the e-banking service activities from the centre with different technical and administrative divisions. The service is provided to its customers via its branch offices. To this effect the researcher identifies the total population of the study; it includes the literate e-banking service users of the bank, branch and different e-banking division managers under Addis Ababa city Which is categorized into four districts based on their locations as North Addis, south Addis, east Addis and west Addis. The branches under each districts also equipped with necessary facility to deliver e-banking service to the customers of the bank. ATM and POS machines (tools) are installed adequately to serve and introduce their customers. The plan for recruitment of customers is cascaded among branches is based on the number of staffs and customers they have. All branches under their districts' are expected to recruit customers for the e-banking service based on their annual e-banking service users' recruitment plan. Those well established branches are termed as Grade four and Grade three branches and these is done to give due attention to their activities. Moreover, E- Banking is at an evolutionary stage finding person who use such service was quiet difficult. Hence, convenience sampling method was therefore used for data collection. Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient Accessibility and proximity to the researcher .Convenience sampling is very easy to carry out and requires relative little cost and time to carry out.

The research under study is composed of managers, front line officers and users of the E - banking service. To determine the questionnaire respondents, the sampling technique used in this study is convenience sampling; this sampling method is chosen due to its difficulty to find the customers that would select randomly. Purposive sampling also employed to select respondents of the interview which was directed to answer by the management staff of the bank. The total sample of population under study is 265; this number is composed of 265 users of the product and 53 branch managers and Customer Service Managers. Research population and the sample size given in the table below. The sample size determination of the study is made on the assessment E Banking service quality of commercial Bank of Ethiopia. Research population and the sample size given in the table below. The sample size determination of the study is made on the assessment E Banking service quality of commercial Bank of Ethiopia. Total numbers of CBE Active users in Addis Ababa area are 345,614 of which 360 was selected using random sample method which was 13% of the total Active users in Addis Ababa.

Table 1. Sample size determination of e-payment users

	POS Machines distributed	ATM Machines distributed	Active Debit/ATM Card distributed	Internet banking users	Mobile Banking users	Active POS users
Total number of CBE Active users at corporate level	5268	589	463711	10163	298687	5268
Total number of CBE Active users in Addis Ababa area	4349	241	209259	4199	127807	4349
Sample size of e-banking users			81	79	79	79

Source: CBE’s quarter report and E-payment process report

Table 2. Management staff Sample size determination

Districts in Addis Ababa	North Addis district	South Addis district	East Addis district	West Addis district	Total
Number of managers involved from grade four and three branches of each district	15	14	12	12	53
Number of customers involved from each selected grade four and three branch in each district	66	65	67	67	265
Total	81	79	77	79	318

Source: - Own survey, 2016

3.5. Questionnaire Design and Pre-test

The respondents responded to questions under each variable on five point Likert Scale with “Strongly Agree” dictating the highest level of satisfaction, “Strongly Disagree” as the highest level of dissatisfaction. Some demographic questions were also asked for more interpretation of responses. The developed questionnaire will be pre-tested with a few customers to ensure the quality of the questions.

3.6. Data Analysis and Interpretation Techniques

The data analyzed using tables, percentages, and graphs. Thus, organized and interpreted so as to recommend action identified and provide the findings. As the study’s type is qualitative, the technique preferred for the data analysis is descriptive data analysis method. This method has been employed to validate one form of data with the other form. The data gathered from the field which through the questionnaires administered were recorded and coded into Statistical Package for Social Science (SPSS) software version 20. In analyzing the data gathered from the field (questionnaire), frequencies,

percent, means, and reliability were primarily calculated using SPSS, and content validity of the questionnaire was established by reviewing existing literature.

3.7. Reliability Analysis (Cronbach's Alpha)

The reliability analysis is used to establish both the consistency and stability of the research instrument. Consistency shows how well the research instrument measures the model and the conceptual framework. Cronbach's alpha is a coefficient that indicates how well the items in a set are positively correlated to one another. A test is considered reliable if the same results are gotten repeatedly. The closer the Cronbach's alpha is to 1, the higher the internal consistency reliability of the research instrument.

3.8. Validity

Validity as used in research refers to the degree to which the outcome of a study accurately reflects the variable which is being measured or which the researcher is attempting to measure. According to Eriksson and Wiedersheim-Paul (1997) validity is defined as: "The ability of a scale or measuring instrument to measure what is intended to be measured". Validity is therefore concerned with the success rate at which the study measure what the research sets out to measure. There are various types of validity use in research studies but for the purpose of this study the face validity was used. This is because the study has been proven through thorough pre-testing, rewording and re-evaluation of the instrument used.

CHAPTER FOUR: RESULTS AND DISCUSSION

To produce this part of the study the researched distributed 360 questionnaires to respondent which include managers of grade 4 and 3 branches, and customer service mangers of grade 3 and 4 in Addis Ababa area. A total of 318 questionnaires were returned back and the remaining 42 questionnaire was not returned .The result of the research described as follows.

4.1 Socio - Demographic Characteristics of Respondents

In this apart of the study the researcher tried to treat some socio demographic characteristics which include sex, age, educational level/qualification and work experience of selected district of commercial banks.

Table 3: Socio Demographic Characteristic of Respondents

No	Item	Response	Frequency	Percent
1	Sex	Male	241	75.8
		Female	77	24.2
		Total	318	100
2	Age	25-35	268	84.3
		36-45	41	12.9
		Above 46	9	2.8
		Total	318	100
3	Educational qualification level/	Diploma	47	14.8
		First degree	231	72.6
		Second degree	40	12.6
		Ph.D	-	-
		Other	-	-
		Total	318	100
4	Work experience	< 1 year	19	6
		1-5 years	159	50
		6-10 years	75	23.6
		11-15 years	33	10.4
		Above 15 years	32	10
		Total	318	100

Table 3. Illustrate that the socio demographic characteristics of respondents. The first item which was included in the questionnaire was sex with two category of male and female. Accordingly, 241 (75.8%) of the respondents were male sex category and 77 (24.2%) of the respondents were female sex category. Thus, from the above information, it is possible to conclude that the majority of the participant of the study was male sex category.

The second item was age with three categories of responses which include age range 25-25, 36-45 and above 46. Accordingly, 268 (84.3%) of the respondents were in the age category of 25-35 years and 41 (12.9%) respondents were in the age category of 36-45 years. Thus, the majority of the participant of the study was in the age category of 25-35 years old.

The third item was educational level/qualification, then 231(72.6. %) of the respondents were in the educational level of first degree, 47(14.8%) of the respondents were at educational level of first diploma, 40(12.6%) of the respondents were at educational level of second degree.

The fourth item was work experience. Regarding to this, 159 (50%) of the respondents were 1-5 years, 75 (23.6%) of the respondents were 6-10 years, 33(10.4%) of the respondents were 11-15 years, 32 (10%) of the respondents were in the categorized in the work experience of above 15 years. From the above information, it is possible to conclude that the majority of the respondents were in work experience category of 1-5 years.

Table 4: Reliability Statistics

Variable	Cronbach's alpha	N of items
Reliability	.770	5
Responsiveness	.692	4
Assurance	.783	4
Empathy	.678	5
Tangibles	.803	4

The producer of this research has designed/ adopted five dimension of E-banking quality service in commercial banks of Ethiopia which includes reliability, responsiveness,

assurance, empathy and tangibles. The reliability test has made using Cronach's alpha coefficient. Against variable to say the data is reliable the calculated Cronach's alpha should ranges 0 and 1. If coefficient is above to .770, the reliability will be the strongest.

Table illustrates that Cronach's alpha result against five variables. The first variable dimension of E-banking quality service which was adopted was reliability. Against reliability Cronach's alpha was .770 with 5 items. This implies that there is reliability.

The second variable/dimension of E-banking quality service was responsiveness. Regarding this the Cronach's alpha was .692. This implies that there is reliability but it is not strong because it is below .770 which is .692.

The third variable/dimension of E-banking quality service was assurance. Regarding this, the Cronach's alpha was .783 which is the data has internal consistency (reliability)

The fourth the variable/ dimension of E-banking quality service was empathy. Regarding this, the Cronach's alpha was .678. This implies the statistics was reliable but not strong.

The fifth variable/dimension of E- banking quality service was tangibles. The calculated Cranach's alpha coefficient was .803 with 4 items. This implies that the data related to tangible was reliable.

Table 5: Respondents Evaluation/Comment on Service Quality of E-Banking

Item	Response	No.	Percent
How do you evaluate/ comment service quality of E-banking	Excellent	135	42.5
	Very good	118	37.1
	Good	50	15.7
	Fair	7	2.2
	Poor	8	2.5
	Total	318	100

Table 5 deals about the respondents comment or evaluation of service quality of E-banking. Concerning to this, 135(42.5%) of the respondents were responded that the service quality of E-banking was excellent, 118(37.1%) of the respondents were responded that the service quality of E-banking was very good, and 50(15.7%) of the respondents were responded that service quality of E-banking was good. From the above information, it is possible to conclude that the above information it is possible to conclude that the service quality of E-banking was excellent.

Table 6: Respondents Trust in E-banking Service

Item	Response	Frequency	Percent
Do you trust in E-banking service?	Yes	276	86.8
	No	23	7.2
	I don't know	19	6.0
	Total	318	100

Table 6 indicates that respondents trust in E-banking service. Regarding trust in E-banking service; 276(86.8%) of the respondents reported that as they have trust in E-banking service and 23(7.2%) of the respondent reported that as they have no trust in E-banking services. Thus, from the above information, it is possible to conclude that the respondents confirmed the presence of trust in E-banking services.

Table 7: Respondents Report on E-Banking with CBE is Reliable

Item	Response	Frequency	Percent
Do you think E-banking with CBE is reliable?	Yes	258	81.1
	No	28	8.8
	I don't know	32	10.1
	Total	318	100

Table 7 illustrated that E-banking reliability related with CBE. Regarding to this; 258 (81.1%) of the respondents were reported that E-banking was reliable with CBE and 32 (10.1%) of them responded I don't know, 28 (8.8%) of then was no. From the above information it is possible to conclude that E-banking was reliable with CBE.

Table 8: respondents Report on Contact on Customer Satisfaction

Item	Response	Frequency	Percent
Do you think E-banking on customer satisfaction?	Yes	263	83.2
	No	23	7.3
	I don't know	30	9.5
	Total	316	100

Table 8 depicted that 263(83.2%) of the respondents reported that E-banking has impact on customer satisfaction, 30(9.5%) of them said I don't know and 23(7.3%) of the said no. Thus, it is possible to conclude from the above information E-banking has impact on customer satisfaction.

4.2. Dimension of Service Quality of E-Banking

Under this topic the researcher tried to deals about service quality of e- banking in the context of five dimensions which was designed or adapted from literature. Each dimension has their own hypothetical statements which help to assess the situation of e-banking quality service.

4.2.1. Reliability: Dimension of E-banking Quality Service

Reliability was dimension of quality service which was adopted to assess the quality service of E-banking in commercial bank of Ethiopia. Regarding to this, hypothesis was designed and statements were included under it, which to describe the hypothesis.

Table 9: Respondents Report on Reliability of E-Banking Quality Service

No	E-banking quality	Chi-square (X²)	Degree of freedom	P-value
1	E- banking provides services as promised	66.746	4	.000
2	E-banking dependable handling customers service problem	68.833	4	.000
3	E-banking performs services right the first time	83.805	4	.000
4	E-banking provides services at the promised	66.788	4	.000
5	E-banking maintains error free records	39.439	4	.000

Table 9 illustrated the statement designed/ adopted to describe reliability of E-banking quality service

The hypothesis (Ho). There is a positive effect of reliability on service quality of e-banking

Statement 1: E-banking provides services as promised. Regarding to this statement the calculated chi-square was 66.746 at 4 degree of freedom. Additionally, the calculated statistical significance value which was associated with the data was.000 which was less than the usual statistical rejection value 0.05 ($P < 0.05$). This implies that the statement was failed to be accepted.

Statement 2: E-banking dependable handling customers service problems. Against this statement, the calculated chi-square value was 83.805 at 4 degrees of freedom. Furthermore, the calculated statistical significance value.000 which was less than the usual statistical rejection significance value 0.05 ($P < 0.05$). This implies the statement was failed to be accepted.

Statement 3: E-banking performs services right the first time. Concerning this issue, the calculated chi-square value was 83.805 at 4 degrees of freedom. Moreover, the calculated statistical significance value .000 which was less than usual statistical rejection threshold valve 0.05 ($P < 0.05$). This implies that statement was failed to be accepted.

Statement 4: E-banking provides services of promised time regarding to this, the calculated chi-square value was 66.788 at 4 degrees of freedom, furthermore the calculated statistical significance value 0.05 ($P < 0.05$). This implies that the statement was failed to be accepted.

Statement 5: E-banking maintains error free records. Regarding to this, the calculated chi-square was 39.439 at 4 degrees of freedom. Furthermore, the calculated statistical significance value was 0.000 which was less than the usual statistical rejection value 0.05($P < 0.05$). This implies that the statement failed to be accepted.

4.2.2. Dimension of Responsiveness

To assess the responsiveness of quality service of E-banking was one dimension on which was assessed. To this hypothesis was designed which is given as follows and statement was included

Hypothesis (HO): There is a positive impact of responsiveness on service quality of e-banking.

Table 10: Respondents Report on Responsiveness on Service Quality of E-Banking

No	Statement	Chi-square (χ^2)	Degree of freedom	P-value
1	E-banking keeps customers informed about when a service is performed	154.955	4	.000
2	E-banking prompts service to customers	133.542	4	.000
3	E-banking has flexibility to help customers	51.515	4	.000
4	E-banking has readiness to respond to customers requests	100.797	4	.000

Table 10 illustrated that the responsiveness dimension of quality service of E-banking in commercial banks of Ethiopia. Responsiveness hypothetical student was tried to be described as follows.

Statement 1: E-banking keeps customer informed about when a service is performed. The calculated chi-square value was 154.955 at 4 degrees of freedom additionally, the calculated statistical significance value was 000 which was less than the usual statically rejection value 0.05 ($P < 0.05$). This implies that E-banking keeps customer informed about a service is not performed.

Statement 2: E –banking promotes service to customer regarding to this hypothetical statement, the calculated chi-square value was 133.542 at 4 degrees of freedom. Additionally, the calculated statistical significance value .000 which was less than the usual statistical rejection value 0.05 ($P < 0.05$). This implies the hypothetical statement failed to be accepted.

Statement 3: E-banking has flexibility to help customers. Regarding to this hypothetical statement, the calculated chi-square value was 51.515 at 4 degrees of freedom. Furthermore, the calendared statistical significance value. 000 which was less than the usual statistical rejection significance value 0.05 (P<0.05). This implies that the statement was failed to be accepted.

Statement 4: banking has readiness to respond to customers requests. Additionally, the calculated chi-square value was 100.797 at degrees of freedom. Furthermore, the calculated statistical significance value .000 which was less than the usual statistical significance rejection value 0.05(P<0.05). This implies that the statement was failed to be accepted.

Finally the hypothesis: There is a positive impact of reliability on service quality of E-banking was failed to be accepted according to the give statement that described above.

4.2.3. Assurance: Dimension of Quality Service of E- banking

To describe and assess the dimension of assurance of quality service of E-banking five hypothetical statements was designed and analysis and interpretation given as follows:

Hypothesis (Ho). There is a positive impact of assurance on service quality of E-banking

Table 11: Respondents Report on Assurance on Service Quality of E-Banking

No	Statement	Chi-square	Degree of freedom	P-value
1	E-banking helps employees and instill confidence in customers	152.374	4	.000
2	E- banking helps customer feel safe in their transactions	94.305	4	.000
3	E- Banking helps employees who are consistently coetaneous	71.863	4	.000
4	E- banking help employees who have the knowledge to answer customer questions	79.344	4	.000

Table 11 illustrated that respondents report on assurance on service quality of E-banking. To assess assurance four hypothetical statements was designed and analysis was given as follows.

Statement 1: E-banking helps employees and instills confidence in customers. Regarding the hypothetical statement, the calculated chi-square was 152.374 at 4 degrees of freedom. Additionally, the calculated statistical significance value. 000 which was less than the usual statistical significance rejection value 0.05 ($P < 0.05$). This implies that the hypothetical statement failed to be accepted.

Statement 2: e-banking helps customers' free safe in their transactions. Regarding the hypothetic statement the calculated chi-square was 94.305 at 4 degrees of freedom. Additionally, the calculated statistical significance value.000 which was less than the usual statistical significance rejection value 0.05 ($P < 0.05$). This implies that the hypothetical statement was failed to be accepted.

Statement 3: E-banking helps employees who are consistently courteous. Regarding this hypothetical statement, the calculated chi-square was 71.863 at 4 degrees of freedom. Additionally, the calculated the statistical significance valve was .000, which was less than the usual statistical significance rejection value 0.05($P < 0.05$). This implies that the hypothetical statement was failed to be accepted.

Finally, the hypothesis was failed to be accepted i.e. there is no positive impact of empathy on service quality of e-banking.

4.2.4. Empathy: Dimension of Quality Service of E- banking

To describe dimension of empathy of quality services five hypothetical statement was designed with one major hypothesis.

Hypothesis (Ho): There is a positive impact of empathy on service quality of E-banking.

Table 12: Respondents Report on Empathy of Service Quality of E-banking

No	Statement	Chi-square (χ^2)	Degree of freedom	P-value
1	E-banking gives customer individual attention	131.122	4	.000
2	E-banking helps employees who deal with customers in caring fashion	86.748	4	.000
3	E-banking helps to have the customers best interest at heart	92.615	4	.000
4	E-banking employees understand the needs of their customers	114.400	4	.000

Table 12 Respondents report on empathy of quality service of E-banking with its statement that was designed to describe empathy.

Statement 1: E-banking gives customers individual attention. Concerning this hypothetical statement the calculated chi-square was 131.122 at 4 degrees of freedom. Calculated statistical significance value was .000 which was less than the usual statistical significance 0.05 ($P < 0.05$). This implies the statement failed to be accepted.

Statement 2: E-banking helps employees who deal with customers in caring fashion. Chi-square value was 86.748 at 4 degrees of freedom P. value was .000 which was less than 0.05. This implies the hypothetical statement failed to be accepted.

Statement 3: E-banking helps to have the customers' best interest at heart. Regarding to this, chi-square value was 92.615 at 4 degrees of freedom. P-value was .000 which was less than 0.05. This implies that the hypothetical statement failed to be accepted.

Statement 4: E-banking employees who understand the needs of their customers. Regarding to this chi-square value was 114.400 at 4 degrees of freedom and P-value was .000 which was less than 0.05 ($P < 0.05$). This implies that the statement was failed to be accepted.

Finally, the null hypothesis” there is a positive impact of empathy on service quality of E-banking was failed to be accepted and alternative hypothesis was accepted. This implies that there is no a positive impact of empathy on service quality of E-banking.

4.2.5. Tangibles: Dimension of Quality service of E- banking

To describe dimension of Tangibles of quality service five hypothetical statements was designed with major hypothesis.

Hypothesis (Ho): There is a positive impact of tangibility on quality service of E-banking

Table13: Respondents report on Tangibles of Quality service of E- banking

No	Statement	Chi-square	Degree freedom	P-value
1	E- banking is modern equipment	116.698	4	.000
2	E- banking is visually appealing	98.403	4	.000
3	E-banking employs have neat professional appearance	57.313	4	.000
4	E- banking is usually appealing materials associated with service	88.326	4	.000

Table 13 showed that respondents report on tangible

Statement 1: E-banking is modern equipment chi-square value was 116.698 at 4 degrees of freedom P. value was 0.000 which was less than 0.05 ($P < 0.05$). This implies that the statement was failed.

Statement 2: E-banking visually appealing facilities. Concerning this hypothetical statement, chi-square value 98.403 at 4 degrees of freedom the P-value was .000 which is less than 0.05. This implies that the statement was failed to be accepted.

Statement 3: E-banking is usually appealing facilities regarding to this, the chi square was 57.313 at 4 degrees of freedom. The P-value was 0.000 which was less than 0.05. This implies that statement failed to be accepted.

Statement 4: E-banking is usually appealing materials associated with the service. Concerning this, Chi-square value was 88.326 at 4 degree of freedom. P-Value was .000 which was less than 0.05. This implies that the statement was failed to be accepted.

Finally, the null thesis, There is a positive of E-banking was failed to be accepted and the alternative hypothesis there is no a positive impact of tangible on quality service of E-banking.

Table 14: Correlation /association/ between E-banking quality service and Hypothetical statement reliabilities

Control Variables	Statements	Statistical test	Statements				
			E- banking provides services as promised	E- banking dependable handling customer's service problems	E-banking performs services right the first time	E- banking provides services at the promised time	E-banking maintains error free records
Service Quality of E- Banking in the context of reliability	E- banking provides services as promised	Correlation	1.000				
		Significance (p-value)	.				
		Degree of freedom	0				
	E- banking dependable handling customer's service problems	Correlation	.345	1.000			
		Significance (p-value)	.000	.			
		Degree of freedom	127	0			
	E-banking performs services right the first time	Correlation	.369	.308	1.000		
		Significance (p-value)	.000	.000	.		
		Degree of freedom	127	127	0		
	E- banking provides services at the promised time	Correlation	.417	.435	.540	1.000	
		Significance (p-value)	.000	.000	.000	.	
		Degree of freedom	127	127	127	0	
	E-banking maintains error free records	Correlation	.416	.350	.376	.449	1.000
		Significance (p-value))	.000	.000	.000	.000	.
		Degree of freedom	127	127	127	127	0

Table 14 depicted that correlation /association/ between e-banking quality service and hypothetical statement of reliability. The correlation value ranges between -1 and 1.in the above table it is clearly observed the coefficient result between .308 and 1. This implies that there is positive correlation between the statement and reliability dimension of quality service of e-banking in selected district of commercial bank of Ethiopia.

Table 15: Correlation /association/ between e-banking quality service and hypothetical statement of responsiveness

Control Variables	statements	Statistical test	Statements			
			E- banking keeps customers informed about when a service is performed	E- banking prompts service to customer	E-banking has flexibility to help- customers	E- banking has readiness to respond to customers requests
Service Quality of E- Banking in context of responsiveness	E- banking keeps customers informed about when a service is performed	Correlation	1.000			
		Significance (p-value)	.			
		Degree of freedom	0			
	E- banking prompts service to customer	Correlation	.370	1.000		
		Significance (p-value)	.000	.		
		Degree of freedom	128	0		
	E-Banking has flexibility to help- customers	Correlation	.291	.402	1.000	
		Significance (p-value)	.001	.000	.	
		Degree of freedom	128	128	0	
	E- banking has readiness to respond to customers requests	Correlation	.334	.310	.440	1.000
		Significance (p-value)	.000	.000	.000	.
		Degree of freedom	128	128	128	0

Table 15 depicted that correlation /association/ between e-banking quality service and hypothetical statement of responsiveness. The correlation value ranges between -1 and 1. In the above table it is clearly observed the coefficient result between .310 and 1. This implies that there is positive correlation between the statement and responsiveness dimension of quality service of e-banking in selected district of commercial bank of Ethiopia.

Table 16: Correlation /association/ between e-banking quality service and hypothetical statement of assurance

Control Variables	Statements	Statistical test	Statements			
			E- banking helps employees and install confidence in customers	E-banking helps customers feel safe in their transactions	E-banking helps employees who are consistently courteous	E- banking helps employees who have the knowledge to answer customer questions
service Quality of E-Banking in context of assurance	E- banking helps employees and install confidence in customers	Correlation	1.000			
		Significance (P-value)	.			
		Degree of freedom	0			
	E-banking helps customers feel safe in their transactions	Correlation	.535	1.000		
		Significance (p-value)	.000	.		
		Degree of freedom	128	0		
	E-banking helps employees who are consistently courteous	Correlation	.356	.540	1.000	
		Significance (p-value)	.000	.000	.	
		Degree of freedom	128	128	0	
	E- banking helps employees who have the knowledge to answer customer questions	Correlation	.334	.484	.556	1.000
		Significance (p-value)	.000	.000	.000	.
		Degree of freedom	128	128	128	0

Table 16 depicted that correlation /association/ between e-banking quality service and hypothetical statement of assurance. The correlation value ranges between -1 and 1. In the above table it is clearly observed the coefficient result between .334 and 1. This implies that there is positive correlation between the statement and assurance dimension of quality service of e-banking in selected district of commercial bank of Ethiopia

Table 17: Correlation /association/ between e-banking quality service and hypothetical statement of empathy

Control Variables	Statements	Statistical test	Statements				
			E-banking gives customers individual attention	E-banking helps employees who deal with customers in a caring fashion	E- banking helps to have the customer's best interest at heart	E- banking employees who understand the needs of their customers	E- banking has convenient business hours
service Quality of E- Banking in the context of empathy	E-banking gives customers individual attention	Correlation	1.000				
		Significance(P-value)	.				
		Degree of freedom	0				
	E-banking helps employees who deal with customers in a caring fashion	Correlation	.343	1.000			
		Significance(P-value)	.000	.			
		Degree of freedom	126	0			
	E- banking helps to have the customer's best interest at heart	Correlation	.196	.277	1.000		
		Significance(P-value)	.027	.002	.		
		Degree of freedom	126	126	0		
	E- banking employees who understand the needs of their customers	Correlation	.156	.247	.544	1.000	
		Significance (P-value)	.078	.005	.000	.	
		Degree of freedom	126	126	126	0	
E- banking has convenient business hours	Correlation	.187	.439	.378	.328	1.000	
	Significance (P-value)	.035	.000	.000	.000	.	
	Degree of freedom	126	126	126	126	0	

Table 17 depicted that correlation /association/ between e-banking quality service and hypothetical statement of empathy. The correlation value ranges between -1 and 1. In the above table it is clearly observed the coefficient result between .027 and 1. This implies that there is positive correlation between the statement and empathy dimension of quality service of e-banking in selected district of commercial bank of Ethiopia

Table 18: Correlation /association/ between e-banking quality service and hypothetical statement of tangibles

Control Variables	Statements	Statistical test	statements			
			E-banking is modern equipment	E-banking is visually appealing facilities	E- banking employees who have a neat ,professional appearance	E- banking is visually appealing material associated with service
service Quality of E-Banking in the context of tangibles	E-banking is modern equipment	Correlation	1.000			
		Significance (P-value)	.			
		Degree of freedom	0			
	E-banking is visually appealing facilities	Correlation	.534	1.000		
		Significance (P-value)	.000	.		
		Degree of freedom	125	0		
	E- banking employees who have a neat ,professional appearance	Correlation	.452	.526	1.000	
		Significance (P-value)	.000	.000	.	
		Degree of freedom	125	125	0	
	E- banking is visually appealing material associated with service	Correlation	.429	.587	.517	1.000
		Significance (P-value)	.000	.000	.000	.
		Degree of freedom	125	125	125	0

Table 18 depicted that correlation /association/ between e-banking quality service and hypothetical statement of tangible. The correlation value ranges between -1 and 1. In the above table it is clearly observed the coefficient result between .429 and 1. This implies that there is positive correlation between the statement and tangible dimension of quality service of e-banking in selected district of commercial bank of Ethiopia.

4.3. Interview Report

The main objective of interviewing this group was to discover Assessment of E- Banking Service Quality on Customer Satisfaction in Commercial Bank of Ethiopia and its responsibility on the success of CBE. Thirty (30) Managers working in Grade four and three Branches and E-payment subdivision at head office were interviewed seven questions.

All of the respondents contacted had first degree and above. More than Seventy percent (70%) of the managers who were interviewed had been in their present Office and more than ten (10) years experiences. The remaining (30%) percent had been in their current organization for less than 10 years. Although they had been in their current position for less than ten years, their understanding about the E- Banking Service Quality and organizational success is significantly useful because they deal with the issue under study in their day-to-day activities.

Based on questionnaire provided and interview conducted with CBE managers' Coded, structured questionnaire was used to collect data. The interview was made by group member specifically by one of the member working in CBE branches. In this regard, the formulation of 7 question is based on the assumption that respondent would give the response and the interviewers within a maximum of one hour.

The questionnaire has been divided into two parts.

Part A: It includes the demographic background of respondent which gives general Information about the respondent such as gender, age, education and occupation.

Part B: It includes question regarding customers’ awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality. It also contains questions to get the respondents view on effectiveness of services, timeliness, reliability and cost of services.

Although CBE provides various services to the public but here the focus has been given to e- banking services quality that provide service to the public at large. The researcher found that all respondents know about E-banking service quality on customer satisfaction.

Table 19. Managers (Employees) knowing about E-banking service quality

Number of respondents	Know about E-banking service quality	Percent	Don’t know about E-banking service quality	percent
30	30	100	-	0

The table represents that 100% of respondents know about e-banking service quality.

Regarding the questions that customers’ awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality and enhance effectiveness and efficiency of the service provision? Most respondents respond yes it does. However, few of the respondents didn’t agree with the question due to poor implementation, trust, lack of awareness, security, etc.

Table 20. Customers’ awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality and enhance effectiveness and efficiency of the service provision?

Number of respondents	Customers’ awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality and enhance effectiveness and efficiency of the service provision?	Percent	Don’t awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality and enhance effectiveness and efficiency of the service provision?	percent
30	20	67	10	33

The table represent that only 67% of the respondents respond that Customers’ awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality and enhance effectiveness and efficiency service. The other responds it doesn’t because they think that don’t have awareness, trust, and factors determine on customer satisfaction on their understanding about e-banking service quality.

With regard to the question on customer compliance about the e-banking service quality on customer satisfaction in Commercial Bank of Ethiopia, the researcher found common responses involve around with issues here under:

- Lack of information
- Service delivery time
- Attitudinal problem and
- Inefficient service

4.4. Findings and Results of Interview:

According to the interview analysis majority of the respondents positively responded to the questions. However, some of the respondents as well indicate different challenges and

issues related with the effective implementation of e-banking service quality on customer satisfaction in Commercial Bank of Ethiopia. The researcher summarized findings with the following bullet points:-

- 67 % of the respondents believe that the implementation of e-banking service quality on customer satisfaction and enhanced efficiency and effectiveness of the service delivery.
- However, the remaining 33% didn't expect e-banking service quality on customer satisfaction ensure accountability, promote effectiveness and efficiency and properly implemented.

Finally the researcher found that several relevant facts during an interview with managers' (employees) on factor that affecting e-banking service quality on customer satisfaction.

- Lack of giving emphasis for e-banking service quality
- Infrastructure (service provider and the like)
- Lack of transparency and accountability
- Lack of accessibility and trust
- Lack of training
- Enough awareness is not created
- Lack of the required skilled by employees and customers
- Inefficiency of Internal working systems and lack of enough ATM machines
- Aggressive promotion and marketing

Interviewee were suggested or recommended the following suggestions to bring better utilization of E-banking and promote quality service.

- To satisfy our costumers the bank should rigorously work hard and the numbers of E- banking equipments (ATM) machine should be increased, the bank should on give lessons to the public on the benefit of using E baking services
- To satisfy costumers the following points need to be considered which include Security, availability at any time reliability.

- Awareness creation to customers to use of e- banking
- Ensure the privacy problem inform the customers how to use the E - banking quality service
- Making timely decision when the customer complain or present grievance.
- The system must be evaluable 24 hours and the application should be functional
- Awareness creation must be conducted in all available media
- To use a well organized system and competent personnel us required in addition a secured system
- Improvement should done in telephone line and power consistency to satisfy customers
- Upgrading employees skill periodically by using different mechanism such as training and creating conducive work environment

4.5. Summary of Major Findings

On the basis of the assessment results obtained through quantitative and qualitative data analyses, the following major findings are identified for further consideration.

- The overall customer satisfaction levels of the E- Payment product/service are found in the lower level of customers' satisfaction. It also indicates the existence a wide gap for improvement through proactive and reactive measures. The result of the study also stress that this is high/right time to focus on service quality improvement and also concentrating on enhancing service accessibility as well.
- The assessment result of the study using overall service quality dimension revealed that E- banking service, attribute tangibles is rated as the best area of customer satisfaction , followed by security , Responsiveness , reliability and access. This shows the existence of slight variation on the satisfaction level of customers towards service quality dimensions. However, the level of satisfaction for all attribute is very low except tangibles.

- Tangibility factor: With regard to tangibility attribute, the satisfaction is stands and the least satisfaction level was identified to be cleanness and attractiveness of ATM site.
- Reliability factor: the data shows values regarding reliability attribute and the overall satisfaction result shows satisfaction level. The lowest score among the four measurements in this dimension is for the inquiry, E- banking provides error free service (Transaction) and dependability. The highest level is on “E- banking provides prompt resolution when problem encountered” which compared to what the CBE has promised through media and actually delivered.
- Responsiveness: attribute is found to have a satisfaction, which is also low. In this aspect, providing adequate and sufficient information compliant handling and getting prompt E- banking service initiative is lagging behind.
- Security: The survey result revealed that the respondents have low satisfaction with the security of the services that the E Payment provides. This indicates that the respondents have reservation both in the confidentiality and security sub attribute.
- Access: refer to the measurement paradigm of access, the CBE was found out to draw only 48% of customer satisfaction score which is the lowest among the attributes. Location of ATM machines, availability of POS terminal and availability of Mobile and Internet banking service 24/7, which is annoyingly very low.
- The assessment result also shows that the respondents perceived that the basic challenge encountered and holding back them from using E Payment service is the poor/no network connection.

Chapter Five: Conclusion and Recommendations

5.1. Conclusion

The major objective of this study was assessment of E- Banking Service Quality in the selected district of commercial bank of Ethiopia in Addis Ababa area. Purposive sampling was used to select branches. Moreover, random sampling was applied to select respondents. Data collection instrument which was used in this study was questionnaire and interviews of managers. The research design was mixed approach and various statistical tools like chi- square test, frequency, percentage, Cronbach's Alpha was applied .And the following findings were identified. The majority of the participant of the study was male sex category. The majority of the participant of the study was in the age category of 25-35 years old, work experience category of 1-5 years and service quality of E-banking was excellent .The respondents confirmed the presence of trust in E-banking services. E-banking was reliable with CBE. E-banking has impact on customer satisfaction.

Regarding reliability of quality service of e- banking the following results obtained .E-banking provides services as promised. Regarding to this statement the calculated chi-square was 66.746 at 4 degree of freedom. Additionally, the calculated statistical significance value which was associated with the data was.000 which was less than the usual statistical rejection value 0.05 ($P < 0.05$). This implies that the statement was failed to be accepted. E-banking dependable handling customers service problems. Against this statement, the calculated chi-square value was 83.805 at 4 degrees of freedom. Furthermore, the calculated statistical significance value.000 which was less than the usual statistical rejection significance value0.05 ($P < 0.05$). This implies the statement was failed to be accepted. E-banking maintains error free records. Regarding to this, the calculated chi-square was 39.439 at 4 degrees of freedom. Furthermore, the calculated statistical significance value was .000 which was less than the usual statistical rejection value 0.05($P < 0.05$). This implies that the statement failed to be accepted. E-banking provides services of promised time regarding to this, the calculated chi-square value was 66.788 at 4 degrees of freedom, furthermore the calculated statistical significance value 0.05 ($P < 0.05$). This implies that the statement was failed to be accepted. E-banking

performs services right the first time. Concerning this issue, the calculated chi-square value was 83.805 at 4 degrees of freedom. Moreover, the calculated statistical significance value .000 which was less than usual statistical rejection threshold value 0.05 ($P < 0.05$). This implies that statement was failed to be accepted.

Concerning quality service of responsiveness of e-banking the following results obtained- banking keeps customer informed about when a service is performed. The calculated chi-square value was 154.955 at 4 degrees of freedom additionally, the calculated statistical significance value was 000 which was less than the usual statically rejection value 0.05 ($P < 0.09$). This implies that E-banking keeps customer informed about a service is not performed. E –banking promotes service to customer regarding to this hypothetical statement, the calculated chi-square value was 133.542 at 4 degrees of freedom. Additionally, the calculated statistical significance value .000 which was less than the usual statistical rejection value 0.05($P < 0.05$). This implies the hypothetical statement failed to be accepted. E-banking has flexibility to help customers. Regarding to this hypothetical statement, the calculated chi-square value was 51.515 at 4 degrees of freedom. Furthermore, the calendared statistical significance value. 000 which was less than the usual statistical rejection significance value 0.05($P < 0.05$). This implies that the statement was failed to be accepted. E- Banking has readiness to respond to customers requests. Additionally, the calculated chi-square value was 100.797 at degrees of freedom. Furthermore, the calculated statistical significance value .000 which was less than the usual statistical significance rejection value 0.05($P < 0.05$). This implies that the statement was failed to be accepted. E-banking helps employees and instills confidence in customers. Regarding the hypothetical statement, the calculated chi-square was 152.374 at 4 degrees of freedom. Additionally, the calculated statistical significance value. 000 which was less than the usual statistical significance rejection value 0.05 ($P < 0.05$). This implies that the hypothetical statement failed to be accepted.

Regarding assurance of e-banking obtained the following results. E-banking helps customers' free safe in their transactions. Regarding the hypothetic statement the calculated chi-square was 94.305 at 4 degrees of freedom. Additionally, the calculated statistical significance value.000 which was less than the usual statistical significance

rejection value 0.05 ($P < 0.05$). This implies that the hypothetical statement was failed to be accepted. E-banking helps employees who are consistently courteous. Regarding this hypothetical statement, the calculated chi-square was 71.863 at 4 degrees of freedom. Additionally, the calculated the statistical significance valve was .000, which was less than the usual statistical significance rejection value 0.05($P < 0.05$). This implies that the hypothetical statement was failed to be accepted.

Concerning the empathy of quality service of E-banking with its statement that was designed to describe empathy- banking gives customers individual attention. Concerning this hypothetical statement the calculated chi-square was 131.122 at 4 degrees of freedom. Calculated statistical significance value was .000 which was less than the usual statistical significance 0.05($P < 0.05$). This implies the statement failed to be accepted. E-banking helps employees who deal with customers in caring fashion. Chi- square value was 86.748 at 4 degrees of freedom P. value was .000 which was less than 0.05. This implies the hypothetical statement failed to be accepted.

E-banking helps to have the customers' best interest at heart. Regarding to this, chi-square value was 92.615 at 4 degrees of freedom. P-value was .000 which was less than 0.05. This implies that the hypothetical statement failed to be accepted.

E-banking employees who understand the needs of their customers. Regarding to this chi-square value was 114.400 at 4 degrees of freedom and P-value was .000 which was less than 0.05 ($P < 0.05$). This implies that the statement was failed to be accepted.

Regarding tangible the following results was obtained which include the following E-banking is modern equipment chi-square value was 116.698 at 4 degrees of freedom P. value was 0.000 which was less than 0.05 ($P < 0.05$). This implies that the statement was failed. E-banking visually appealing facilities. Concerning this hypothetical statement, chi-square value 98.403 at 4 degrees of freedom the P-value was .000 which is less than 0.05. This implies that the statement was failed to be accepted. E-banking is usually appealing facilities regarding to this, the chi square was 57. 313 at 4 degrees of freedom. The P- value was 000 which was less than 0.05. This implies that statement failed to be accepted. E-banking is usually appealing materials associated with the service.

Concerning this, Chi-square value was 88.326 at 4 degree of freedom. P- Value was .000 which was less than 0.05. This implies that the statement was filed to be accepted.

5.2. Recommendation

Based on the assessment results of the survey, the study proposed the following general and specific recommendations so as to help the E- banking service achieve desired level of improvements. The overall customer perception assessment result of the E-banking service shows that the process is now in the lower level of customers' satisfaction. This requires exerting maximum effort and investment in human, material and capital resources of the process in the short, medium and long term so as to enhance service efficiency and effectiveness of the E- banking service quality and attain higher level of customer satisfaction. More emphasis should be given to enhance the service Access, Reliability, Responsiveness and Security. Besides, the study team proposes the following specific actions.

- The CBE should improve provision of ATM, internet banking and POS services to satisfy all customers in standard and functional manner. It should also decrease the down time of the network at all levels.
- Commercial banks and other stake holder to retain the existing e- banking customers and to improve e- banking service quality, the bank should continuously maintain error - free transactions through e-banking service, since bank accounts and figure are very sensitive for each and every customers of e- banking.
- The bank management should improve e- banking quality service so as to satisfy customers' needs. The bank needs to pay attention to e-banking customer complaints in order to satisfy the customer expectation.
- The bank should be give individual attention to e- banking customers in order to better understand their needs and better satisfy them.
- The management of the bank should regularly run research activities in order to keep a regular truck of customer satisfaction level of e- banking services.
- The bank and other stakeholders' further study should investigate the impact of e-banking service quality dimensions on technological trust and usage by customers of commercial bank of Ethiopia.

- The study confirmed that there is low level of satisfaction almost in all attributes i.e. Access, Reliability, Responsiveness and Security. In order to solve this gap, it is a must to provide continuous staff training, especially to those engaged in customer handling in relation E-banking product and service, aggressive awareness and promotional activities about the product is also required. Related measures that need to be addressed here include:
 - ✓ Assessing human resource requirement of E Payment Process and operation staff who engaged with Electronics Banking Service.
 - ✓ Revisiting the existing ATM and POS machines deployment so as to improve accessibility;
 - ✓ Follow-up and ensure full functioning of ATM and POS machines, Mobile and Internet Banking;
 - ✓ Solving frequent network failure though establishing service level agreement with infrastructure providers or through installing wireless technology;
 - ✓ Ensuring sustainable services throughout the year by undertaking timely maintenance during service failure. It is also possible to consider service level agreement with selected suppliers of banking technologies;
 - ✓ Though identifying CBE ATM and POS machines is easy and rated further branding ATM and POS machines owned by the CBE will elevate the customer satisfaction to the next level; and
 - ✓ Undertaking continuous education on how to get the services through different media channels and through branch level demonstration. A better solution proposed here is to design a program that fits for the displays of queue manager and ATM machines and fill such educative message at the branch level and in ATM sites.

Finally, the existing level of satisfaction on E-banking service quality is low. Thus, the electronic banking service is highly requiring the due attention of the process and the top management of the bank as well.

References

- Angelova, B. and Zekiri, J. 2011. Measuring customer satisfaction with service quality using American Customer Satisfaction Model (ACSI Model). *International journal of Academic Research in Business and Social Sciences*, October 2011, vol.1 no.3
- Cengiz, E. 2010; Measuring Customer Satisfaction.
- Chaffey, D; Mayer, R; Johnson, K and Ellis Chadwick, F (2006). Internet Marketing: Strategy, Implementation and Practice, (3rd Edition) Financial Times/Prentice Hall, Harlow, Essex, U.K, 8– 10.
- Chavan, Jayshree (2013): Internet Banking- Benefits and Challenges in an Emerging Economy: *International Journal of Research in Business Management (IJRBM)* Vol. 1, Issue 1, June 2013, 19-26: Impact Journals
- Cohen D, Gan C., Yong H. & Choong, E., (2006). Customer satisfaction: A study of bank customer retention in New Zealand. Commerce Division. Lincoln University Canterbury. ISSN1174-5045 ISBN1-877176-86-9
- Daniel, N. and Cephas, N. 2009. What Derives Customer Loyalty and Profitability? Analysis of perspectives from Retail Customers in Ghana's Banking Industry. School of Management. Institute of Technology.
- Durvasula S., Lysonski S., & Mehta S., 2005 Service encounters: The missing link between service quality perceptions and satisfaction. *Journal of Applied Business Research*- Summer 2005. Vol 21, No. 3:15-26
- E. Daniel (1999). Provision of Electronic Banking in the U.K. and Ireland, *International Journal of Bank Marketing*, Vol. 17, pp.211-232,.
- Fisher – French, (2007). The New Battle for your Buck. Mail and Guardian (Online). Available:
<http://www.mg.co.za/personalfinance/articlePage.aspx?articleid=303167>.
- Imola Drigă, Claudia Isac (2014) E-Banking Services – Features, Challenges And Benefits: *Annals of the University of Petroșani, Economics*, 14(1), 2014, 49-58
- Johnson (2005). Overview of Electronic Payment Systems in Nigeria: Strategic and Technical Issues. CBN, 29(2), 68 – 71.
- Johnson, R. & Onwuegbuzie, J. (2004). Mixed method research: A research paradigm whose time has come. *Educational Researcher*, Vol. 33, No. 7 (Oct., 2004), pp.

- 14-26, American Educational Research Association Stable URL: <http://www.jstor.org/stable/3700093> Accessed: 17/05/2014
- Johnson, R., Onwuegbuzie, J. Turner, A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*. 2007; 1; 112 DOI: 10.1177/1558689806298224
- Kheng, L., Mahamad, O., Ramayah T. & Mosahab, R. (2010). The impact of service quality on customer loyalty: A study of banks in Penang, Malaysia. *International Journal of Marketing Studies*. Vol. 2: 57-66. Canadian Center of Science and Education. Accessed on 20 May, 2014 from www.ccsenet.org/ijms
- Kim, Park & Jeong, (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. *Telecommunications Policy* 28(2004) 145-159. Accessed on 26/5/14 www.elsevierbusinessandmanagement.com/telpol Doi: 10.1016/j.telpol.2003.12.2003, Elsevier Ltd.
- Larpsiri, R and M Speece (2004). Technology Integration: Perception of Sales Force Automation in Thailand's Life Assurance Industry. *Journal of Marketing Intelligence planning*, 22(4), 392 – 406.
- Mburu P., Van Zyl H., & Cullen M. (2013). Determinants of customer satisfaction in Kenyan banking industry. *European Journal of Business Management*. ISSN 2222-1905 (paper) ISSN 2222-2839 (online) Vol. 5, No. 2, 2013 accessed on 24 May, 2014 from www.iiste.org
- Mohammad Miznur Rahaman Abdullah and Aatur Rahman, July 2011; Measuring Service Quality using SERVQUAL Model: A Study on PCBs (Private Commercial Banks) in Bangladesh.
- Ozuru, H. N; Chikwe, J. E and Idika Uduma (2010). The use of Traditional payments and electronic payments systems in Nigeria: A discourse. Proceedings of the 11th Annual Conference of International Academy of African Business and Development.
- Parasuraman A. & Zeithaml V. (1988). Multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*. Vol. 64. Number 1.
- Parasuraman, A., Berry, L.L. & Zeithaml, V. A. (1991), "Understanding Customer Expectations of Service," *Sloan Management Review*, Vol. 32 No. 3, pp. 39-48.

- Parasuraman, A.; Zeithaml, V.; and Berry, L. 1985. A conceptual Model of Service quality and its Implications for future Research. *Journal of Marketing* 49 (Fall) 41-50.
- Ramlugun Vidisha Devi, 2012; Assessing Service Quality in the Mauritian Banking Sector Using SERVQUAL.
- Siddiki, K., 2011; Interrelations between service quality attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh. *International Journal of Business and Management*. Vol. 6, No. 3; March 2011, accessed on 19/May/2014 from http://www.ccsenet.org/journal/index.php/ijbm/article/view/9689/6943?origin=publication_detail
- SNEHALKUMAR H MISTRY, July 2013; Measuring Customer Satisfaction in Banking Sector: With Special Reference to Banks of Surat City, India.
- Suleiman Ibraheem Shelash Al-Hawary et al, 2011; Banking Service Quality Provided by Commercial Banks and Customer Satisfaction, Jordan.
- V.A. Zeithaml, A. Parasuraman, and A. Malhotra (2002). Service quality delivery through web sites: a critical review of extant knowledge, *Journal of the Academy of Marketing Science*, Vol. 30 No. 4, pp. 362-75, 2002.

Annexes

Addis Ababa University
College of Business and Economics
Department of Public Administration and
Development Management

Dear Respondents,

This questionnaire is designed to produce academic study report entitled “Assessment of E-banking Quality service on Customer Satisfaction in commercial Bank of Ethiopia”. The purpose of this research is to acquire data which will be used to assess E- banking Quality service in commercial Bank of Ethiopia. The study is purely for academic purpose and thus will not affect you in any way. Therefore, your genuine, frank and timely response is very important to the outcome of the study and you are kindly requested to complete all questions.

Instruction: Dear respondents,

1. No need of writing your name
2. Please encircles where alternative answers are available and put (✓) mark where necessary
3. Please write your response on the space provided for open end question

1. Socio- demographic characteristics

Section I This part of the questionnaire covers items related to background of the respondents.

1. Gender

Male

Female

2. Age

25-35

36-45

Above 46

3. Educational level/Qualification

Diploma

First Degree

Second Degree

PhD

Other, please specify _____

4. Field Specialization _____

5. work experience

Less than one year

1-5 years

6-10 years

11-15 years

Above 15 years

General Information

6. How do you see (comment) the quality service of E-banking?
A. Excellent B. Very Good C. Good D. fair E. poor
7. Do you trust in E-banking service?
B. Yes B. No C. I don't know
8. If your response for Q 7, No mention your reason?

9. Do you think E-banking with CBE is reliable?
A. Yes B. No C. I don't know
10. Do you think E- banking has impact on customer satisfaction?
A. Yes B. No C. I don't know
11. From your experience; what are the factors that determine quality of E-banking service?

Section II. This part of the questionnaire covers items related E- Banking (Active Mobile banking, Active Debit/ATM Card, Active Internet banking and Active POS). Please indicate how much you agree or disagree with each of the following statements by put (✓) mark that best represents your opinion. 1 indicates strongly agree (SA), 2 indicates agree (A), 3 indicates neutral (N), 4 indicates disagree (DA) and 5 indicates strongly disagree (SDA)

Roll no	Hypothetical Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	Reliability					
1	E- Banking Provides services as promised.					
2	E- Banking dependable handling customers' service problems.					
3	E- Banking performs services right the first time.					
4	E-banking provides services at the promised time.					
5	E-Banking maintains error-free records.					
	Responsiveness					
6	E-banking keeps customers informed about when a service is performed.					
7	E-banking Prompts service to customers.					
8	E-banking has flexibility to help customers.					
9	E –Banking has readiness to respond to customers' requests.					
	Assurance					
10	E- Banking helps Employees and instills confidence in customers.					
11	E Banking helps customers feel safe in their transactions.					
12	E Banking helps employees who are consistently courteous.					
13	E banking helps Employees who have the knowledge to answer customer questions.					
	Empathy					
14	E-banking gives customers individual attention.					
15	E-banking helps employees who deal with customers in a caring fashion.					
16	E Banking helps to have the customer's best interest at heart.					
17	E banking employees who understand the needs of their customers.					
18	E-banking has convenient business hours					
	Tangibles					
19	E-banking is modern equipment.					

20	E-banking is visually appealing facilities.					
21	E-banking employs who have a neat, professional appearance.					
22	E-banking is visually appealing materials associated with service					

What is your suggestion or recommendation to bring about better utilization of E-banking services so as to satisfy customers?

Interview Guidelines

Sex _____

Educational level _____

Work experience _____

Position _____

How do you see (comment) the quality service of E-banking?

Do you trust in E-banking service if not? Mention your reason?

Do you think E-banking with CBE is reliable?

Do you think E- banking has impact on customer satisfaction?

From your experience; what are the factors that determine quality of E-banking service?

What is your suggestion or recommendation to bring about better utilization of E-banking services so as to satisfy customers?