



St.Mary University Graduate Studies

Assessment on E-Banking Service Quality: the case of Commercial Bank of Ethiopia

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By

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A thesis submitted to the school of Graduate Studies of St.Mary University in partial fulfillment of the requirement for the degree of Masters in Business Administration

July 2015
Addis Ababa

Acknowledgment

My very first gratitude goes to Dr. Alem Hagos for his greater patience, critical and constructive comments, unlimited and all-time assistance. Without his skillful support, this study could have not been able to have the shape it has. For my husband Aderajew Mekibeb's contribution, it is hardly possible for me to enumerate words.

My last thank should go to the entire St. Mary University Community who helped me in one or other way during my stay in the school and to realize this study.

Abstract

E-banking can provide a reliable service to the customers for which make them happy. E-banking service is a comparative advantage and can improve relationship with customers. The purpose of this study is to measure e-banking quality by using E-SERVQUAL model on the quality of the service rendered by Commercial Bank of Ethiopia (CBE). Eight service quality dimensions were used, these are efficiency, Fulfillment, system availability, privacy, responsiveness, site aesthetics, security/trust and contact have been established based on E-SERVQUAL model modified by Parasuraman, Zeithaml and Berry (1988). These variables have been tested to measure e-banking service quality. The data were gathered through a questionnaire with 60 customers and 5 e-payment department staffs. The study also explores that efficiency; Fulfillment, system availability, privacy, responsiveness, site aesthetics; security/trust and contact have more contribution to satisfy the customers of Commercial Bank of Ethiopia. From the whole variable many respondent give high weight for privacy and next to this they give more weight to efficient. The study recommend that CBE must have done on frequent service interruption, it also must be certain about the availability of the system and work hard for effective utilization of the POS machine, and also CBE should establish collaboration with stakeholders such as Ethio-Telecom and Ethiopian Electric Power Corporation.

Key Words: E-banking, E-SERVQUAL, SERVICE QUALITY

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Acronyms

TRA-Theory of Reasoned Action

TAM-Technology Acceptance Model

CBE-Commercial Bank of Ethiopia

E-SQ-Electronic Service Quality

ATM-Automated Teller Machine

M-banking-Mobile banking

POS- Point of Sale

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Chapter One

Introduction

1.1 General Background of the Study

Now a day's E-banking service has become the most advance technique used all over the world and also it brings the customer to perform their various needs to transaction at their hands. In order to that the study focuses on E-banking service quality and customer satisfaction level. E-banking service reduce the cost with traditional banking by decreasing processing time, quick transaction, improving the flexibility of banking transaction and proving better customer service through electronic banking (Zhang, 2013).

In today's world every business relays on information communication technology for its day to day activities, Commercial Bank of Ethiopia would never be exceptional. Global interest for information technology forced the banking industry to entering into this remarkable development for their intense competition backed by newest information and communication technology infrastructure. For present business environment information and communication applications are very important to the banks for their all financial, banking and commercial transactions and others. The current trading relationship and service provision within the financial sector are going through fastest change with the development of new financial software applications. The rapidly growing information and communication technology initiates every organization throughout the world; this is true too Commercial Bank of Ethiopia (Worku, 2010).

The pervasive growth of Electronic Banking in developed countries and is speedily expanding in developing countries. For our country Ethiopia cash is the most common medium of exchange and electronic payment is still in its early stage. E-banking system creates opportunity for the banks customer to transact business and find information about their account balance and any information what they need through electronic channels like Automated Teller Machines(ATMs), Tele banking, mobile banking and internet banking as all of them becoming common over the world and same to in Ethiopia (Sira, 2013).

Even if lots of studies have been conducted regarding e-banking for the developed world, till to date measuring the service quality of e-banking service is very few of such studies have been held for Ethiopia particularly for Commercial Bank of Ethiopia (Worku, 2010).

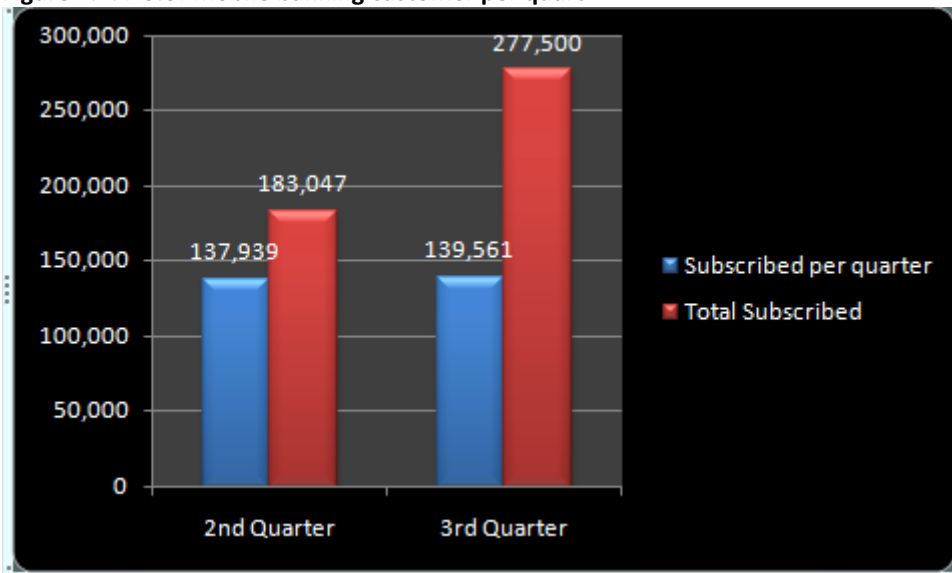
The focus of this paper is to measure the service quality of E-banking in Commercial Bank of Ethiopia by using E-Servqual model which was adapted and recommended by Parasuraman, Zeithaml and Berry (1988).

Although the growth of e-banking worldwide is very high, Commercial banks in Ethiopia continue to perform majority of its transaction using traditional teller based methods. Still banking operation is hindered by low level of infrastructure, high rate of illiteracy, frequent power interruption and security issues. As Worku mentioned (2010) it is very well known banking industry in Ethiopia is not developed as expected and therefore there is a need of modernizing the banking system by implementing technology as it is widely used all over the world . Since import and export business and international trade increased speedily, banks operating in Ethiopia should acknowledge the introduction of electronic banking system to satisfy their customer. This happens because of the expanding of local and international trades, so both needs increased banking service. Certainly Commercial Bank of Ethiopia is the pioneer to bring into practice of ATM (Automated Teller Machine). Additionally Commercial Bank of Ethiopia has had VISA membership 14 Nov.2015, evenif the bank is failed to use this opportunity due to inppropriated infrastructure. Additionally,e-banking is a new technology in Ethiopia which needs a lot of effort and resources to be easily to introdce e-banking(Yitbarek Takele, 2013).

The starting of e-banking calls back after Commercial Bank of Ethiopia and Dashen bank and Ethiopian Commodity Exchange(ECX) were signed to make easy payment . with agreement between them , they acquire a secure data electronic sharing.

Total number of mobile banking customers per quarter

Figure 1.1: No.of Mobile banking customer per quart



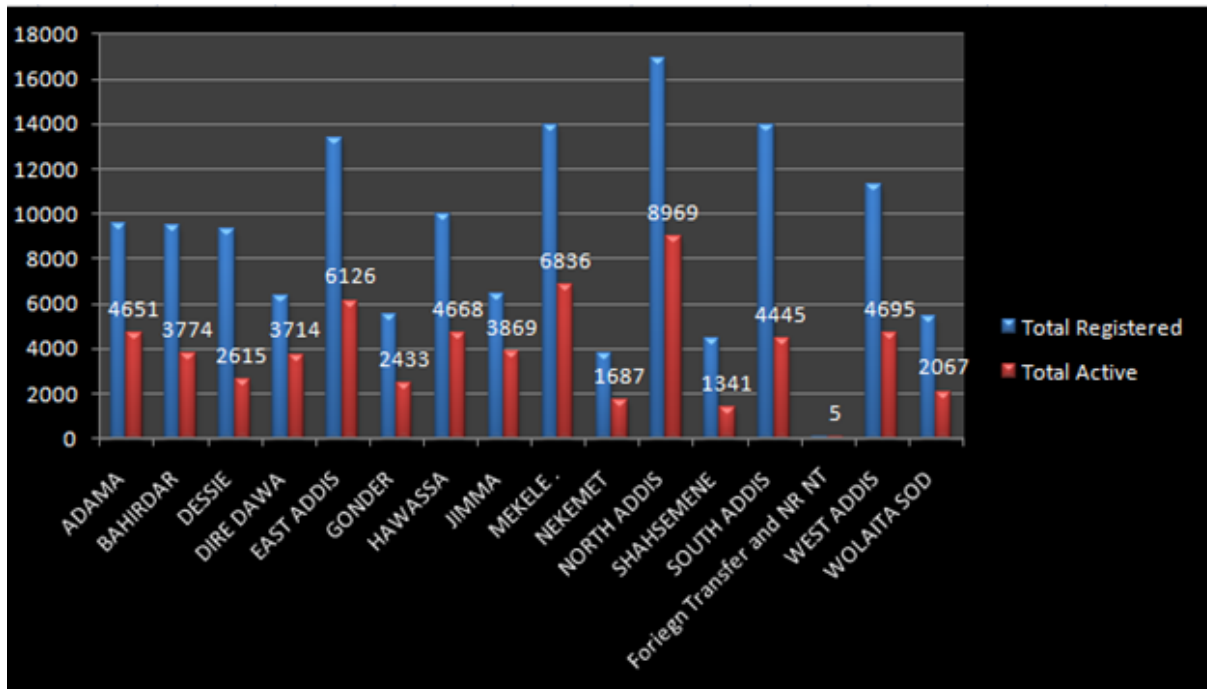
Source: Extracted from CBE'S Quarter report

Table1.1

DISTRICT	Registered Mobile Banking Customers	Active customers	% age rate
ADAMA	24995	13335	53%
BAHIRDAR	24046	10289	43%
DESSIE	18100	6052	33%
DIRE DAWA	16134	8726	54%
EAST ADDIS	33485	15913	48%
GONDER	19051	5884	31%
HAWASSA	19089	8270	43%
JIMMA	10930	6355	58%
MEKELE	25021	12901	52%
NEKEMET	8597	3908	45%
NORTH ADDIS	40439	20332	50%
SHAHSEMENE	7802	2479	32%
SOUTH ADDIS	33340	11889	36%
FORIENG TRANSFER NR/NT	13	12	92%
WEST ADDIS	33186	14032	42%
WOLAITA SODO	10321	4211	41%
Grand Count	324549	144588	45%

Source: CBE's Quarter report

Figure 1.2 Distribution of Mobile Banking



Source: Extracted from CBE'S Quarter report

Internet Baking

Number of internet banking customers recruited at the end of march 31,2015

Table 1.2 Internet banking by district

DISTRICT	Registered	Token Delivered	Activated
ADAMA DISTRICT	24	0	0
BAHIRDAR DISTRICT	76	25	1
DIRE DAWA DISTRICT	12	8	0
EAST ADDIS DISTRICT	584	262	60
GONDER	0	0	0
HAWASSA DISTRICT	32	2	0
JIMMA DISTRICT	2	1	1
NEKEMETE	0		1
MEKELE DISTRICT.	5	0	0
NORTH ADDIS DISTRICT	363	107	28
SOUTH ADDIS DISTRICT	317	105	18
FOREIGN TRANSFER NR/NT	111	0	38
WEST ADDIS DISTRICT	224	25	9
WOLAITA SOD DISTRICT	1	0	0
Grand Count	1751	535	156

Source: Banks quarter report

The below table shows registered internet banking users

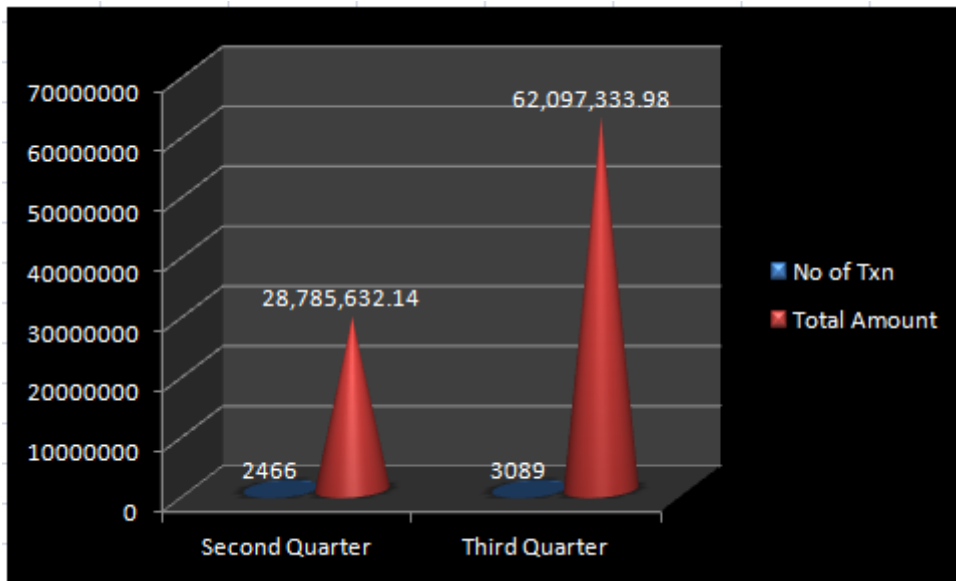
Table 1.3 Registered Internet Banking users

DISTRICT	Total Registered	Token Delivered	Active Token
ADAMA	35	4	4
BAHIRDAR	173	60	19
DIRE DAWA	88	32	16
EAST ADDIS	1169	723	231
GONDER	28	1	1
HAWASSA	77	37	17
JIMMA	2	1	1
MEKELE	6	3	3
NEKEMET	100	2	2
NORTH ADDIS	1024	318	263
SHAHSEMENE	6	0	0
SOUTH ADDIS	461	221	96
FOREIGN NR/NT	321	257	238
WEST ADDIS	305	86	46
Grand Count	3795	1745	937

SOURCE: EXTRACTED FROM BANK'S QUARTER REPORT

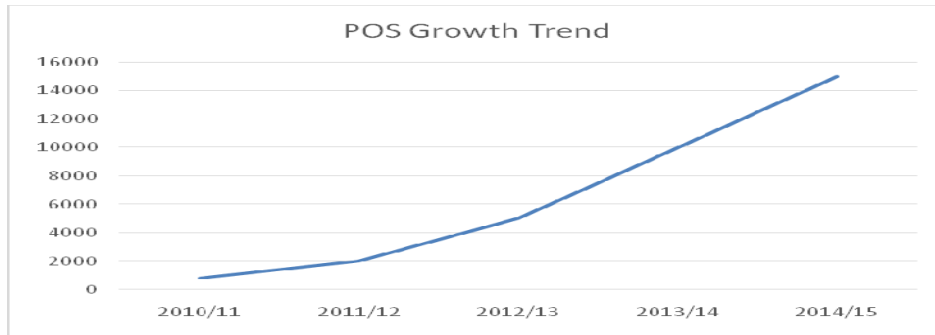
Internet banking fund transfer and no. of transaction

Figure 1.3 Internet banking fund transfer



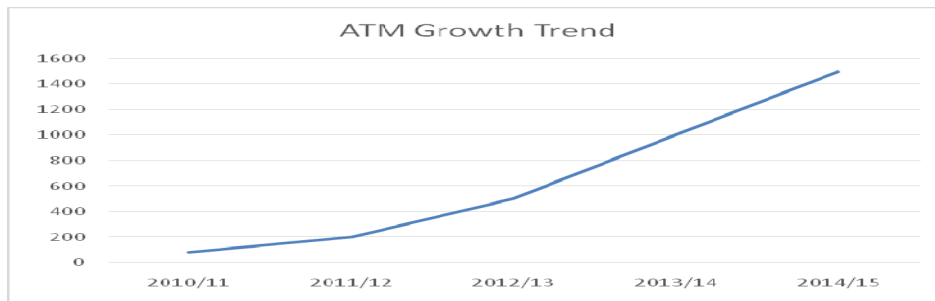
Source: CBE's Quarter report

Figure 1.4 POS Growth Trend



Source: the banks report of the five years e-payment strategy document

Figure 1.5 ATM Growth Trend



Source: the banks report of the five years e-payment strategy document

1.2 Statement of the Problem

In modern business arena, particularly in banking industries irrespective of the kind of banking service, giving due attention for the rapidly growth of information and communication technology become unavoidable. In this connection implementing electronic banking needs special attention. In other words it is worthwhile to examine the challenge to introduce the electronic banking system in relation to its acceptance and its pitfalls. So as to identify the traditional banking from the electronic banking, it is critical for the bank to scrutinize its service quality of electronic banking. Electronic banking, as the researcher consulted different users of e-banking has got much deficiency.

Although enormous benefit can be getting from using E-banking, E-banking users of Commercial Bank of Ethiopia face a problem due to technological advancement in banking industry. The latest E-banking method like Automated teller machine (ATM), Debit cards, Credit cards, Tele banking, Internet banking, Mobile banking and others are new to the Ethiopian banking industry (Bultum, 2014).

While implementing electronic banking there is a problem of acceptance, authenticity, uncertainty and lack of trust from the customers side (Bultum, 2014).

In summary the customers of Commercial Bank of Ethiopia have missed to enjoy the technological advancement of banking sector which has been entertained elsewhere in Africa and the rest of the world. The modern e-banking like ATM, Debit cards, Credit cards, Internet banking, Mobile banking and most of them are new in comparison to customary banking. E-banking which refers to using the modern technology that admits customers to access banking services electronically whether to withdraw cash, transfer funds, to pay or obtain commercial information and advices are not widely spread in Ethiopia (Yitbarek Takele, 2013).

This research aims at getting a comprehensive picture of E-banking service quality in CBE. Exploring the level of E-banking service quality in the designated Bank entails measuring the expectation and perception of customer using the stated tool and finding the difference between the two. Thus as the service quality gap is identified, the possible causes of gap is analyzed. In doing so, the entire effort of the paper revolves around seeking answers to the following basic research questions:

- ☞ What is the level of perceived quality of customers E-banking in CBE?
- ☞ Are service expectations appropriately matched with service perceptions? Are there gaps in service quality?
- ☞ How does CBE service equate along each of the 8 E-SERVQUAL dimensions relative to customers expectations?
- ☞ If service gaps do exist, what are the possible causes of these gaps?
- ☞ Is service quality E-banking in CBE perceived differently amongst different customer?
- ☞ What does the version of the story of employees, management and the Banks internal record look like concerning service quality of E-banking?

1.3 Objectives of the Study

1.3.1 General objective

The very general objective of the study is to measure E-banking service quality, explore the implementation of E-banking in Commercial Bank of Ethiopia.

1.3.2 Specific Objective

- To identify the level of expectation and perception of customers concerning the quality of E-Banking service and dimensions;
- To assess whether there exists a e-service quality of E-banking gap in CBE;
- To investigate the possible causes of the service quality gap in accordance to the GAP model;
- To make an assessment on actions being taken by CBE to alleviate the quality of E-banking services.

1.4 Significance of the Study

The research is significant in such a way that it generates a comprehensive overview of the shortfalls as well as the benefits of E-banking; it would assist in formulating strategies to improve the awareness of E-banking for all societies to increase its profitability and the banks competitiveness. It would create an opportunity for the bank to identify its status of implementing E-banking.

- Would enable the management of CBE to understand the expectation of different customers and design the E-banking service accordingly.
- Provide a useful ground for further E-banking service quality assessment surveys among many private and government banks.
- Create an objective (empirical) means to make comparison of the bank's E-banking service performance among the E-banking service dimensions and with other banks as well.
- Enrich the knowledge of the management and employees of CBE with what E-banking service quality is all about;

- Enable the management to devise service quality strategies that substantially improve the quality of e- banking service delivery.
- Indicate areas of E-banking service quality problems where more focus must be given and where more resource and energy must be injected.
- Create a comprehensive understanding of customers' expectation and perception of E-banking service quality, so that the bank would able to cater to the demands of its customers

On top of all these, this descriptive research leaves behind an important lesson for service organizations, specifically lesson for E-banking services concerning the application of the objective measurement of E-banking service quality using the E-SERVQUAL and the GAP model.

1.6 Scope of the Study

The scope of this research is limited to CBE's E-banking Services users in Addis Ababa. From E-banking the researcher focused on ATM, Mobile Banking and POS.

Due to time & financial constraints, the researcher couldn't cover all aspects (variables) of the E-banking services.

1.7 Limitation of the study

The very immediate and major constraint of this study is that it is very few studies under gone in connection with the service qualities of e-banking, unlike other service sectors. It has been even hardly possible to get a study conducted locally in this regard.

Hence, the researcher couldn't compare and contrast the study vis a vis others and let e-banking users view various perspectives. Time has, in its part, been another constraint for this study.

1.8 Organization of the study

The report has four chapters: the first chapter deals with background of the study or introductory part of the paper followed by Chapter Two, which is dedicated to literature review. Research design and methodology in chapter three of the paper, chapter four deals with Data presentation, analysis, and interpretation. Finally, the paper completed by drawing conclusions and making recommendations in chapter five.

Chapter Two

2. LITREATURE REVIEW

2.1 What is Service

Service is an intangible activity which should be achieved by the interaction between the service seeker and service provider.

2.2 Theories of E-banking

The information technology revolution in the banking industry service delivery channels began in the early 1970s with the introduction of the credit card, Automated Teller Machine (ATM). Electronic banking is thus a result evolutionary innovation whereby the application of internet has brought a radical transformation in a way of banking.

In general, the adoption and growth of e-banking and card payment system is found very important towards creating a cashless society with its impact on bringing economic transparency, efficiency and growth. From customer perspective, the most recognized drivers for growth of e-banking include the convenience, the reliability, the widely availability, affordability and usefulness of the services.

2.1.1 Theories of E-Servqual Model

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In simple terms it can be said that core scale refers to the quality of the actual of the website itself, while the recovery scale is more concerned with the actual performance of the company, rather than with website performance (A.Parasuraman, 2005).

The four variables of core E-SERVQUAL scale are efficiency, fulfillment, reliability and privacy. Efficiency means customers ability to effectively access to website, find their needed product and related information and able to check it out with slight effort. Fulfillment refers to a company's actual performance is different from what is promised through website, and integrates accuracy of service promises. Reliability is a technical function of website. Privacy indicates the company's ability to maintain the integrity of customer data.

The three recovery variables of e-SERVQUAL are responsiveness, compensation and contact points, which are mainly concerned with the situations that arise when a problem needs to be solved and personal service is required. Responsiveness defines as the company's ability to provide appropriate problem solving mechanisms. Compensation means money-back guarantees, return of shipping and handling costs. Contact involves to customers' need to speak to a live, customer service agent online or on the phone. So it is a company's ability to provide such support in real time through online (Zhao, 2005). The other measurement with slight difference from e-SQ is WEBQUAL which give more attention for the interface of the website and is evoked to be one of the most empirically grounded e-SQ scales. It is evolved based on the conceptual background of the Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM). WEBQUAL mostly focuses on the technical quality of the website itself rather than on the rendering of service quality through the website. As Zeithmal, Parasraman and Malhorta suggested that WEBQUAL is the scale that is highly usable for web designer who needs it to decide paths of improving a website to positively affect the interaction and perceptions of users. As earlier mentioned e-SQ scale focus the whole customers shopping experience by taking into consideration both pre-website and post-website .

2.1.2 Technology Acceptance Model

Davis developed the (D.Davis, 1985) TAM to which users' adoption of a computer system depends on their behavioral intention to use, in which it depends on their attitude and two beliefs, that is perceived ease of use and perceived usefulness (Wang, 2003). The TAM mainly used model for predicting the acceptance and use of information systems and has recently also been applied in order to predict internet adoption. TAM is derived from Theory of Reasoned Action (TRA) by

Fishbein and Ajzen (1975) . In essence, the TAM suggest that perceived usefulness and perceived ease of use decides an individual intention to use a system (D.Davis, 1985).

2.1.3 Theory of Planned Behavior

In order to understand the acceptance of new technologies by customer other two theories were developed. These are the Theory of Planned Behavior (TPB) and Theory of Reasoned Action. The Theory of Planned behavior is an extension of Theory of reasoned action (TRA), which appends a construction that unite the difficulty or ease of implementation of a behavior. Perceived behavioral control emerged as a strong predictor of intention, which is out of

2.1.4 The Evolution of E- Banking System

Asghar stated that science and technology are anxious to render more facilities through research and innovation in all fields of life. In today's world internet is one of the method which facilitates and become an essential part of life. In particular internet has been a key driving force behind the change in the banking industry. In banking industry electronic innovation was traced back to 1970 when the computerization of financial institutions gained momentum. However; a visible presence of this was evident to the customer since 1980 with the introduction of ATM (Automated Teller Machine). As Bultum(2014) stating that the innovation of banking is continuing, this is backed by technological advancement in telecommunications and information technology industry. The beginning of electronic banking era was to be considered as the basic conversion ever faced by the banking industry.

The beginning of 1990s testified the emergency of automated voice response (AVR).By using this technology banks started to render telephone banking facilities for financial services. With continuous technological development enable banks to provide service through PC which was accessible to customers via the use of internet (Kondabagil, 2007). Jayaram in his study stated electronic banking supported by the advancement of telecommunication technology namely ATM(Automated Teller Machine),mobile banking, internet banking, and POS.

The acceleration of Internet gave a genuine raise in electronic banking and shifts the banking services from back-end implementation to customer centric front ends.

2.1.5 Benefit of E-banking

E-banking assists us to win the shortcoming of traditional banking system, as computers are able to storing, analyzing, consolidating, searching and performing the data as per the requirement of the user with high speed and quality (Sharma, 2011).

E-banking provides service to various parties:

To the Banks

- E-banking services help in increasing profits.
- E-banking provides competitive advantage with boundary less network to the banks.
- Due to e-banking banks carry on business less with paper money and more with plastic money; have online transfer of funds, thus economizing on the cost of storage of huge stocks of currency notes and coins.
- By connecting with ATM and POS terminals, risk of cash overdraw can be eliminated in case of ATM credit and debit cards.
- E-banking websites can act as a revenue earner through its promotional activities.
- Customers can avail e-banking facility from anywhere, therefore saving the need not to invest more on building infrastructures.
- Websites that offer financial convergence for the customer will create a more involved banking customer who will more frequently utilize the banking websites.

To the Customers

- E-banking provides 24 hours service to the customers for cash withdrawal from any branch.
- Fast and stable access to information.
- Online purchase of goods and services and payments can be made for various purposes.

- The customer can view his account balance, can get a statement of his account, can apply for loans, check the progress of his investments, review interest rates and collect other important information.

To the Merchants, Traders, etc.

- It ensures assured quick payment and settlement to the various transactions made by the traders.
- It provides a variety of services to the businessmen on parallel with the international standards with low transaction cost.
- Cost and risk problems involved in handling cash which are very high in business transactions are avoided.
- It leads to the growth of global and local clientele base with the development of e-Banking.
- Other benefits include improved image, improved customer service, eliminating paper work, reduced waiting costs and enhanced flexibility.

2.1.6 E-BANKING COMPONENTS

The purpose of technology in underpinning the e-banking operation has become highly sophisticated. The possible components and procedure seen in a normal institution that work together to provide e-banking services are given below (Kondabagil, 2007).

- Operational processes: For different products and services offered; for example, net-banking and aggregation services.
- ICT infrastructure: Servers for net-banking, email, and internal networks Communication systems Storage area networks (SAN) Item processing equipment such as MICR coders ATMs.
- Application: Operating systems: Applications Core banking processing system E-banking applications such as bill pays automated decision-support systems, System performance monitoring and Intrusion detection systems.
- Operational: Aspects Programming support Network administration Security management. Firewall configuration and management Configuration management.
- Service providers Website design and hosting Disaster recovery services.

2.1.7 Channels of E-banking

E-banking provides broad option for customers, comfort, control and cost saving. Customers have access to their financial information and able to perform activity anytime and anywhere. Customers have better control, manage accounting activity, household budgeting and organizing their financial records. Cost comes from avoiding trips and by reducing transaction cost (Marinos, 2013).

2.1.7.1 ATM (Automated Teller Machine)

The ATM, is having no personnel that render fullflaged service to the customer comprises checking deposit or withdrawal, transfer of fund between accounts, and some installment payment to the financial institution has evoked from the original use of terminals as off line cash provider. ATM should be placed where easy accessable to the customer out of normal banking hours. In other words customer get service on a 24-hours ,7 days per week basis. (L.kraemer, 1980 it is one of the channels of e-banking in which customers order convey via the internet. Internet banking enables customer)

2.1.7.2 Internet Banking

To access to their bank from their convenient home or offices. Meaning customer can send their instruction from the net to pay for the good they purchase, order their banks to pay for the seller of the goods or service (Abaenewe, 2013).

2.1.7.3 POS (Point Of Sale)

According to Colton EFT/POS involves the use of plastic cards in terminals on merchant's premises. It actually comprises two distinct mechanisms:

- Debit-card transactions: - These were a new form of value-transfer, whereby an account holder authenticated by the presentation of a token (a data-bearing card) and the keying of a PIN, uses a terminal and network to authorize the transfer of value from their account to that of a merchant.
- Credit-card transactions: these represent the automated capture of data about purchase against a revolving credit account, replacing what have hitherto been 'flick-flack'-generated hard copy vouchers (W.Colton, 1980).

2.1.7.4 Mobile Banking

Tojib and Tsarenko,(2012) notes that Mobile services are more attractive than current online services due to service quality, a unique characteristic exclusive to the mobile environment . The most important services provided in mobile banking system are: balance enquiry, accounts transactions enquiry, draft, approved of Check amount, Check status enquiry, blocking card, buy prepaid recharge, installments payment, bills payment, received messages archives, ability of receiving various customer accounts information, shopping ability, hotel expenses payment, stock market status enquiry (S.F.Amiri Aghdaie, 2012). On the other hand John proposed that mobile banking also known as m-banking or SMS banking .Normally mobile banking packages include the following packages:money transferring, term deposits,access to loan statement,mini-statements and checking account history,access to card statements, mutual funds/equity statements,insurance policy management,pension plan management status on cheques, stop payment .

The main advantage of mobile banking for banking industry resting on its accessibility for many customers of the bank. It has significant power of transforming the economies of service delivery, particularly minimizing the cost of financial transaction. It is an important way to savings services to the billion people worldwide who have a cell phone with out holding a bank account. It is important by far from off line banking systems for overcoming geographical constraints. From Mobile banking we can also get advantages like security, immediacy, and efficiency.

Mobile banking serve as a virtual bank card by which customer and institution get information securely by avoiding the cost of distributing cards to customers. In another way mobile phone may serve as point of sale (POS) terminal meaning to pay for goods or service at the store,malls,and retails. By which mobile phone serves to perform proper financial institution by giving authorization to debit their account. The other advantage of mobil banking is to used as an ATM.Its basic function is cash collection and distribution. Fainally Mobil banking may be used as an Internet banking terminal by which it provides a)fast access to any account and b) paying or transferring money for remote places.

Evenif Mobilbanking gives us many benefit, it is not easy to implement in other words it faces many challenges. The major one is lack of developed infrastructure. To be successful and reliable in mobile banking, cost effective infrastructure is the one to be mentioned(John, 2014).

2.1.9 Types of E-Banking

2.1.9.1 Informational E-Banking:

It is the basic level of Internet Banking. Normally it provides information about the bank's products and services on a standalone server. Since informational system generally have no path between the server and the bank's internal network its risk is relatively low. This kind of internet banking can be rendered by the bank or outsourced. Informational e-banking system needs proper control in order to avert the access of unauthorized modification of the bank's server or web site.

2.1.9 .2 Communicative E-banking:

This types of E-banking permits some kinds of relationship between the banks and the customer. The communication may be restricted to e-mail, account inquiry, loan applications, or static file updates such as name and change of address. When it is compared to informational e-banking, in this system the risk is high due to that the servers may have a route to the bank's internal networks. Suitable control is a must to preclude monitor and change management of any unauthorized trial to the bank's internal networks and computer systems. In this system various presentation of virus is become very important in the environment.

2.1.9 .3 Transactional E-banking:

At this level of internet banking customers are allowed to perform transaction. Since there is a line between the bank's customer and the internal network, the risk is structured and must have the strongest controls. The transactions include accessing account, paying bills, transferring funds.

2.1.10 Challenges of implementation e-banking

Electronic banking is the climax of information technology to omit time and place limitation. During past decade's money now factors were bank working hours, number and place or branches (Farshad havasi, 2013) .

Farshad in his study states about the challenges of e-banking industry is the security concern . Giving their account number online or paying invoice via internet is very difficult ,the other problme for implementing e-commerce in general and e-banking in particular is receving quality servcie including speed and reliablty which results in disappointment in may e-business . Unfamiliarity with the internet, which is noticeable among the leader has recently caught some attention,as these customers belive that considered as a drawback and become very unwilling in

using online banking (Farshad havasi, 2013) . Jayshree Chavan proposed the challenges of e-banking as :-

- The implementation of world technology for local needs: before the adoption of global technology the developing countries must sufficiently improve their infrastructure and acquiring human expertise. If these are not the case the countries may face serious problem of implementing e-banking.
- Strengthening the public support for e-finance: to find public support cooperative effort from both private and public together with multilateral agencies like the world bank is essential to facilitate public support for e-finance related initiative.
- Before the internet time confidentiality, integrity and authentication are the basic thing for banking industry, insecure channel such as the internet might not be the best ground for bank-client relations as trust might partially be lost .
- The commence of E-banking has created lots of challenges for bank's management and regulatory and supervisory authorities. They initiate not just from accelerated capability for cross border transactions but also for local transaction grounding on technological exercise that raise many security related issues. The most important focal point is how to extend, adapt, and accommodate the existing risk management framework to the electronic banking setting.
- Now a days for many banks, cross border performance provides an opportunity to harvest economies of scale. Of course this cross border finance also require advanced degree of crossborder supervision. Such an alliance may want to prolong to similar supervisory rules and revelation and some coherence of legal accounting prepared to face the result for cross border e-banking.
- The bad side of technological expansion is that electronic banking is not only growing of business, but may create bad situation that is some of the same risks especially governance, legal operational and reputational—essential in manual banking . In addition it presents new challenges. In reply, many local regulators have already stabilized their regulations to accomplish their main objectives: make sure the safety and soundness of local banking system, advertising market discipline and keeping customers rights and the public trust in the banking system (chavan, 2013).

As Bhaskar the key challenge in adoption of e-banking stated (Tewdros, 2011) as follows:

2.1.10.1 Internets and Telecommunication

Absence of infrastructure hinder the development of internet and telecommunication and improvement of e-banking. More than 80 percent of population reside in rural areas of the country, in which mass of small and medium business are condensed without internet facilitation and they are in a difficulty to use banking services like e-banking. (Tewdros, 2011) . Since the entire country wholly relied on only one network called Ethiopian Telcommunication which results the lagged behind e-banking. In shor due to poor infrastructure banks are in difficulty to expand e-banking widely as they expect.

2.1. 10.2 Lack of Suitable Legal and Regulatory Framework

The current law in Ethiopia do not adopt electronic contract and signature, Ethiopia has not yet perform legislation that deal with e-commerce interested in comprehended to strengthen the well grounded of electronic contracts, digital signatures and intellectual copyright and limit the use of encryption technologies.

2.1. 10.3 Political Instabilities in Neighboring Countries

Because neighboring countries such as Somalia, Sudan and Eretria political and economic condition not stable it impede easy business transaction particularly e-banking, and agitate free flow of goods and service.

2.1. 10 .4 High rates of Illiteracy

Level of technological awareness and illiteracy should be considered serious problem for banking sector to provide proper banking especially e-banking because it is highly dependent on technology. Because of this they would not enjoy e-banking and it is a challenge for the bank.

2.1.10.5 Frequent Power Interruptions

Absence of continuous supply of power is also considered as a key challenge for government and also the whole business society. As a result of this industrialization and banking industry faces a serious problem.

2.1.10 .6 Resistance to changes in Technology among customers and staff

1. Shortage of know how about new technology

2. Fear of risk
3. Inefficiency of personnel regarding technology in the organization

2.1.10.7 Cyber Security Issues

Cyber Security issue is worldwide problem so Ethiopia is not exceptional. This global challenge needs global and multidimensional attention with consideration of policy, socio-economic, legal and technological parts. So the bank's customer anticipating protected transaction. Due to this bank should give special attention when they implement e-banking. On the other hand Wondwossen stated that the main challenge of e-payment is assuring its security. When we secure payment via electronic payment we are including the authentication of customer and merchant fence the information which has taken place upon transaction. Furthermore there must be a system which can reduce the discomfort that arises from payment (Wondwossen Tadesse, 2005).

2.1.11 E-banking Risks

2.1.11.1 Strategic risk:-

Before implementing e-banking the banks management should aware the risk that may results from e-banking. Appling poor e-banking planning and decision to invest on it can increase a financial institution's strategic risk. Since e-banking is relatively new service the senior management may be in difficulty to recognize the risk and its potential advantage and its implication. Most of the time in banking industry, it is common to get staffs with technological, but not banking skills. This will result disconnected and gradual growth of the bank .They can be costly and unable to get back their cost. Additionally they considered as loss leaders .They fail to attract more customer which is disadvantage for bank and this is beyond banks expectation. To tackle this risk bank should definitely plan a strategy that supports the effect of e-banking when it is important.

2.1.11.2. Operational risk

It is a risk which resulted from deception, system failure, transaction mistake and other unexpected events which arises from company's capacity to render services or products.

2.1.11.3. Technology risk

This kinds of risk is associated with fail in processing disruption of system flaw in performance inefficient capacity, defective software, exposed network, lack of control, hacking incident, Inefficient recovery ability.

2.1.11.4. Reputational risk

This risk results from customer dissatisfaction. Which is identified when customer complaining on our service or goods. If there is a defect of the goods or services (Jamal, 2011).

2.1.12 .The opportunities of E-banking

E-banking presents tremendous opportunities for banks, thrifts and other financial services institution to basically change their organization (Verlagsgesellschaft, 2001). Jamaluddin (2013) in his survey proposed the opportunities of e-banking as:

- A. IT Networking
- B. System Integration and Management
- C. Customer Relationship Management application
- D. Back Office processing and call center
- E. Data warehousing /Data mining

2.2. Empirical Study of E-banking

2.2.1 Traditional Service Quality vs Electronic Service Quality

Extensive research on traditional SQ has been conducted during the past year. In contrast only a limited number of scholars done directly with how customers measure the e-service quality and its predecessors and result. So it is necessary to overview briefly the relevant aspects of traditional banking service quality and describe the reasons why that research needs to be repeated in the electronic context (Shayan Jahromi, 2011).

2.2.2 Traditional Service Quality

Chavan (2013) in his study stated that by traditional SQ we are referring to the quality of all non internet based customer interactions and experiences with companies. And he also suggested that SQ stems from a comparison of what customers feel a company should offer (i.e their expectation) with the company's actual service performance. By extracting these studies as a starting point Parasuraman, Zeithaml and Berry (1988, 1991) introduced, develop and refine SERVQUAL, a multiple-item instrument to quantify customers global (as contrast transaction-specific) illustrated a company's. They are using five dimensions reliability, responsiveness, assurance, empathy, and tangibles. The SERVQUAL instrument and its implementation have been used for measuring SQ in many proprietary and published studies, From traditional service quality, potentially relevant to defining, conceptualizing perceived e-SQ emerge.

2.2.3 E-Banking

According to TALLA(2013) E-banking is the term used for all types of electronic banking –it is also known as online banking or internet banking.

As Zhabg defines E-banking is, the products, information and services by a bank to its customers (account holders), through a mobile phone, computer, telephone, television, and other social media. The internet banking offered the services to its customer and online facilities are Sign E-cheques, Payment to their clients, cash transfers from one account to another account, apply for bank-drafts, enquiry on account balance, instantaneous accessibility of multiple accounts, Enquiry for various new and upcoming schemes like loan transaction process, account schemes etc. E-banking service provides the various channels through Internet Banking or online banking, pc banking or offline banking, telephone banking, TV-based banking, mobile phone banking and managed network (MUTHUKRISHNAN B., 2013).

Asani (2009-2013) defined E-banking, as it is the spread out of banking services and products over electronic communication networks directly to customers. It is the stipulation of banking service to customers' through internet technology. E-banking has been reported as operative expressway for rendering banking service.

According to Mohammed Shaikh (2014) E-banking is the stipulation of information or services by a bank to its customer through a computer, television, telephone or mobile phone. As it is electronic connection between bank and customers in order to prepare, manage and control financial transaction. On the other hand Sharma mentioned that (Sharm, 2011) E-banking is the term that signifies and encompasses the entire sphere of technology initiative that have taken place in the banking industry. Also he stated that E-banking facilitates new relationships with customer regulatory authorities, suppliers and banking partners with digital-age tools. Fonchamnyo, (2012) illastrated e-banking as the newest delivery of banking services. The definition is different among diferrent researcher due to the fact that electronic banking indicate to various types of service through which the customers of the bank can acquire and carry out much of their baning transaction by using their computer of mobile phone.

As discused previously many scholars have pointed many things about e-banking. Through their study they mentoned the customer satisfaction of e-banking can be measred by using different

dimensions . Almost all researchers and authors believed that good quality dimensions are important factors that affecting customer satisfaction (A.Ismail, 2012).

Previous research work by (Okechi, 2013) introduced that customers of banks' who are used e-banking system repetitively because of its convenient, easy to use, time saving and appropriate for their transaction needs. In addition system security and network security regarding privacy are the major issue. On the other hand Thomas in his study found that secure service is significant factor, preceded by accessibility of the ATM, efficiency, ability to bring about accounts, accuracy of records, ser friendly, and ease of use, complaint satisfaction, accurate transactions and operation in 24 hours.

2.2.4 Service

According to Jonson (2006) service is an intangible activity which should be achieved by the interaction between the service seeker and service provider.

Services have been differentiated from goods in many ways such as they are a process, they are intangible and heterogeneous, they are unable to stock, transfer of ownership is not possible, the consumption and production is simultaneous i.e. customer is participated at the time of service delivery. Since the quality of the service is directly perceived during its production, it is very difficult to measure the service's quality.

2.2.5 SERVICE QUALITY

As stated by Jonson service quality is the difference between the quality of the service perceived by the customer and what the customer expect. Even many researchers define service quality in various ways, the identifying nature is same. The issue of determining the service quality is highly followed after Parasuraman et al's (1988) first adopt the measure of perceived service quality (Ahmed, 2011).

Furthermore for bank's successful performance service quality is expressive influence and this days service quality give due attention because of its clear relationship with costs, financial deed, customer satisfaction, and customer loyalty. As mentioned by Shanmugapriya G, (2004) in order to get customer loyalty bank should increase the quality of service it renders.

Dimensions to measure service quality

Service quality dimension	Definition
Reliability	Involves consistency of performance and dependability
Responsiveness	Willingness or readiness of employees to provide service (timeliness of service, giving prompt service)
Competence	Possession of the required skills and knowledge to perform the service
Access	Approach of ability and ease of contact
Courtesy	Politeness, respect, consideration and friendliness of contact personnel
Communication	Keeping customers informed in language they can understand and listening to them
Credibility	Trustworthiness, believability, honesty, and having the customers' best interests at heart
Security	Freedom from danger, risk and doubt
Understanding/Knowing the customer	Making the effort to understand the customer's needs
Tangibles	Physical evidence of the service

Table 2.6 Dimensions to measure service Quality

Even Parasuraman et al adopt the above ten dimensions, they were reduced to five ones i.e tangibility reliability, responsiveness, assurance and empathy (Ahmed, 2011).

As SERVQUAL does not enfold the E-Banking service quality such as customer-to Web-site relation, and this tool was developed to show customer to employee dealing. In spite of the fact that SERVQUAL is a device to expedient quality has been broadly used and various researcher have tried to contend with key features of service quality.

2.2.6 E-service

E-service is rendering service via internet Jonason P., (2006). On the other hand Ahmed in his study mentioned that it is the extent to which a website facilitates efficient and effective shopping, purchasing and delivering of products and services. Another definition by (Zhang, 2013) e-service is the web based service over the internet which is different from traditional service rendering.

As the service is delivered via internet a challenge is expected to the service provider. E-service is completely changed from traditional service setting. In e-service delivery there is no interaction between the service providers. The customers face the website of the company. So this website decides how the service is provided to customer. This is an opportunity for customer to evaluate what service is rendered and also they can judge how it is offered (Vasya Kenova, 2006).

So the bank should give due attention for their website design, its function is to make sure the ease of use very well. Since the customer will become angry by the performance of our system, and it will forced them to refrain from consistently using the website. Furthermore for the judgment of e-service the type of information loaded is taken as a necessary criterion.

2.2.7 E-services Quality

This days as the need of valuable information and communication technology is escalating, particularly for financial service many researcher have give more attention to study service quality of e-banking service.

According to Jonasson (2006) e-service quality is inclusively customer's appraisal and evaluation of e-service delivery in the virtual market place. On the other hand Ahmed (2011) defines e banking as to encompass all phases of a customer's interactions with a web site: The extent to which site facilitates efficient and effective shopping, purchasing and delivery.

As Mohd stated in his study the definition of e-SQ is the scope to website facilitates efficient and effective buying products and rendering service. His definition includes the practice of customer over his/her electronic purchasing process and embrace pre-website, on website post website service aspects. As a whole e-SQ indicates the consumer general examinations of the quality of e-service quality indicate to the whole consumer evaluation (Shoki, 2013).

According to the research carried out by Amhmed (2011), even if providing high quality e-services is well known by lots of companies, there is problem of clearly defining it. It is also in difficult of differentiating its determinants how to scale it. To summing up e-service quality plays a very important role in the era of information economy with popularity of online banking offering in e-commerce, the necessity to develop the scale for e-service evaluation has been coming to the virtual world.

E-services Quality Dimension

E-service Quality Dimension	Description
Reliability	Involves the correct technical functioning of the site and the accuracy of service promises (delivering when promised) and product information
Responsiveness	Quick response and the ability to get help if there is a problem or question
Access	The ability to get on the site quickly and to reach the company when needed
Flexibility	Choice of ways to pay, ship, buy, search for and return Items
Ease of Navigation	The site contains functions that help customers find what they need without difficulty, possesses a good search engine, and allows the customer to maneuver easily and quickly back and forth through the pages
Efficiency	The site is simple to use, structured properly, requires minimum of information to be input by the customer
Assurance/Trust	The confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells as well as clear and truthful information presented
Security/Privacy	The degree to which the customer believes the site is safe from intrusion and personal information is protected
Price Knowledge	The extent to which the customer can determine shipping price, total price and comparative prices during the shopping process
Site Aesthetics	The appearance of the site
Customization/ Personalization	How much and how easily the site can be tailored to individual customers' preferences, histories and ways of Shopping

Table 2.7 E-service Quality Dimension

2.2.5 E- quality dimensions

As Zeithaml, Parasuraman, and Malhotra's (2000) identified dozens of Web site features at the perceptual attribute level and categorized them into 11 e-SQ dimensions:

1. *Reliability*: Correct technical functioning of the site and the accuracy of service promises (having items in stock, delivering what is ordered, delivering when promised), billing, and product

information. Zaral, found that Reliability is the boundary to which it is available and performing correctly.

2. *Responsiveness*: Quick response and the ability to get help if there is a problem or question.

3. *Access*: Ability to get on the site quickly and to reach the company when needed.

4. *Flexibility*: Choice of ways to pay, ship, by search for, and return items.

5. *Ease of navigation*: Site contains functions that help customers find what they need without difficulty, has good search functionality, and allows the customer to maneuver easily and quickly back and forth through the pages.

6. *Efficiency*: Site is simple to use, structured properly, and requires a minimum of information to be inputted by the customer. In other way Efficiency defines as ability to effectively access the website, get their interesting products and related information, check it out with lowest effort (Zarel, 2010).

7. *Assurance/trust*: Confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells, as well as clear and truthful information presented.

8. *Security/privacy*: Degree to which the customer believes the site is safe from intrusion and personal information is protected. Privacy is also pertaining to the company's will and the competency to keep the rightness of customer data.

9. *Price knowledge*: Extent to which the customer can determine shipping price, total price, and comparative prices during the shopping process.

10. *Site aesthetics*: Appearance of the site.

11. *Customization/personalization*: How much and how easily the site can be tailored to individual customers' preferences, histories, and ways of shopping. The collection of Web site attributes pertaining to these 11 dimensions served as the e-SQ domain from which we drew items for the e-SQ scale.

2.2.6 E-satisfaction

Jing (2013) mentioned in his study satisfaction can be defined as the attitude of the customer that restrain away from unconfirmed expectation together with emotion resulting from previous

experience of customer. We can take satisfaction as an examination of consistent consumption of goods or service. On the other hand e-satisfaction supposed to be a positive sentiment which results from using electronic banking.

Banking through electronic channels has gained increasingly popularity recently. This system, popularly known as e-banking. It is an alternative for faster delivery of banking service to retain a wide range of customers.

From the above mentioned literature review, e-banking can act as complementary towards banking sector. E-banking is a lower-cost delivery channel and a way to increase sales. Internet banking service lies in the increased retention of highly valued customer segments. With the help of e-banking the country can create opportunity as this will help both banks and customer.

2.3 Conceptual Framework

The conceptual framework (Figure one) explains the underlying process, which is applied to guide this study. The eight Service Dimensions of E-SERVQUAL determine to what extent a given service is in line with its customers expectation and perception. These dimensions are the launching pad to study the quality of a service. To what extent efficient a given service is, how the bank fulfills its promises, assurance/trust, system availability, privacy, responsiveness and contact are a critical issue in the effort to address the Quality of Services. Efficiency, fulfillment, system availability, privacy, site aesthetics, responsiveness and contact are the eight dimensions of E-SERVQUAL used to measure the service quality. The researcher modified and used the framework developed by Parasuraman et al (1988) and related it with E-BANKING service quality study.

Efficiency: Site is simple to use, structured properly, and requires a minimum of information to be input by the customer.

Fulfillment: fulfillment incorporates accuracy of service promises, having product in stock, and delivering the product in the promised time.

System Availability/Reliability: Involves the correct technical functioning of the site

Privacy/Security: Degree to which the customer believes the site is safe from intrusion and personal information is protected.

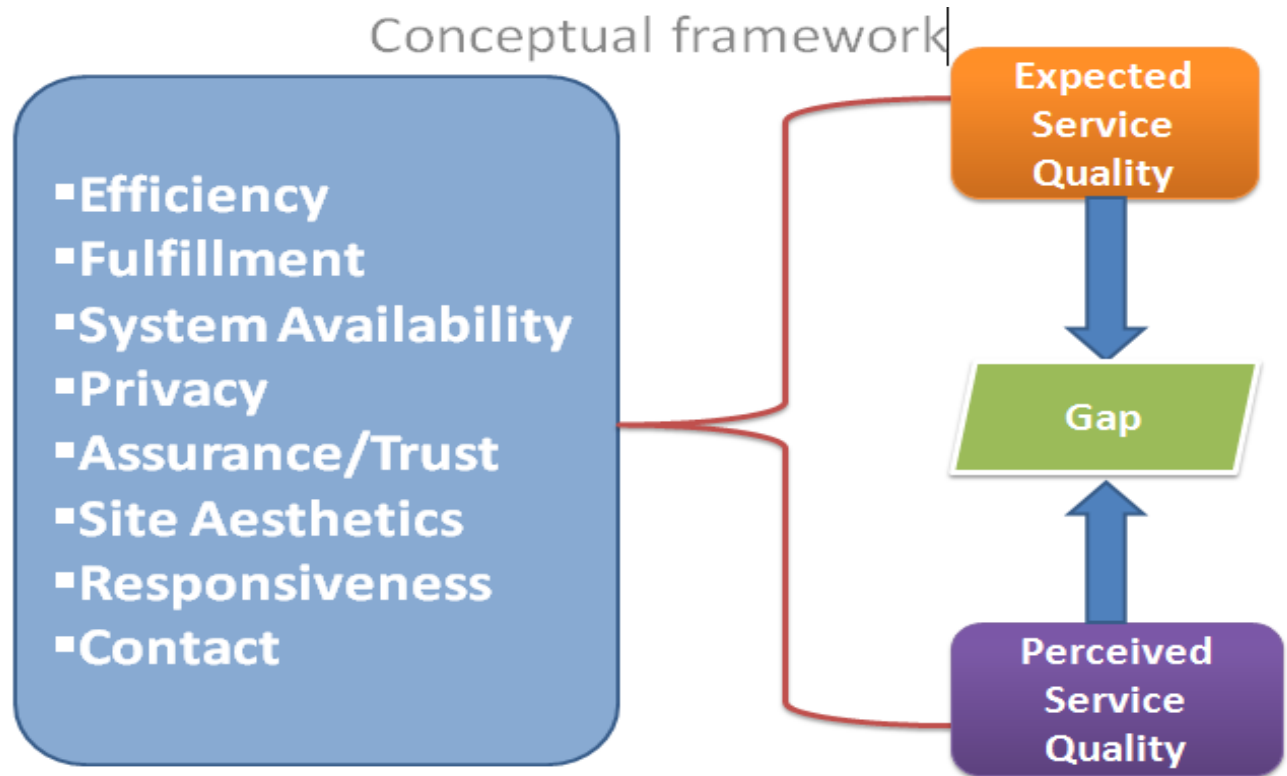
Assurance/Trust: Confidence the customer feels in dealing with the site and is due to the reputation of the site and is due to the reputation of the site and the products or services it sells, as well as clear and truthful information presented.

Contact: this dimension of the recovery e-Servqual scale point to the need of customers to be able to speak to a live customer agent online or through the phone. It means requiring seamless multiple channel capabilities on the part of tailor.

Responsiveness: has to do with the bank willingness to help users and provide prompt service. Responsiveness defined as the willingness or readiness of employees to provide service. It involves timeliness of services and it involves understanding needs and wants of the e-banking users, safety in their transact area.

Site aesthetics: The appearance of the site

Figure 2.8 Conceptual Frame Work



Chapter 3

RESEARCH DESIGN AND METHODOLOGY

This research has been conducted to assess the status of the quality of e- delivery of the Commercial Bank of Ethiopia. The research is descriptive and has utilized the GAP e- quality Model and its famous instrument E-SERVIQUAL (questionnaire) developed by the scholars Parasuraman, Zeithaml & Berry (1988), to compare e-banking users' perceptions against their expectations in banking industry.

3.1 Research Design

Descriptive research design has been implemented to conduct the study. Through this approach, using the E-SERVQUAL questionnaire, it has been possible to collect data primarily from e-banking users regarding their expectation and perception of the e- quality in the Commercial Bank of Ethiopia E-banking service. Management and staff of e-payment Department was approached and asked about their understanding and perception of the e-banking service and data is collected via interview.

Beside demographic questions, e-banking users are asked to answer 22 expectations against 22 perceptions. In addition to this, eight dimensions of e-quality i.e. efficiency, fulfillment, responsiveness, system availability, privacy, aesthetics, responsiveness and contact are articulated against the bank's performance.

So as to get a comprehensive picture of e-quality in Commercial Bank of Ethiopia, e-quality survey questionnaires have been distributed to e-banking users of the Bank. An interview with the management of the e-payment Department is conducted as well. The e-quality measurement via the gap model has also been compared against the e- performance measures of the Bank to ensure an all rounded meaningful survey result. Eventually, recommendations on what needs to be done to improve the quality of the e- have been identified through the research are presented.

3.2 Research Approach

For the underlying study the researcher has chosen mixed approach that is both qualitative approach and quantitative approach have been used in order to accomplish the study. Qualitative

research is concerned with exploring a deeper understanding of social phenomenon. Qualitative research is defined as a form of systematic empirical inquiry into meaning. (Zhang, 2013)

Qualitative research emphasis the process and meaning that are not rigorously examined or measured, in term of quantity, amount of intensity or frequency (Baraghani, 2008).

Quantitative research methods were originally developed in the natural sciences to research methods has been developed in the social sciences to enable researchers to study social and cultural phenomena.

3.3 Research Strategy

The most important condition for differentiating among various research strategies is to identify the research question being asked. There are five main research strategies to use when collecting and analyzing empirical evidences: Experiment, Survey, Archival analysis, History and case study.

The research strategy depends on characteristics of the stated research question. The main goal of this study is to measure customers' satisfaction of electronic banking from customers point of view, the study focuses on contemporary event, does not require control over behavioral events and the research question of this study is in form of what so the most appropriate strategy is survey.

3.4 Sampling

The target population is customers of Commercial Bank of Ethiopia who are e-banking users. As far as sampling technique is concerned, the researcher has been using convenience sampling. So as to minimize variations attribute to any not pertinent factors in evaluating the gap between the e-banking users' expectation and their actual perception. Convenience Sampling is one of the non probability sampling methods which involve select sample members who can provide required information and who are more available to participate in the study. In general the samples are being selected from part of the population which is close to hand. It is cost effective and it has been used in many information systems study. The population of interest was defined as group of Commercial Bank of Ethiopia customers who are e-banking users. The researcher limited the sample, so data collection was conducted in five branches of Commercial Bank of Ethiopia located

in Addis Ababa. The five branches are selected based on their volume of transaction and access convenience.

E-banking users are selected using convenience sampling method. Hence, a total of 65 questionnaires have been distributed, Out of these, 60 questionnaires were distributed for e-banking users and five questionnaires for e-payment department staffs. So as to minimize the possibility of not filling and return on the limited time, convenience sampling has been chosen by researcher and able to communicate with e-banking users to confirm whether they are willing to fill the questionnaire. Based on this strategy it has been possible to collect 52 questionnaires out of the 65. From this, one can understand that the response rate 00% has been achieved. Among the distributed questionnaires, 5 were not returned. Following the distribution of questionnaire to the selected e-banking users, one manager and one expert from the e-payment department were approached to conduct interview and all of the interviewee were able to respond well and timely. The interview conducted was structured. The interviewees were pre-informed before they were approached by the interviewer. These interviewees were selected judgmentally considering that they have information about the satisfaction of customer's. These are people who are highly involved in facilitating the e-payment. They are also the one who usually handle grievances and complains against the service of e-payment, when it occurs.

3.5 Questionnaire

After intensive literature review questionnaire was developed. The questionnaire consists of two sections. The first section gathers general information about the respondent. In order to achieve better and fair result through the analysis, the researcher has tried her best to have all possible representatives in terms of gender, age and other demographic background information have been incorporated and the detail of the procedure is as follows:-

E-banking users are selected using convenience sampling method. So as to minimize the possibility of not filling and return on the limited time, convenience sampling has been chosen by researcher and able to communicate with users to confirm whether they are willing to fill the questionnaire. The questionnaire model was derived from E-SERVQUAL instrument which comprises about 22 question items that are concentrating around service quality dimensions of efficiency, fulfillment, system availability, responsiveness, privacy, aesthetics and contract. The questionnaires first pages are used to capture general demographic information which is followed

by subsequent pages consisting of 22 pairs of expectation against perception items. The questions are designed to entertain users' expectations vis a vis their actual experience or perceptions in relation to the quality of e-banking in Commercial Bank of Ethiopia.

3.6 Data Collection

For the purpose of the study, the researcher has decided to collect primary and secondary data. Primary data include data via a survey with customers of e-banking service was used as data collection method. Data collection was conducted in five branches of Commercial Bank of Ethiopia located at Addis Ababa. Users were provided Likert Scale rating options, '5' 'strongly disagree' to express their extreme disappointment or extremely unsatisfied by the service being provided and '1' 'Strongly agree' to witness the Bank is providing its e- at extremely best standard. One page in the questionnaire is devoted to evaluate and rank the e- in conformity with the E-SERVQUAL service quality features. The last page of the questionnaire is dedicated to entertain users open ended comments. These comments are not an integral part of the E-SERVQUAL questionnaire items. The researcher incorporate this comment page to give a chance to e-banking users to discuss comments which are not addressed by the E-SERVQUAL items provided.

3.7 Data Analysis

Results collected from e-banking uses are presented in a table form. Tables produced and presented hereunder demonstrate profile and responses of individual respondents. Charts as well are presented so as to make clear the analysis. Each question in the tables has been analyzed thoroughly and appropriately. Collected data was analyzed using the statistical tools- Statistical Package for Social Science (SPSS) Version 20 and Microsoft Excel 2007 version. The statistical measures applied are mainly: mean standard deviation and coefficient of variation. To measure service quality of the e-banking users' data was analyzed using SPSS and calculations are applied as the methodology of the E-SERVQUAL demands. Standard errors of the sampling distribution of mean expectations and perceptions and gaps have been analyzed to control the level of quality of processed data. As far as dependency is concerned, demographic variables are independent one and the expectations and perceptions of the e-banking users are dependent variable. What is most significant with regard to this e- service quality analysis is that the Commercial Bank of Ethiopia Management can use the feedback to deliver its e- at best.

For organizations that are providing service, using E-SERVQUAL is a good instrument to evaluate their customers' expectations against their practical perception. Therefore, using the E-SERVQUAL would fit best so as to measure e- quality in terms of the selected service quality dimension such as efficiency, fulfillment, system availability, privacy, Responsiveness, aesthetics and contract.

For each dimension of e- quality aforesaid, E-SERVQUAL measures both the expectation and perception of the e-banking service on a scale of 1 to 5, for the 22 questions forwarded. The score for each dimension is multiplied by the respective weight given to each question. Following this, the Gap Score for each dimension is calculated by subtracting the Expectation score from the Perception score. A negative Gap score indicates that the actual service (the Perceived score) was less than what was expected (the Expectation score).

The Gap score is a reliable indication of each of the eight dimensions of e- quality. Using E-SERVQUAL, service providers can obtain an indication of the level of quality of their service provision, and highlight areas requiring improvement. To put it in terms of mathematical equation, $Gap = user\ perception - user\ expectation$. In relation with this, various calculations have been done. An average Gap score is calculated by summing up each Gap obtained and dividing it to the total number of Gaps. An average E-SERVQUAL score is obtained by dividing total score to eight.

3.8 Validity and Reliability

The e-SQ dimensions of this study was adapted and modified based on E-SERVQUAL developed by Parasuraman et al. that can be classified into two scales; E-S-QUAL or core scale, and e-RecS-QUAL or recovery scale. The four dimensions of E-S-QUAL used were efficiency, fulfillment, system availability and privacy and security with 22 items. For RecS-QUAL, two dimensions used were responsiveness and contact with eight items. As all questions are extracted from approved e-servqual model, the results of the data in this research were reliable and valid for further analysis and from the reliability statistics the Cronbach's Alpha shows .936. Accordingly the e-servqual scale is regarded as reliable measurement for E-banking Service Quality in CBE

Cronbach's Alpha	N of Items
.936	11

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION, AND PRESENTATION

In the study statistical analyses have been made by the researcher to present general information of respondents and the results obtained. The scores obtained from the respondents are based on each respondent's expectation and perception items and service dimensions. What follows this is the discussion of implications of the scores obtained

4.1 Demographic Information of the Respondents

Following, descriptive analysis of demographic data of the E-BANKING users collected using the questionnaire is conducted. This analysis shows the makeup of the respondents in terms of educational level, gender, which E-Banking channels mostly used, occupation and frequency of using E-banking channel. More specifically the analysis, in this part of the questionnaire shows which is utilizing E-BANKING service.

As far as the distribution of the respondents of the E-BANKING in terms of sex is concerned, out of 52 respondents 10(19.2%) are happened to be female and the remaining 41(78.8%) are men. From this we can learn that majority of e-banking users are male. The number of men users is four times that of women's. Such a huge gap, even though not the aim of this study needs a considerable attention so as to narrow the gap.

Table 4.1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	41	78.8	80.4	80.4
	Female	10	19.2	19.6	100.0
	Total	51	98.1	100.0	
Missing	System	1	1.9		
Total		52	100.0		

Table 4.2: Academic level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than High school	2	3.8	3.9	3.9
	High school	6	11.5	11.8	15.7
	First Degree	36	69.2	70.6	86.3
	Masters	7	13.5	13.7	100.0
	Total	51	98.1	100.0	
Missing	System	1	1.9		
Total		52	100.0		

When we see the distribution of respondents (Table4.2) in terms of academic level, the higher number of users of the E-BANKING is First Degree holder followed by masters and high school students. This indicates that e-banking is very popular with users having higher education background.

Table 4.3 E-banking Channels

The information taken from the users of the E-BANKING which E-Banking channels mostly used,		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ATM (Automated Teller Machine)	28	53.8	54.9	54.9
	POS (Point Of Sale)	3	5.8	5.9	60.8
	ATM (Automated Teller Machine) & Mobile Banking (MB)	6	11.5	11.8	72.5
	ATM (Automated Teller Machine) & POS (Point Of Sale)	5	9.6	9.8	82.4
	ATM (Automated Teller Machine), Mobile Banking (MB)	9	17.3	17.6	100.0
	Total	51	98.1	100.0	
Missing	System	1	1.9		
Total		52	100.0		

From Table 4.3 it is clear that most frequently used channel of E-banking is ATM (Automated Teller Machine)i.e. it has 53.8% from the total users. By this the researcher recommends that the management should give due attention to solve problems related to ATM. And also identify the other channels problem to know why customers are not used the other channels.

Table 4.4 Frequency of usage of E-banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	18	34.6	35.3	35.3
	Weekly	21	40.4	41.2	76.5
	Monthly	12	23.1	23.5	100.0
	Total	51	98.1	100.0	
Missing	System	1	1.9		
Total		52	100.0		

With regard to the question how often users of the E-BANKING visit to CBE E-BANKING channel, as shown in table 4.4 21(40.4%) of them responded they come weekly, 18(34.6%) respondents daily, 12(23.1%) monthly.

4.2 The E-SERVQUAL Score

This section of the research covered the analysis and presentation of the E-SERVQUAL result obtained from respondents via the questionnaire. Results and their computation are presented hereunder. The researcher evaluated the result of mean expectation and perception in line with E-S-QUAL model proposed by A.Parasuraman, Valarie A.Zeithaml service quality level.

4.2.1 The Mean Expectation, Perception and GAP Scores

Table 4.5 below presents the perception statements based on the E-SERVQUAL used to measure E-BANKING service quality in CBE and their respective mean expectation, perception and gap scores. The expectation (E) and perception (P) scores are the averages for each question for 52 E-BANKING users. The GAP score (the difference between expectation and perception) for each statement calculated by using the formula $(P-E=G)$ where G stands for gap.

The highest possible score for the mean expectation and perception is 4.2 and 2.73 respectively the lowest is 3.63 and 2.19 respectively; thus the results of the GAP score for each question lies between .57 and 0.54, each result being the lowest and the highest respectively. Results with equal gap score of -.03 shows that service has not met expectation or the E-BANKING has not fully acceptable service level; while results above 0 (positive) shows that service performance is more than E-BANKING users' expectation and results below 0 (negative), shows that service performance has not met expectation.

In other words, the maximum area where E-BANKING users expected more service quality and end up with less performance areas, where the gap is wide, are those services related with the E-BANKING's contact, fulfillment and site aesthetic. With regard to giving high expectation weight for services areas, E-BANKING's privacy, efficiency, system availability and responsiveness of the E-BANKING service showed great service quality expectations. Thus E-BANKING users' expectations of service have not been matched appropriately with perceptions of experienced service in all aspects of service delivery. In other words, with regard to keeping the expected level of service quality, in most statements in the table provided, E-BANKING users' expectation doesn't reconcile with their practical experience of the service. So E-BANKING service quality of CBE needs to measure its services so as to meet the expected level.

Table 4.5 Mean expectation and perception Gap

Description	Mean Perception	Mean Expectation	Gap
I am able to get on site quickly	2.48	3.92	-1
It is easy to find what I need on the website	2.40	3.82	-1
It is quick to complete a transaction through the bank's website	2.30	3.70	-1
Using the bank's website does not require a lot of effort	2.51	3.78	-1
The CBE'S online content is easy to follow	2.55	4.04	-1
When CBE promises to do something by a certain time, it does so	2.27	3.63	-1
My online transactions with CBE are always accurate	2.40	4.04	-2
The service delivered through CBE's website is quick	2.36	3.90	-2
CBE's site makes accurate promises about the services being delivered.	2.54	3.90	-1
The site is always available for business	2.19	3.65	-1
This site launches and runs right away	2.24	3.75	-2
CBE does not misuse may personal information	2.73	3.94	-1
I feel safe in my transactions with CBE	2.57	4.00	-1
I have confidence in CBE's service	2.61	4.22	-2
The name CBE is well known and has good reputation	2.61	4.14	-2
The website design is aesthetically attractive	2.46	3.75	-1
CBE gives prompt responses to my requests by e-mail or other means	2.35	3.65	-1
CBE quickly resolves problems I encounter with my online transaction	2.21	3.67	-1
CBE is easily accessible by telephone	2.52	3.77	-1

4.2.2 Measures of Variations in E-BANKING users 'Expectation and Perception Scores

Table 4.6 shows variation in e-banking users' Mean Expectation, Mean Perception and their respective standard Deviation and variance.

Table 4.6 variations in e-banking

	Mean Expectation	Mean Perception	Standard Deviation		Variance	
			Expectation	Perception	Expectation	Perception
I am able to get on site quickly	3.9	2.5	0.8	1.4	0.8	1.7
It is easy to find what I need on the website	3.8	2.4	0.8	1.2	1.0	1.6
It is quick to complete a transaction through the bank's website	3.7	2.3	0.9	1.3	1.2	1.2
Using the bank's website does not require a lot of effort	3.8	2.5	0.8	1.3	0.9	1.4
The CBE'S online content is easy to follow	4.0	2.6	1.0	1.3	0.6	1.8
When CBE promises to do something by a certain time, it does so	3.6	2.3	0.8	1.2	1.0	1.4
My online transactions with CBE are always accurate	3.6	2.4	0.9	1.1	0.8	1.3
The service delivered through CBE's website is quick	4.0	2.4	0.8	1.2	0.7	1.2
CBE's site makes accurate promises about the services being delivered.	3.9	2.5	1.0	1.3	1.0	1.4
The site is always available for business	3.9	2.2	1.0	1.1	0.9	1.6
This site launches and runs right away	3.6	2.2	0.9	1.3	1.0	1.5
CBE does not misuse my personal information	3.7	2.7	1.2	1.2	0.7	1.8
I feel safe in my transactions with CBE	3.9	2.6	1.0	1.1	1.0	1.8
I have confidence in CBE's service	4.0	2.6	1.0	1.1	0.7	1.6
The name CBE is well known and has good reputation	4.2	2.6	1.1	1.1	0.7	1.5
The website design is aesthetically attractive	4.1	2.6	1.0	1.2	1.0	1.2
CBE gives prompt responses to my requests by e-mail or other means	3.8	2.5	1.0	1.2	1.1	1.1
CBE quickly resolves problems I encounter with my online transaction	3.7	2.3	0.9	0.9	1.1	0.9
CBE is easily accessible by telephone	3.7	2.2	1.0	1.3	1.5	1.3

As shown in the Table 4.6 above, the highest level of variation in answers for perception is 1.8 for item number 8,12,13(8,12,13 row of the table) which is about e-banking users, while the variation in answers are on average 1.05 and 5.73 for expectations and perceptions respectively. This shows that the degrees of variation in e-banking users' answers for perception are by far higher than that of expectation for each questions projected in the questionnaire. In other words the degree of variation in respondents' expectation is less than that of their perceptions. Almost their expectation in all area of the service is vary from one another and their corresponding perception showed wide variations.

4.2.3 The Ranking of Mean Expectation, Perception and GAP Scores

As far as rendering services is concerned, identifying a portion of a service on which clients/customer have high level of expectation would help the service provider to give attention in that part of the service. In the same token, identifying these areas, for CBE's E-banking service is a critical task. As it can be clearly observed from the table above, Table 4.6, E-banking users give various points for their expectation. Among those points, privacy', scored the highest (4.22 out of 8); efficiency scored the next highest (4.14) followed by system availability of the banks (4.04), assurance/trust (4.00), and fulfillment (3.9).

On the other hand, when we see the maximum perception achieved by respondents; we should examine it by comparing with its respective expectation projected. Since the gap between the expectation and perception is wide, the service is not as expected. In other words the perceived is less than expected. Hence, the maximum rank (where drawn perception is less than the expected) is observed in the privacy of CBE e-banking service concerned. In all aspects of dimension perception is less than expectation.

4.2.4 The E-SERVQUAL Score for the Eight Service Dimensions and their Rankings

Measuring and tabulating the result of service dimensions would assist decisions makers in identifying and concentrating on a given service dimension as to its priority. By doing so they can resort and deploy their resources to improve the service that is sensitive and demand high concern. The more managers know about a specific service dimension, the better they would be in a position to prioritize and decide accordingly. Pertinent to this respondents' feedback is summarized in Table 4.7

Table 4.7 ranking the dimension

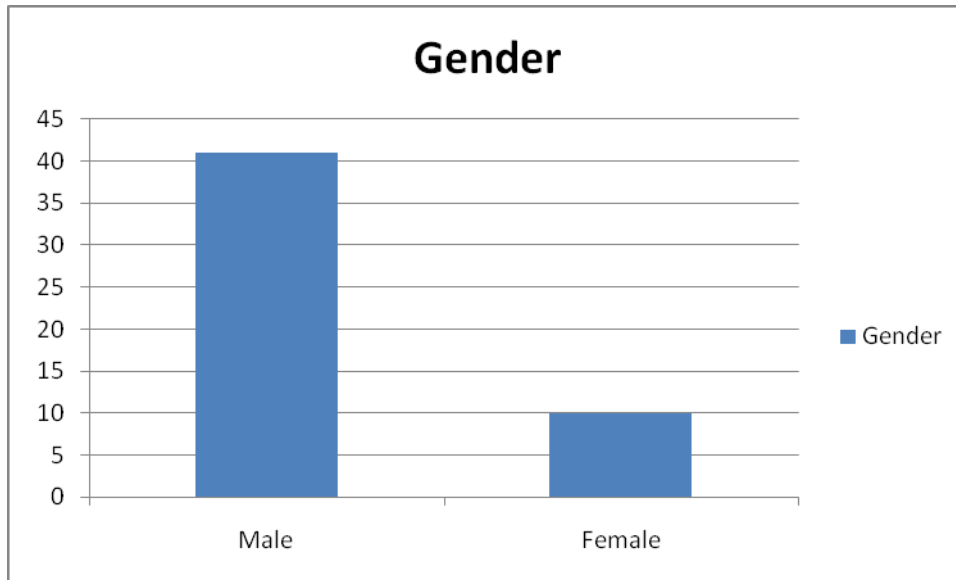
Analyze the data in terms of dimensions of E-Servequal	Mean Weight	Rank
Privacy_ The degree to which the site is safe and protects customer information	22	1
Efficiency_ The ease and speed of accessing and using the website	20	2
System Availability_ The correct technical functioning of the site	17	3
Assurance/Trust_ The confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells as well as clear and truthful information	10	4
Site Aesthetics_ The appearance of the site	9	5
Responsiveness_ Effective handling of problems and returns through the site	8	6
Fulfillment_ The extent to which the site's promises about order delivery and item availability are fulfillment	8	7
Contact_ The availability of assistance through telephone or online representatives.	7	8

To evaluate the above eight dimensions CBE E-banking service users were asked to rank each dimension out of 100%. They responded as it is depicted in the above Table 4.7. To examine relatively, respondents gave more weight to **privacy** service dimension. In other words, they have more concern on the privacy of the E-banking as they need it to be private for security and safety purpose. To sum up for most respondent if privacy failed they will definitely leave the bank. So privacy issue is the most important to use e-banking. This indicates that customers want safe environment to use e-banking. The second concern of respondents is **Efficiency**, which deals with the ease of use and the speed of accessing and using the website. This would send signal to Banks managers to give emphasis to these service dimensions.

Despite the fact that respondents seem to give more weight for Privacy, the overall result shows there is a very high difference between the services dimensions observed. It is possible to say that respondents weigh each service dimensions differently. Score of service quality based on the average of the scores of the eight dimensions is 12.63.

4.2.6 The E-SERVQUAL Average Means Expectation by Gender

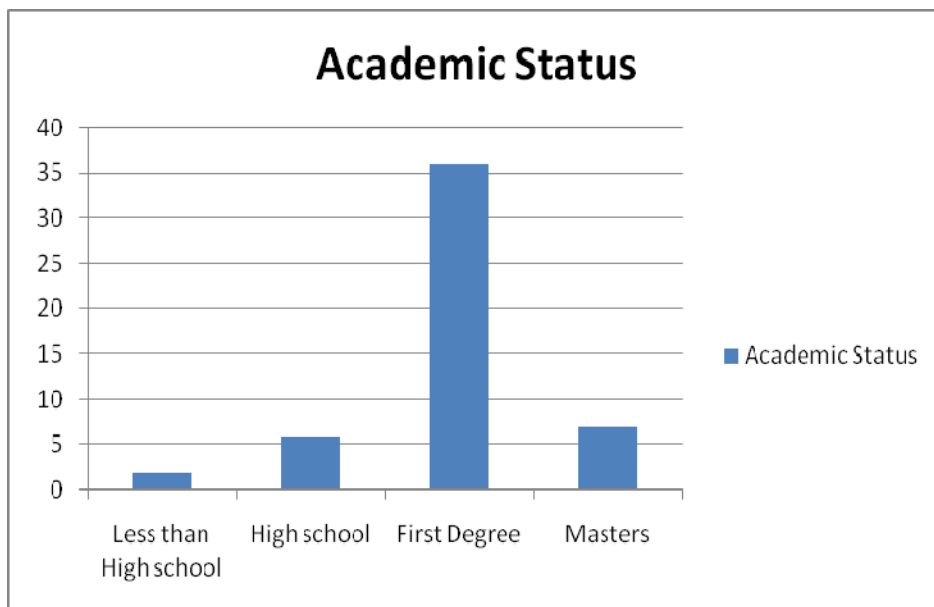
Figure 4.1



As it is depicted in Figure 4.1, the expectation of users by gender showed that males expect the E-BANKING service more than that of females' as a result the gap between males' expectation and perception is higher. In order to narrow the gap the bank should encourage female user.

4.2.7 The E-SERVQUAL Average Means Expectation by Academic Level

Table 4.2

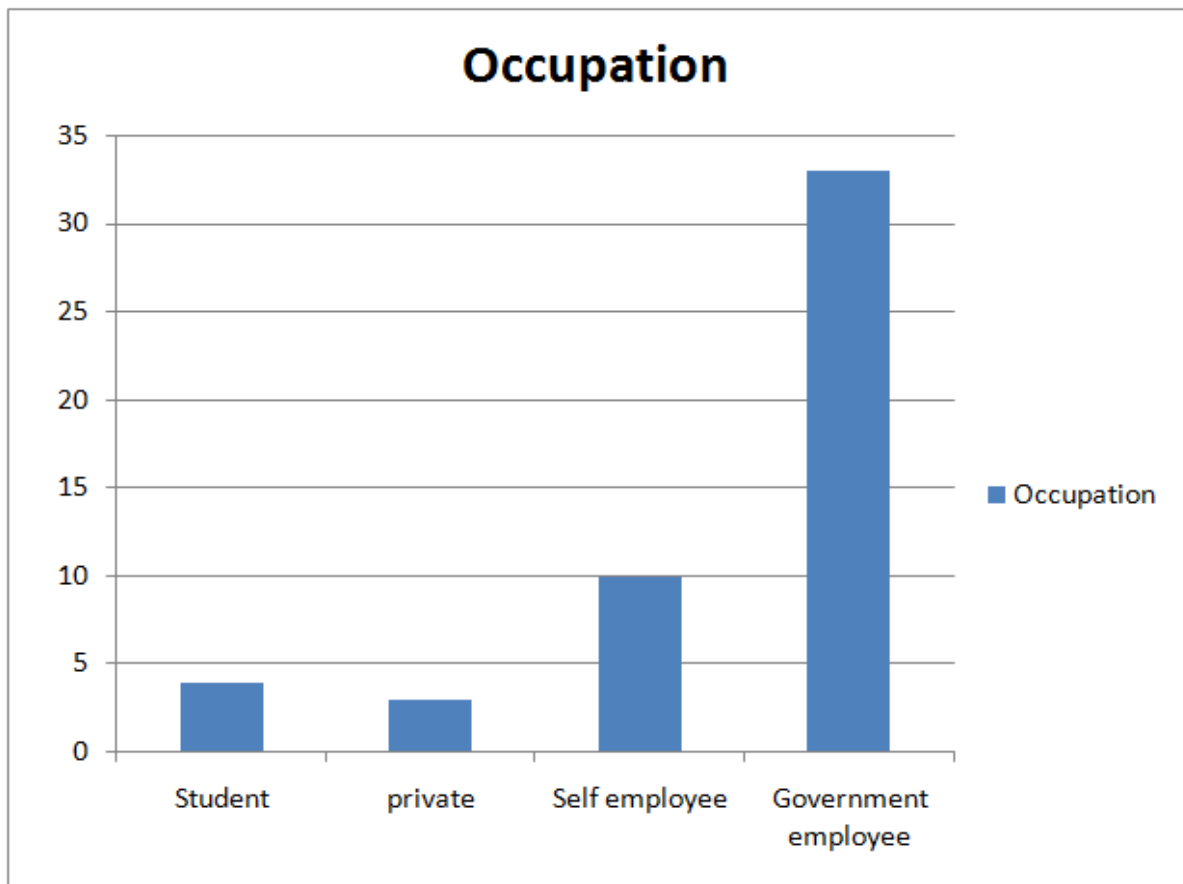


Users of the CBE E-BANKING would expect the service more as their academic level is high. First degree holders are more user of the service than the rest of the respondents.

With regard to perception of the quality of the service, despite ranked less than expected, still 4.2 perception is high while 2.2 is low. The more one gets highest level of education his/her perception and expectation for action would be seen from different angles.

4.2.8 The E-SERVQUAL Average Means Expectation by Occupation

Table 4.3



From the above figure one can learnt that e-banking service are very popular with user who are employees of different government organization. The bank should work hard to create awareness for employees are who working other than government organization.

4.2.9 CBE E-payment Managers Interview and customers comment

The researcher approached the e-payment department management staffs and conducted pre-planned interview. They were asked whether the bank's e-banking system is as to E-servqaul

dimensions item requirements. As per Ato Mintesinot Seyoum, manager mobile banking and Internet banking, the main challenge of e-banking are two: Awareness related problem and Connectivity problem. He suggested that it is necessary to work on creating general awareness and training for branch and call center staff - Frontline staff is critical to driving mobile banking adoption. They should know the service very well before selling it to customers. Therefore, training should be arranged to the staff.

On the other hand, Woy. Mahlate Expert of POS (Point of Sale) in e-payment admitted that to the merchants side there is a doubt of settlement after transaction and she recommend that some sort of motivation instrument must be in place. Although the response from the customers comment is not high, it is still helpful to learn more from the users' perception and expectation. Regarding the 1st respondent stated that it is better for the bank if it establishes customer feedback system for e-banking service quality to that the real needs of customers could be learnt and updated by time. Regarding the 2nd comment which was deals with system efficiency and said: The bank should go in the high way and most of the customer satisfied means nature of service by the service but it is better to increase the quality and delivery of the system in order to improve the service. Besides the dimension items forwarded, respondents asked to give their general comment about e-banking service quality. Accordingly they responded the following comments: about the reliability of the system stated as now a day the e-banking is in a good progress in CBE but some technical issues are not deny as a result many customer including me forwarding many complain, as a result CBE should modify it e-banking procedures and other related activities The other comment is about the speed of the system like: I think the visa card is not fast then please make it fast because the customer is not comfortable without ATM About the network one respondent said Sometime there is network problem should be solved. The other said about system down as some time the system is down they have problem of network for the other services are good by Ethiopian standard. I will advise you to continue new things. The other said: The topic that you choose to me is the hottest issue for many people and the bank, the customer likes it and hopefully this survey will be a good reference for many users. About continues system failures one respondent said as: Frequent failure of machines or system. Getting transaction conflict on there and getting support 24/7 are more problem in E-banking at CBE. One respondent said CBE should extend more and more e-banking as well as other services to be well competent enough in this competitive environment to stay with its good name and confidence with its customers. In addition to this CBE have the employees that

can able to go with the dynamic technology in order to serve the customer properly and adequately. About the cost effectiveness of E-banking CBE plans are not done according to the procedures; sometime tasks are done without plan and procedure. E-banking system are much more cost effective i.e the quality of e-banking and the service that is provided are not equal for instance most ATM machines are unworkable for some branches so it needs more thinking

CHAPTER FIVE

FINDINGS, CONCLUSION, AND RECOMMENDATIONS

Finding of the Study

The findings of the service quality using E-SERVQUAL are summarized in terms of E-SERVQUAL Scores and their relations with demographic variables in the following manner:

- This research showed that the CBE E-banking Service users' perception is different from their expectation. There is difference in the weighted mean of Perception of the CBE E-banking Service users against their Expectation. The negative result is obtained due to the fact that E-banking Service users expect more service quality than they really perceived. In other way, users of the E-banking Service demanded more service quality and this don't fit with their real experience. The difference between perception and expectation of all E-SERVQUAL statements is negative.
- The observed high point of mean expectation is between 4.22 and 3.63 while the observed high point of the mean perception is between 2.73 and 2.19. On the other hand, the difference between individual's perception and expectation is high in all cases.
- With regard to the expectation and perception of CBE E-banking users in terms of gender, male and female. They do also have different perception of quality of services in the bank.
- Concerning the eight service dimensions, users of the e-banking service ranked the weight of each service dimension in related to their usefulness for them. Accordingly, users gave high priority to **Privacy** (The degree to which the customer believes the site is safe). The second important dimension for users of the E-Banking is **Efficiency** (to use, structured properly, and requires a minimum of information to be inputted by the customer). This shows that users are more concerned about the safety of transacting using electronic banking. The others have the subsequent rank from **system availability** (Involves the correct technical functioning of the site) to **Assurance/Trust** (The confidence the customer feels in dealing with the site). **Service quality** shortfalls have been the concern of this research. To explore the scenario, major aspects of service quality dimensions of CBE E-banking service has been measures objectively using the E-SERVQUAL instrument; and results have revealed gaps that contribute to poor quality of service as perceived by users of the e-banking Consequently, in line with the objectives of this research outlined earlier and based

on the findings in the preceding section, the conclusion is drawn concerning the service quality of CBE e-banking service.

5.2 Conclusion

Service quality shortfalls have been the concern of this research. To explore the scenario, major aspects of service quality dimensions of CBE e-banking service quality has been measured objectively using the E-SERVQUAL instrument; and results have revealed gaps that contribute to poor quality of service as perceived by users of the e-banking. Consequently, in line with the objectives of this research outlined earlier and based on the findings in the preceding section, the conclusion is drawn concerning the service quality of CBE e-banking service quality.

Despite the fact that the discrepancies (Gaps) between the expectations and perceptions of the CBE e-banking service users on the quality of the service is very close to zero, still it doesn't fulfill what users expect from. CBE e-banking service users' expectation is much more and demanding high level of service quality. As it can be seen from this research, the CBE e-banking service quality would exhibit poor quality if it is not corrected at this stage. Specifically, in service areas such as privacy, efficiency, and trust the difference between respondents' perception and expectation is relatively high. Hence they need the management's immediate attention and intervention.

This research paper is not comprehensive and complete due to various challenges: due to time constraint, the administrative aspect of the E-Banking service, as to how to get, who can get the service, is not included; what specific collections exactly available at what level, was not approached and was one of the challenges as well. These and other unspecified problems demand further investigation of interested researchers.

5.3 Recommendation

It is clear that e-banking service increases CBE's outreach and its profitability on top of bringing convenience to customers. The following recommendations are made in order to enhance e-banking service quality and also increase usage rate among users of the service.

- Commercial Bank should always make sure the system availability. In this connection it must also be certain that there is an easy system of receiving feedback, in case the system is down specifically in ATM system where high level of complaint is turned out.
- The bank must work with stakeholders such as Ethio-telecom, Ethiopian power authority to rectify system availability problem. It must also examine and bring solution to intra

problems such as unable to replenish the necessary amount of money on ATM machines all the time.

- CBE must improve the utilization of POS machines in various in market centers and business areas by devising different strategies such as providing incentives for merchants as it did it for its customers.
- CBE need to launch aggressive and intensive awareness creation campaigns against e-banking specifically mobile banking.
- CBE must highly consider its customers privacy and in line with this the location of ATM machines must be in area where users feel secured and comfortable. So as to maintain its customers trust CBE must make sure that the system is as to the standard of assurance/Trust of E-SERVQUAL model. The reliability of the system transaction must be kept all the time.
- Frequency service interruption due to poor connectivity should also be given due attention.

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E-SERVICE QUALITY SURVEY

Questionnaire

General Instruction

This Questionnaire is designed to gather relevant data on e-service quality of electronic banking from the users of e-banking of Commercial Bank of Ethiopia. The information is required for academic research purpose. Your response is kept confidential E-banking users' genuine response is very important because they will make the analysis more realistic. The questionnaire has the following sections.

- The first section consists of general demographic questions.
- The second section consists of questions designed to ascertain the quality of service that e-banking users expect from the banks electronic service.
- The third section is intended to rank the importance of eight e-service quality features
- The fourth section comprises questions that are designed to capture e-banking users' perceptions of the quality of e-service they actually received from the bank.

Finally E-banking users can give any other personal comment which has not been addressed by the questions in the blank space provided.

Please go through all questions in all four sections and give answers to all. Please note that this questionnaire is anonymous.

Thank you for your time and cooperation!!

I. E-SERVICE QUALITY QUESTIONNAIR

Dear respondent, this questionnaire is designed to gather relevant data on e-service quality of Commercial Bank of Ethiopia .The information is required for academic research purpose; you are therefore, kindly requested to respond to the subsequent questions with genuine and independent mind. This will make the analysis more realistic and useful. Please note that you are not required to write your name.

Thank you for your time and cooperation!!

- Please give your answers by marking 'X' in the box provided.
- For question no.'5' you can mark more than one.

General information

1. Gender : Male Female

2. How often do use the e-banking channels?

Daily Weekly Monthly

3. Level of Education :

Less than High school High school

First Degree Masters PhD

4. Occupation : Student private

Self employee Government employee

5. Which E-banking channels do you mostly use?

ATM (Automated Teller Machine)

Mobile Banking (MB)

POS (Point Of Sale)

Thank you for your time and cooperation!!

II. E-banking users' expectation

N.B.: Below are lists of statement describing **Expected** e-service quality (What you did expect). Please show the extent to which the statements reflect your expectation of e-service in commercial Bank of Ethiopia by putting (✓) of your choice. The numbers indicate the following: 5=I strongly disagree (SDA) 4=I disagree (DA) 3= I am neutral (N) 2= I agree (A) 1=I strongly agree (SA)

No	Expectation statement	5	4	3	2	1
	<i>Efficiency</i>					
1	I am able to get on site quickly					
2	It is easy to find what I need on the website					
3	It is quick to complete a transaction through the bank's website					
4	Using the bank's website does not require a lot of effort					
5	The CBE'S online content is easy to follow					
	<i>Fulfillment</i>					
6	When CBE promises to do something by a certain time, it does so					
7	My online transactions with CBE are always accurate					
8	The service delivered through CBE's website is quick					
9	CBE's site makes accurate promises about the services being delivered.					
	<i>System Availability</i>					
10	The site is always available for business					
11	This site launches and runs right away					
	<i>Privacy</i>					
12	CBE does not misuse my personal information					
13	I feel safe in my transactions with CBE					
	<i>Assurance/Trust</i>					
14	I have confidence in CBE's service					
15	The name CBE is well known and has good reputation					
	<i>Site Aesthetics</i>					
16	The website design is aesthetically attractive					
	<i>Responsiveness</i>					
17	CBE gives prompt responses to my requests by e-mail or other means					
18	CBE quickly resolves problems I encounter with my online transaction					
	<i>Contact</i>					
19	CBE is easily accessible by telephone					

III. E-banking users' Perception

N.B.: Below are lists of statement describing **Perceived** e-service quality (What did you get). Please show the extent to which the statements reflect your perception of e-service in commercial Bank of Ethiopia by putting (✓) of your choice. The numbers indicate the following: 5=I strongly disagree (SDA) 4=I disagree (DA) 3= I am neutral (N) 2= I agree (A) 1=I strongly agree (SA)

No	Expectation statement	5	4	3	2	1
	<i>Efficiency</i>					
1	I am able to get on site quickly					
2	It is easy to find what I need on the website					
3	It is quick to complete a transaction through the bank's website					
4	Using the bank's website does not require a lot of effort					
5	The CBE'S online content is easy to follow					
	<i>Fulfillment</i>					
6	When CBE promises to do something by a certain time, it does so					
7	My online transactions with CBE are always accurate					
8	The service delivered through CBE's website is quick					
9	CBE's site makes accurate promises about the services being delivered.					
	<i>System Availability</i>					
10	The site is always available for business					
11	This site launches and runs right away					
	<i>Privacy</i>					
12	CBE does not misuse my personal information					
13	I feel safe in my transactions with CBE					
	<i>Assurance/Trust</i>					
14	I have confidence in CBE's service					
15	The name CBE is well known and has good reputation					
	<i>Site Aesthetics</i>					
16	The website design is aesthetically attractive					
	<i>Responsiveness</i>					
17	CBE gives prompt responses to my requests by e-mail or other means					
18	CBE quickly resolves problems I encounter with my online transaction					
	<i>Contact</i>					
19	CBE is easily accessible by telephone					

V. E-Banking Features

N.B. Listed below are 8 features pertaining to the e-banking services. I would like to know how much each of these features is important to you. Please rate each feature out of 100 points according to the importance. Make sure the points add up to 100.

No.	Features	Features Meaning	Points
1	<i>Efficiency</i>	The ease and speed of accessing and using the website	
2	<i>Fulfillment</i>	The extent to which the site's promises about order delivery and item availability are fulfillment	
3	<i>System Availability</i>	The correct technical functioning of the site	
4	<i>Privacy</i>	The degree to which the site is safe and protects customer information	
5	<i>Assurance/Trust</i>	The confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells as well as clear and truthful information	
6	<i>Site Aesthetics</i>	The appearance of the site	
7	<i>Responsiveness</i>	Effective handling of problems and returns through the site	
8	<i>Contact</i>	The availability of assistance through telephone or online representatives.	
		Total:	100

OTHER COMMENT _____

Many thanks for your participation in this E-banking Service quality survey.

Interview questions

1. Do you think the bank's E-banking service is efficient?
2. To what extent is the bank fulfill its promises?
3. What do you think about the functionality of the system?
4. Do you think the privacy of the customer's is kept?
5. Do you think customer trust the bank?
6. Can you tell me to what extent is the bank responsive?
7. Is there any person in charge of managing customers query?