ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS

THE EFFECTS OF E-BANKING SERVICES ON CUSTOMER SATISFACTION: THE CASE OF COMMERCIAL BANK OF ETHIOPIA

A Thesis Submitted to Addis Ababa University in Partial Fulfillment of the Requirements for the degree of Masters of Arts in Business Administration (MBA)

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June, 2018
Addis Ababa, Ethiopia
Statement of Declaration

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Abebaw Kassie (Ass. Prof.). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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Addis Ababa University
College of Business and Economics
POST GRADUATE MBA PROGRAM

Effect of E banking on Customer Satisfaction: The Case of Commercial Bank of Ethiopia

By: Sherefedin Mohammed

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## Acronyms

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<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>ATM(s)</td>
<td>Automatic Tellers Machine(s)</td>
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<td>CBE</td>
<td>Commercial Bank of Ethiopia</td>
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<td>CSEB</td>
<td>Customer Satisfaction in Electronic Banking</td>
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<td>E-banking</td>
<td>Electronic Banking</td>
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<td>ICT</td>
<td>Information &amp; Communication Technology</td>
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<td>NBE</td>
<td>National Bank of Ethiopia</td>
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<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>POS</td>
<td>Point of Sale</td>
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<td>SERVQUAL</td>
<td>Service Quality</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<td>ESERVQUAL</td>
<td>Electronic Service Quality</td>
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<td>WEBQUAL</td>
<td>Website Quality</td>
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Abstract

This research work intends to investigate the effect of E-banking variables on customer satisfaction in Commercial Bank of Ethiopia. In addition the research tried to investigate major challenges encountered by the bank in delivering the service that may reduce the level of customer satisfaction in using the technology. Based on literature five quality dimensions viz. reliability, efficiency, security, responsiveness and contact have been selected as forecasters of customer satisfaction in E-banking. The study adopts Quantitative Research design. Data has been gathered through already tested questionnaire from 386 CBE E-banking users in Addis Ababa. The sample were selected from eight city branches by judgment sampling technique The data was gathered through 5-point likert scale and analyzed with the help Statistical Package for Social Science (SPSS) version 23. To test the relation between e banking satisfaction and the selected variables Multiple Linear Regression method was used. Further chi square test also done so as to test the relation between demographic character and e banking satisfaction. The empirical result shows that the quality dimensions: reliability, efficiency, responsiveness and contact have strong impact on e banking customer satisfaction in CBE. Therefore CBE need to satisfy these dimensions (efficiency, reliability, responsiveness and contact) by all means in order to achieve customer satisfaction in e banking. More over the finding reveals customer satisfaction in using e banking has a relation with age and educational level. The major challenges that the bank faced in providing the service are; service broken due to internet connectivity and electric power problem, lack of Information and Communication infrastructures, lack of customer awareness in using the technology. Thus, in order to sustain customer satisfaction CBE should work with concerned government bodies (Ethio-telecom & Electric power corporations). In addition to government support the bank should strive along with all banks in Ethiopia with the help of Bankers association so as to have dedicated infrastructure to financial institutions in the country.

Key words: Customer satisfaction, Electronic Banking, Service Quality
CHAPTER ONE
INTRODUCTION

1.1 Background of the study

In highly competitive environment success in the banking industry especially depends on having use of the appropriate technology along with retention of well trained and motivated employees who have the capacity to exploit the Bank’s existing technology as well as look for better advancement. In today’s era, one cannot think about the success of any service industry including banking industry without information technology. It has increased the contribution of banking industry in the economy. Financial transactions and payments can now be processed quickly and easily in friction of seconds by using electronic banking services (keivani et al., 2012). Despite E banking has a recent history (since the late 1990s), it has developed from virtual insignificance to hundreds millions of users worldwide. This is due to the fact that e banking enables users to carry out their banking transaction without walking to banks and also cut service cost to the banks (OECD, 2001). More over Electronic delivery solutions would make flow of information much faster, more accurate and enable quicker analysis of data received. This would make the decision making process faster and more efficient. This not only helps the banks in improvement of their internal functioning but also it enables them to provide better customer service (Sharma, 2005).

Every bank these days is considering the adoption of information technology equipment’s as a means to improve the performance, service quality and efficiency in delivering the services. E-banking refers to the system that enables the banks to offer their customers access to their accounts, transact business and obtain information via electronic communication channels; these channels can be Automated Teller Machines (ATMs), tele-banking, internet banking and point of sale (Turban, 1999). Traditional banking methods (e.g. back office processes such as paper filling, paper work processing, sorting cheques and cash handling ) from both banks and customers perspective, has become most costly. Regular requests from customers for bill payment (for telephone, mobile, electricity, insurance and credit card bills), cash withdrawals, loan applications, cheque clearings, money transfer were huge tasks for traditional banks, thus there was a clear need to adopt information technology equipment’s to automate back office work (Turban, 1999).

Ethiopia does not embrace electronic banking early compared to other countries. Certainly the banking industry in Ethiopia is under developed and therefore the introduction of electronic banking also too late in the country. The history of E banking in Ethiopia is traced back with the introduction of ATM in the country. Undeniably the largest state-owned bank, commercial bank of Ethiopia introduced ATM service for local users in 2001 with its eight ATM located in Addis Ababa. Following CBE, Dashen bank also introduces ATM to its customer and move aggressively in expanding the service (Getachew, 2009). Despite CBE is pioneer in introducing
E banking in the country, the proportion of E banking users to its total customer remain unsatisfactory. According to the banks’ report as of September 2016 the bank has more than 13.3 million customers and out of these 1,352,000 customers have mobile and internet banking access and 3 million are ATM users. These shows only 9.7% of the total customers have access to mobile & internet banking while only 22.5% of the total customers are ATM users. Further the report states out of those e banking user only 68% of mobile banking users and 61% of ATM users are active the remaining customers are not active users. Moreover the quarter report of the bank that covers the period from 01/07/2017- 22/09/2017 shows during the period the bank recruits 3875 new internet bank users however out of these only 2488 customers made at least one transaction by using the technology the rest do not make any transaction by using the e banking technology despite they have the technology on their hand instead they still demand visiting the banks hall for every transaction. This initiates the researcher to investigate the reason for CBE customers’ are not actively using e banking technology. Therefore this study aimed at examining the impact of using e banking on customer satisfaction in Commercial Bank of Ethiopia.

1.2 Statements of the problem

E-banking technology is gaining all-round adoption in banking industry across developed and developing countries. The use of e-banking technologies that includes automated teller machines (ATMs), internet banking, mobile banking and point of sale (POS) i.e. branchless banking in the delivery of banking products and services to their customers has become an essential aspect of modern banking system. The banking environment of today is rapidly changing and the rules of yesterday are no longer applicable. E banking has brought drastic change in the day to day functioning of banking operations. It not only brings improvements in their internal functioning and daily routine work but also enable them to provide better customer service efficiently and effectively. More over E banking is essential for developing country like Ethiopia where the bank branches are limited. According to the NBE report in 2014/15 bank branch to population ratio is 1:33,448 in Ethiopia. It is believed that by providing E banking service it is possible to reduce the number of customers that visit bank branches every day and maximize customer satisfaction as well. Thus it is important to check whether the customers are satisfied with the provision of E banking service or not. However in this angle there are few researches that have been conducted to check the impact of E banking on customer satisfaction in Ethiopia.

Sintayehu (2015) conducted a study on impact of E banking service on customer satisfaction on two private banks (wegagen & Dashen Bank) and CBE in Addis Ababa city. The researcher adopts explanatory approach so as to explain the relation between variables. However in taking sample the researcher does not consider the size of the bank rather he took 100 samples from each bank. As the researcher stated the proportion of CBE from the population of the study were about 58.2% whereas the sample were selected equally from the three banks. In addition in measuring satisfaction he used a model developed for e retail not for e banking.
Similarly Million (2013) conducted a study on the impact of E banking on customer satisfaction by taking samples from Dashen and Wegagen banks at Gonder city. However the researcher only considers ATM as E banking since there was no other E banking products at the time. More over the study limited on two branches and do not include the largest bank (i.e. CBE) that own largest portion of the country’s bank customers.

Some other researchers were also conducted on E banking but their main focus was related with the adoption of the E banking not on its impact on customer satisfaction. Kassahun (2016) conducted his study on challenges and opportunities in adoption and development of Electronic Banking in Ethiopian banking industry in the case of selected private banks. Abebe (2016) also studied opportunities and challenges in the adoption of E banking service. Alayu (2015) conducted his study on assessment in challenges and prospects of E banking. All these studies mainly focused of the adoption of E banking particularly on the challenges and opportunities in the adoption. Therefore as very few researches made on the title the present study focused on effect of E banking on customer satisfaction in the case of CBE.

1.3 Objective of the study

1.3.1 General Objective of the Study
The major objective of the study is to examine the effect of E banking on customer satisfaction in Commercial Bank of Ethiopia.

1.3.2 Specific objective of the Study
1. To examine the effect of E banking dimensions (Reliability, Efficiency, Security/Privacy, Responsiveness, Contact,) on customer satisfaction.
2. To examine the level of customer satisfaction on E banking service.
3. To describe the relation between age, gender and education level with E banking service.

1.4 Research questions
1. What is effect of the major E banking dimensions on customer satisfaction?
2. What is the level customer satisfaction in using E banking?
3. Do age, gender, occupation and education level has relation with customer satisfaction in using E banking?

1.5 Hypothesis
As far as there is a natural difference between e banking and e retail, Wu and Tao (2012) has proposed a model to measure customer satisfaction specifically in using e banking. Accordingly based on this model the following hypotheses have been developed.
Ho: Reliability has no positive significant effect on customer satisfaction
H1: Reliability has positive significant effect on customer satisfaction
Ho: Efficiency has no positive significant effect on customer satisfaction
H1: Efficiency has positive significant effect on customer satisfaction
Ho: Security/Privacy has no positive significant effect on customer satisfaction
H1: Security/Privacy has positive significant effect on customer satisfaction
Ho: Responsiveness no positive significant effect on customer satisfaction
H1: Responsiveness has positive significant effect on customer satisfaction
Ho: Contact has no positive significant effect on customer satisfaction
H1: Contact security has positive significant effect on customer satisfaction

1.6 Scope of the study
The study focuses on Commercial Bank of Ethiopia about the effect of E banking on customer satisfaction particularly at Addis Ababa city. The researcher chooses CBE due to the fact that CBE accounts more than half of the total bank customers’ in the country. In addition Addis Ababa city is selected since it is the capital city of the country it has a heterogeneous population, which ensures a wide spread of potential respondents to the study. More over the study targeted on those customers who are using any of E banking products because customers may deliver real facts of their feelings about e banking than employees. Further mobile bank, internet bank, ATM and POS has been considered as e banking services as these services are the main e banking services of the bank during the study.

1.7 Significance of the study
The study will help the bank to identify the perception of customers about the electronic banking services they are providing. The satisfaction of the customer is the prime occupation of any business entity, thus this study will provide evidence for the upgrading of these services so as to meet customer need. Also, the study through the examination of service quality will enable the bank judge its performance in the light of how customers judge it. It is further expected that the study will provide the needed evidence to the regulatory body i.e. National Bank of Ethiopia to develop e banking assistant program that are designed to address factors identified by research. Finally finding of the study will add knowledge to the existing literatures in the area of marketing, customer satisfaction and quality service delivery in the banking industry.
1.8 Limitation of the study

As the study focuses on commercial bank of Ethiopia about the effect of e-banking on customer satisfaction, it may be difficult to refer the finding of the study for the whole banks operating in the country. The other limitation of the study relates to the sampling procedure i.e. convenience sampling, which limits the generalizability of the research findings. Finally, there are many other factors which can influence customer satisfaction in using e banking that do not included in this study. Future research is, therefore, recommended to address the above stated limitations.

1.9 Organization of the study

The research report was organized into five chapters: Chapter one focuses on the background of the study, problem statement, objective of the study, significant of the study and limitation of the study. In chapter two, a range of literatures review is captured there to gather relevant information concerning E-banking. In chapter three, detail of methodology followed to achieve results is outlined. It includes the study design, sampling, sampling technique, source and type of data and data analysis. Chapter four contained results and discussion from the study supported with findings from other research works. Chapter five focuses on main findings, conclusions and recommendation.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents a review of previous studies related to the present study. Potential theories that state about different factors which are believed to affect customer satisfaction in using e banking are also discussed. Basically the chapter constitutes 8 sections. Section 2.1 is about introduction of the chapter and 2.2 presents definition of e banking followed by types of e banking in section 2.3. Section 2.4 present benefits of e banking and 2.5 discuss about electronic service quality and customer satisfaction and also variables of the study discussed in this section. In section 2.6 conceptual frameworks and section 2.7 Summary of articles presented. Finally section 2.8 discusses the research gap.

2.2 Theoretical Review

2.2.1 Definition of E banking

Electronic banking (e-banking) is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. That is, automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels (Imiefoh 2012). Electronic banking can also be defined as the application of computer technology to banking especially the payment (deposit transfer) aspects of banking with the help of tele-communication network which permits online processing of the same day credit and debit transfers of funds between member institutions of a clearing system (Anyawa okoro, M.1999).

Hertzum (2004) defined E-Banking as web-based Banking. In other words E-Banking refers to the banking operations, which is done over World Wide Web. A more comprehensive and well-established definition is given by the United Nations Conference on Trade and Development (UNCTAD). This definition covers almost all area of E-Banking. According to the institution E banking refers to the deployment over the Internet of retail and wholesale banking services. It involves individual and corporate clients, and includes bank transfers, payments and settlements, documentary collections and credits, corporate and household lending, card business and some others (UNCTAD, 2002).

Electronic banking is a system by which transactions are settled electronically with the use of electronic gadgets such as ATMs, POS terminals, phones, and Visa cards handled by e-holders, bank customers, and stake holders (Edet, 2008).
2.2.2 Types of E banking

The most important electronic channels in e-banking are the internet banking, mobile banking, Automatic Teller Machines (ATMs), mobile banking and Point of Sales (POS).

2.2.2.1 Internet Banking

Internet banking involves conducting banking transactions such as account enquiry, printing of statement of account; funds transfer payments for goods and services, etc on the internet (World Wide Web) using electronic tools such as the computer without visiting the banking hall. Internet Banking lets clients handle many banking transactions via their personal computer. For instance, one may use his/her computer/laptop/smart-phone to view his/her account balance, request transfer between accounts and pay bills electronically (Onodugo and Chris, 2015).

2.2.2.2 Mobile Banking

In phone banking, banking transaction is done over the telephone. Customers of banks can get information about their accounts; make banking transaction like fixed deposits, money transfer, demand draft, collection and payment of bills etc by using telephones. Telephone banking satisfies the customer with fast, anytime transaction and account information via telephone access. With a simple push of a button, customers can check a deposit, account information, transfer fund as well as perform number of other functions. Telephone banking system uses technology that keeps the cost of delivering the service very low. Moreover, customers can do the banking work directly from their homes or from their office desk, without being stuck in traffic and without standing in queue for hours and without the need to visit a bank branch or automated teller machine (Barnes and Corbett, 2003).

2.2.2.3 ATM

An automated teller machine (ATM) is an electronic computerized device that allows banks customers to directly use a secured method of communication to access their bank accounts. Entry of Automated teller machines (ATM’s) has changed the office atmosphere of the branches of banks. There is no need for a customer to visit branches for their day to day banking transaction like cash deposits, cash withdrawals, balance enquiry, dropping cheque. The customer can be served by himself by using his/her unique ATM card that given by the bank (Okechi and Oruan, 2013).

2.2.2.4 POS

Point of Sale (POS) is electronica device that allow purchases or payments with a debit card, which also may be your ATM card. Transactions can take place in-person at the point of sale. With debit card purchase or payment transfers money quickly from your bank account to the
company’s account, so you have to have sufficient funds in your account to cover your purchase (Malak, 2007).

2.2.3 Benefits of E banking
E-banking helps the customers as well as banks by overcoming the drawbacks of manual system as computers are capable of storing, analyzing, consolidating, searching and presenting the data as per the requirement of customers and banks with a lot of speed and accuracy.

2.2.3.1 E banking benefits to the bank
A bulk of literature states that the bank benefits by adopting e banking in its operation. The main benefits to banks are cost savings, reaching new segments of the population, efficiency, enhancement of the banks reputation and better customer service and satisfaction. The idea is the more transactions can be converted online, the more money will be saved (Brogdon, 1999).

According to Robinson (2000) the cost of an electronic transaction is dramatically less when done online compare to at a branch. He adds that online banking strengthens the relationship between the service provider (e.g. bank) and the customer, because it brings banking services directly to a customer’s home or office, or in the mobile phone. This creates customer loyalty.

A reduction in the percentage of customers visiting banks with an increase in alternative channels of distribution will also minimize the queues in the branches and also increased availability and accessibility of more self-service distribution channels help bank administration in reducing the expensive branch network and its associate staff overheads. Bank employees and office space that are released in this way may be used for some other profitable ventures (Birch and Young, 1997). Shifu (2014) in his study concluded the following as major benefits of e bank for the bank:

1. E-banking helps in reducing the cost of delivering the services to the customers.
2. It provides banks with competitive advantage among their peers.
3. It reduces the use of paper money that helps the central bank in printing less paper notes.
4. Through websites, banks can earn revenue by promotional activities.
5. FAQ’s uploaded over the banks’ website will reduce the workload on employees.

2.2.3.2 E bank benefits to the customers
The main benefit of e banking from the bank customers’ point of view is significant saving of time by the automation of banking services processing and also enabling the customers to access the banking service any time at anywhere. According to Gurau (2002) the major benefits of e banking from customer’s point of view is summarized as follows;

-Reduced costs in accessing and using the banking services.
Increased comfort and timesaving transactions can be made 7x24, without requiring the physical interaction with the bank.

Quick and continuous access to information

Better cash management

Generally, e-banking as already stated has greatly serviced both the public and the banking industry. This has resulted in creation of a better enabling environment that supports growth, productivity and prosperity.

2.2.4 Electronic service quality and customer satisfaction

The digital revolution has undoubtedly changed almost every aspect of daily life as we stepped into the twenty first century. The power of the World Wide Web and global ecommerce is becoming more significant with the increasing number of people around the world getting connected to the internet (Siu and Mou, 2005). Similarly to other service industry developments in information and communication technology have provided a platform by which banks can design, develop and deliver services that can be perceived by customers as superior while accessing online channel for banking transactions (Surjadjaja 2003). E-banking has attained the status of essential service in attaining customers’ loyalty in banking sector by ensuring customer satisfaction and healthy relations. Above all it is of supreme importance in fulfilling customers’ expectations (Berrocal, 2009). E-service quality is about overall assessment and discernment by customer regarding the eminence and quality of e-service delivery (Santos, 2003)

Service quality is one of the main factors that determines the success or failure of electronic commerce and also it is very important in any banking business. Service quality can also be defined as the consumer’s overall impression of the relative inferiority/superiority of the organization and its services. Accordingly e-service quality is defined as how well a delivered service level matches customer expectations. Service quality can also be defined by the practitioners in terms of key dimensions that customers use while evaluating the services. The conceptualization of service quality should include both the service delivery process as well as the service outcomes (Lehtinen and Lehtinen, 1991).

The concept of customer satisfaction is equally important for service organizations, such as banks, as many of them subscribe to the fact that higher customer satisfaction will lead to greater customer loyalty (Bouldinge 1993). Kotler (1997) also defined satisfaction as a person’s feeling of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations. Satisfaction can be illustrated as an evaluation of the perceived discrepancy between prior expectations and the actual performance of the product (Oliver, 1999).

The boom of internet and electronic banking has evoked several research efforts aimed at understanding service satisfaction in relation to virtual business environment. Thus, the unique
characteristics of internet based services are extensive human-computer interactions and high
level self-service may imply that customers perceive satisfaction from online services differently
when contrasted with their offline counterparts (Ribbink 2004). Based on this fact many
researchers put their sight on what factors (dimensions) determine the quality e-commerce in
general and e banking in particular so as to meet customer expectation.

According to Bitner (1990) Customers perceive the quality of services of online banking based
on the performance of online delivery systems and not on the processes in which the delivered
service is developed and produced.

E-SERVQUAL scale contains a core and recovery scale. Core scale is used to measure the
customer’s perceptions of service quality delivered by online retailers. Recovery scale refers to
specific situations, when a customer has a question or runs into a problem (Zeithaml, 2005). In
other word core scale refers to the quality of the website itself, while the recovery scale is more
concerned with the actual performance of the company, rather than with website performance.

Parasuraman, Zeithaml & Berry (1985) has developed a model (SERVQUAL) for measuring
service quality. The model initially consisted of ten dimensions which were reduced to five as
some of them were overlapping. The dimensions are Reliability, Responsiveness, Assurance,
Tangibles, and Empathy. In his study to identify service quality dimensions that affect customer
satisfaction in internet banking Khurana (2009) concluded efficiency, responsiveness,
fulfillment, privacy of personnel information and easiness to use are the core dimensions of e
banking affecting customer satisfaction. Ganguli and Roy (2010) based on their study they
concluded Customer services, technology security and information quality, technology
convenience and technology usage easiness and reliability were identified as four generic service
quality dimensions.

A rating scale for websites, called WebQual, was created by Lociacono, Watson and Goodhue
(2000). This scale was based on twelve dimensions namely: informational fit to task, interaction,
trust, response time, design, intuitiveness, visual appeal, innovativeness, flow, emotional appeal,
integrated communication, business processes, and substitutability. Another measurement scale,
called SITEQUAL was developed by Yoo and Donthu (2001) for measuring site quality on four
dimensions: ease of use, aesthetic design, processing speed, and security.

Parasuraman, Zeithaml and Malhotra (2005) A also developed an e-service quality measure (e-
SQ) consisting of five dimensions: information availability, ease of use, privacy/security, graphic
style, reliability. Latter they refined the model and reduced the above mentioned five dimensions
into four which are: efficiency, fulfillment, availability, privacy.

Further, Saha and Zhao (2005) identified nine service quality dimensions in e banking which are
efficiency, reliability, responsiveness, fulfillment, privacy, communications, personalization,
technology update and logistic/technical equipment. The first five dimensions were tested as a
core dimensions in internet banking. Mohsin and Arshad (2010) in their study in Pakistan
identified the quality dimensions such as efficiency, reliability, responsiveness; fulfillment, privacy and assurance lead to higher customer satisfaction in online services. Further Mandan, Bahram and Maasomeh (2013) they found that ease of service use, website design, speed of connectivity and transactions, information security; information content and support service have a significant effect on user’s satisfaction.

In his study also Nupur (2010) consider Reliability, responsiveness, assurance, empathy, and tangibility are core service quality dimensions for customer satisfaction in e banking. Mohammad and Alhamadani (2011) in their study in Jordan commercial bank they revealed that five dimensions of service quality viz. reliability, responsiveness, empathy, assurance and tangibles are important antecedents of customer satisfaction.

Alam and Soni (2012) the level of satisfaction in using internet banking depends upon reliability, responsiveness, security, ease of use and tangibles. Further they also claimed that satisfaction comes from quick services, affordable service charge, and easiness of the service in using e banking. Ala’Eddin and Hasan (2011) on their study in Bangladesh E-banking functionality and outcomes of customer satisfaction they revealed that accessibility, convenience, security, privacy, content, design, speed, fees and charges had a positive effect on Jordanian Commercial Bank customers' satisfaction. Other study in Nigeria by Ogunlowore and Oladele (2014) concluded that that E-banking has become popular in Nigeria because of its convenience and flexibility, and transaction related benefits like speed, efficiency and accessibility although these are fraught with insecurity and most importantly power challenges. Similarly other study conducted by Fatemeh, Sanaz and Reihaneh (2015) in Iran There is a positive and significant relationship between the speed, efficiency, security, trust, accountability and information with customer satisfaction.

Khan and Mahapatra (2009) by their study in Indian Banks concluded that Customers are satisfied with the reliability of the bank services but are not satisfied with the dimension of user friendliness. The two dimensions viz privacy/ security and fulfillment are not contributing significantly towards the overall service quality. In his study to examine determinants that affect customer service quality Hassen (2012) revealed that Web site design, trust, security, product diversification, credibility, collaboration, access and communication strongly affect the customer perception about the quality of internet banking services.

The study by Bismark, Ashalley and Quaye (2015) on electronic banking and customer satisfaction in Ghana indicates that availability, reliability and convenience have a positive impact on e banking satisfaction. Kumbhar (2011) on his study in India shows Fulfillment, Efficiency, Security/Assurance, Responsiveness, Convenience, Cost Effectiveness, Problem Handling and Compensation are determinants of e banking satisfaction.

While several studies have examined the effective measurement of e-banking service quality, their lack of a holistic view has hindered accumulation of past knowledge. The SERVQUAL
instrument provides a 22-item scale for measuring service quality along five dimensions proposed by Parasuraman (1985) and later refined by Parasuraman (1991). However, the SERVQUAL instrument has also generated debate regarding the most appropriate ways to assess SQ.

Loiacono (2000) proposed web quality (WebQual), a scale for rating websites on 12 dimensions. Yoo and Donthu (2001) then immediately adapted WebQual into a four dimensional SITE-QUAL measurement scale. However, Parasuraman (2005) noted that neither WebQual nor SITE-QUAL capture all aspects of the purchasing process, and therefore cannot comprehensively assess site service quality. Instead he proposed E-S-QUAL and E-RecS-QUAL by empirically testing the two online retailers, Amazon and Walmart.

However Wu and Tao (2012) stated that since there is a natural differences between e-banking and e-retailers, E-S-QUAL and E-RecS-QUAL may be inappropriate for direct application in measuring e-banking SQ. In addition they aimed creating holistic e banking service quality. To address this issue, they first reviews and summarizes the methodology, service quality dimensions, suggestions and limitations of seven e-banking service quality studies conducted in seven countries between 2001 to 2010. Based on the methods used in seven e-Banking SQ studies, the researcher applied a comprehensive methodology for developing SQ measurement by summarizing into a six-step process consisting of generating the scale items, refining the scale items, conducting the field test and collecting the data, confirming the sample representation, performing exploratory factor analysis and the reliability test, and performing confirmatory factor analysis. Finally based on the analysis, they came up with 21 questions and five e banking service dimensions namely Efficiency, privacy/security, reliability, responsiveness and contact.

Therefore in this study also the researcher determine these factors (Efficiency, privacy/security, reliability, responsiveness and contact) as independent variables of the study. This is due to the fact that e service quality models discussed in the literature so far varies in their e service factor they used to measure the service quality. Some researcher used certain factors and some other researcher used another factors by redefining the initial model. This may create confusion on choosing which model better over the other. More over most of the model (SERVQUAL, E SERVQUAL WEBQUAL, SITQUAL E- S –QUAL) are e service quality model focusing on e retail not specifically for e banking service quality. Therefore applying these models to measure e banking service quality may be in appropriate. Accordingly the definition of the independent variable of the study discussed as follows.

A. Reliability

The reliability dimension is related to accuracy, credibility, basic service quality, system availability and customer service (Wu and Tao 2012). Reliability also refers to the alignment of expectations and service delivery. This dimension deals primarily with the correctness and
accurate billing, and timely responses to communiqués between customer and company (Jun & Yang, 2008).

**B. Security/privacy**

As noted by Wolfinbarger and Gilly (2002) security is better defined together with privacy in an online environment. Assurance about security relates to the extent to which the web site guarantees the safety of customers’ financial and personal information, an area which has witnessed a proliferation of research interest. Security can be assured by authorized access, confidentiality, restriction on large volume transaction and sound devotion to security measures (Okeke and Ezeh 2015).

**C. Efficiency**

As stated by Wu and Tao (2012) the efficiency dimension is related to website design, web interface, aesthetics/contents/ease of use and transaction support. According to Ala`Eddin and Hasan (2011) This factor measured by: Frequent connection breakdown, easy to navigate the bank site due to smooth speed, transition is efficient/no waiting time, response speed to complaint is satisfactory, and Speed of e-transactions flow is faster than traditional banking channels.

**D. Responsiveness**

The responsiveness dimension relates to competence, courtesy, communication, problem handling and customer service. As noted by Ho and Lin (2010) responsiveness related to providing a channel of communication for assessing e-banking service courtesy and competence. A further aspect to this dimension is the encouraging of customers to develop and express their views through online communities and forums (Lin & Lee, 2005).

**E. Contact**

As noted by Jun and Cai (2001) the contact dimension also conveys the concept of access. It refers to communication in bank to customer or customers to bank, via e-mail, SMS, Phone, interactive website, postal communication and fax.

**2.3 Empirical evidence**

A lot of related studies were conducted by different researchers in different countries. Nevertheless, there are limited numbers of studies were conducted in Ethiopia on the e banking customer satisfaction. Some of the study includes Sintayehu (2015) conducted his research on the title Impact of E-Banking on customer satisfaction in Ethiopia. The sample of the study was from three banks namely CBE, Dashen and Wogagen bank. The study adopt explanatory research (to explain relation between variables) and descriptive to describe the characteristics of sample. The population of the study was 954,000(active E banking users) from this 300 taken as samples which is 100 from each banks. The study found education level and age have
statistically significant relation with customer satisfaction in E-banking. In addition reliability, efficiency and ease of use have great contribution for the improvement of e banking satisfaction in Ethiopia. In addition Milion (2013) conducted a research on the Impact of Electronic Banking on Customers’ Satisfaction in in two private banks in Goder city. The researcher employed both descriptive and inferential statistics in analyzing the data. The results of the study implied that majority of users of e-banking are the young, the educated, salaried and students but business men and women are not actively using the service. The finding also shows e-banking has impact in improving customer satisfaction by reducing waiting time for customers to get bank service and enable them to control their account movements.

Kassahun (2016) also studied Challenge and opportunity of E-banking in Ethiopia banking industry. Descriptive research method was used to achieve the objective. Out of sixteen banks that operating at the time the researcher purposively sampled 6 private banks. The data was collected by using closed and open ended questionnaires from experts and also interviews with e-payment managers. Further since the study is descriptive in nature the data collected via questionnaires was analyzed using SPSS. The major finding of the study was categorized in to 3 groups. These are organizational, environmental and technological factor. High costs of implementation of E-banking, lack of customer awareness, lack of skills and trained staff, resistance on changes in technology among boards as organizational factor. In addition limitation in network infrastructure, lack of sufficient government supports legal and regulatory differences with cross- country as external factor. In connection with technological factors lack of customer trust, fear of risk and security risk considered as challenges in using E-banking.

The study of Abebe (2016) aimed at identifying opportunities and challenges in the adoption and enhancement of E banking services in Dashin bank. The researcher used both quantitative and qualitative data thus mixed approach has been applied. Further the data were analyzed by using both descriptive and linear regression analysis model with the help of SPSS. The finding of the study reveals that the existing man powers combinations and their positive perception towards usefulness and ease of use in the adoption of E banking services are opportunities at the hands of the bank. On the other hand security risks, technical, managerial and implementation skills of E-banking, public awareness, ICT infrastructures and low internet access is major challenges in the adoption of E-banking services in Dashen Bank.

Alayu (2105) also aimed assessing the Challenges and Prospects of e-banking in Commercial Bank of Ethiopia and he applied descriptive survey type. The researcher classifies the findings in to two parts. Prospects; customer can get all banking service 24 hours a day, they can save time, can access their account quickly, bank load will reduced. On the other hand challenges include unknown fear of customers, power interruption, network failure, language difficulty, inadequate knowledge in the staff..

Mattewos (2016), study on Challenges and Prospect of E-Banking in Ethiopia and purposively choose 5 banks (CBE, Awash, Dashen, Wegagen & zemen banks). The data was analyzed by
using descriptive statistics method. the finding Chances of risk, lack of trained and efficient staff in e-banking context, lack of suitable legal and regulatory framework, absence of financial networks that links different banks, low level of internet penetration and poorly developed telecommunication infrastructure, high cost of internet and security issues are the main challenges of e banking in Ethiopia. Bultum, (2014), his study on Factors affecting adoption of electronic Banking in Ethiopia, he selected purposively; three private banks (Dashen, Zemen and Wegagen bank) and one state owned bank (commercial bank of Ethiopia). The researcher adopts both quantitative and qualitative (Mixed) research approach. The result of the study indicated that, the major barriers Ethiopian banking industry faces in the adoption of electronic banking are: security risk, lack of trust, lack of legal and regulatory frame work, lack of ICT infrastructure and absence of competition between local and foreign banks.

Mohammad and Alhamadani (2011) conducted a research to explore the adoption of e-banking functionality and investigate the impact of e-banking on the outcomes of customer satisfaction in Jordan. The research adopts exploratory approach and a multiple regression modeling approach was proposed as an effective method for studying the relationships. The finding of the study concluded that accessibility, convenience, security, privacy, content, design, speed, fees and charges had a positive effect on Jordanian Commercial Bank customers' satisfaction. The study of Ogunlowore and Oladele (2014) was aimed at investigating the impact of e-banking on customers’ satisfaction in Nigeria. The research design for this work is a sample survey because of timeliness of the data obtained. Further data collected were analyzed by using percentage while hypothesis were tested using chi-square. The study found that there is a significant relationship between electronic banking and customers’ satisfaction. Also that E-banking has become popular because of its convenience and flexibility, and transaction related benefits like speed, efficiency and accessibility. Although these are fraught with insecurity and most importantly power challenges.

A research done by Simon & Thomas (2016) was targeted to determine the effect of E-banking on customer satisfaction in selected commercial banks in Kenya. This study adopted a descriptive survey design. Concerning the sample there were 43 banks in Kenya. Out of these five banks selected purposively. The total customers of these five banks are 262511 and from these 225 customers taken as samples. The collected data were analyzed by using descriptive statistics method and customer satisfaction was regressed against independent variables. The finding shows flexibility and easy to use internet banking; convenience of mobile banking has great effect, but usefulness and friendliness has low effect on customer satisfaction. Further user friendly, ease of access, privacy and affordability of ATM affects customer satisfaction to a great extent.

The other case study conducted by Fatemeh et.al (2015) was to investigate the role of e-payment tools and e-banking in customer satisfaction in Iran. The study is applied research and it is descriptive survey in methodology. SPSS software and Pearson’s correlation test were used to
analyze the data. The research found there is a positive and significant relationship between the speed, efficiency, security, trust, accountability and information with customer satisfaction. Similarly the study of Mudassir (2016) to investigate the impact of E-banking variables on customer satisfaction in Pakistan, adopt explanatory research approach focusing on to connect ideas to recognize the relationship between SERVQUAL variables and customer satisfaction. Further the data was analyzed by using correlation and multiple regression method for each variable. From the statistical analysis when all service quality dimensions taken as predictor of customer satisfaction, Reliability has produced the most significant results followed by responsiveness and assurance, on other hand tangibles and empathy relatively have not produced significant results in e-banking in Pakistan.

Moreover a research by Namugeraw (2013) no the title “Electronic banking & customer satisfaction in Commercial Banks case study of Centenary Bank in Uganda”, discovered that service quality, customer needs, flexibility, good working environment, and effective communication highly determine customer satisfaction and are crucial in order to make customers come the next time. Justus et.al (2014) conducts a study to evaluate customer satisfaction with e banking in the banking industry in case of National Bank of Kenya. The study was descriptive in nature as it is restricted to fact finding. Data was analyzed using descriptive which entailed frequencies, mean, standard deviation. The researcher further employed a multivariate regression model to study to the relationship between e banking and customer satisfaction. The study found E-banking web design, assurance and customer service has great effect on customer satisfaction whereas preferential treatment has less effect on customer satisfaction.

Nupur (2010) also in his study to examine the impact of e-banking variables on customer satisfaction in Bangladesh, he concluded Reliability, responsiveness assurance, empathy, and tangibility are core service quality dimensions for customer satisfaction in e banking and out of them only reliability, responsiveness and assurance having more Contribution to customer satisfaction.


2.4 Conceptual frame work

Based on the above model and its dimension a frame work is developed for present study, to develop the relationship between e service quality dimension and customer satisfaction in banking industry.

![Conceptual Framework](image)

**Figure1. Conceptual Framework**


2.5 Research Gap

Most of the studies in our countries focused on the extent of the adoption of e banking (Abebe, 2106; Kassahun, 2016; Mathewos, 2016; Alayu, 2015; Bultum, 2104). But very little is known about effect of e banking on customer satisfaction in Ethiopia (Million, 2104 and Sintayehu, 2105).

This study is differ methodically with the study conducted by Million (2013) at Gonder city on two private banks. He used qualitative method and furthermore he ignores the customer of the largest state owned bank.

In addition the study by Sintayehu (2105) has some similar attributes with this study. However some of his study’s variables (Reliability, transaction efficiency, ease of use, performance, security, customer support and service content) differ from the current study’s variable (reliability, efficiency, security, responsiveness and contact). Moreover the finding of sintayehu indicates that out of the seven stated explanatory variables only three variables are statistically significant.
Despite various studies conducted in different countries on the title "effect of e banking on customer satisfaction" it may not be appropriate to consider the findings for our countries. Understanding the scenario in other country my throw some light on the topic however it cannot be applicable fully. This is due to the fact customer preferences and satisfaction level based on the demography, culture, affordability, IT penetration varies from country to country. Thus, there is a significant gap relating to research as to impact of e banking on customer satisfaction. There for the proposed study aims to fill up this research gap by studying the impact of e banking on customer satisfaction in the case of CBE.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Research Design

The research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004). It is a logical and systematic plan that has been prepared for directing a research study. It specified the objectives of the study, the methodology and techniques adopted in achieving the objectives.

Because of the setting nature of the study is to examine the e banking service dimension that have effect on customer satisfaction, it fits into explanatory design. According to Robson (2002), Explanatory research aims at gaining an explanation of a specific situation or problem, generally in the form of causal relationships. Therefore the researcher believes it is appropriate to adopt research design that often uses explanatory approach.

3.2 Target Population of the Study

A target population refers to the entire group of individuals, objects or things that share common attributes or characteristics and may not be found within the same geographical location. According to Mugenda (2008), target population is the total population that the researcher specifies in his or her research. In order to undertake this study, the researcher sampled eight branches of CBE in Addis Ababa city namely Anwar mesgid and Ashewa meda branches from West district, Addia abeba and Gulele branches from north district, Edna mall and CMC branches from East district, Saris and Mexico branches from South district by using judgment method. The selection is basically based on the e banking performance of the branches as of June 2017. Therefore customers of these branches who are using any of e banking service are considered as target population of the study. Accordingly as of June 2017 the total number of e banking users of these eight branches are 20053 (Anwar: 2653, Ashewa meda: 1699, Gulele: 3028, Addias Ababa: 3453, Saris: 1965, Mexico: 3058, Edna mall: 2043 and CMC: 2154).

3.3 Sample size and sampling technique

The sample size of 393 is determined from those who have been using any of e banking service in the selected eight branches. The sample size is calculated by using formula provided by Yamane (1967). The formula is

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

Where,  
- \( n \) is number of sample size
- \( N \) total number of study population
e level of confidence in this case 95%

\[ n = \frac{20053}{1 + 20053(0.05)} \]
\[ = \frac{20053}{1 + 50.1325} \]
\[ = \frac{20053}{51.1325} \]
\[ = 392.177 \]

Approximately 393 individuals

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

<table>
<thead>
<tr>
<th>s/n</th>
<th>Name of selected branches</th>
<th>No of e banking users</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anwar mesgid</td>
<td>2653</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Ashewa meda</td>
<td>1699</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>Edna mall</td>
<td>2043</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>CMC</td>
<td>2154</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>Addis Abeba</td>
<td>3453</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Gulele</td>
<td>3028</td>
<td>59</td>
</tr>
<tr>
<td>4</td>
<td>Saris</td>
<td>1965</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>3058</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20053</strong></td>
<td><strong>393</strong></td>
</tr>
</tbody>
</table>

Source; Annual reports of the bank

Based on geographical location CBE classified in to four districts in Addis Ababa namely North, South, West and East districts. The researcher applied a multi stage sampling technique. First from each district two branches were selected by judgment method, next actual respondents were selected from the branches. The branches from the district were selected based on the e banking performance that the district evaluates monthly, quarterly and annually. The e banking performance evaluation mainly include number of e banking users, number of e banking transaction and volume of transactions made by any e banking service as of June 2017. Further the respondents from the branches were selected also by using convenient sampling procedure. A convenience sample is a sample of study subjects taken from a group which is conveniently accessible to a researcher. In this study, most of the participants were approached as they enter the bank hall for business and they agreed to participate in answering the questionnaire. But some of the respondents were contacted at their premises with the help of customer service manager and marketing officer of the branches.

### 3.4 Sources of data

The study was conducted by collecting data from both primary and secondary sources. The primary sources were any e banking users of the selected branches. The source of secondary data is webs, the bank’s annual report, books and published journals. In order to strength the result and
findings of the study the researcher examine the finding and conclusion some related researches. This helped to see what others say about the subject matter, what are their findings and recommendations.

3.5 Data collection instruments

According to Yin (1989), structured questioners are important method for collecting primary data and that it further allows the researcher to be well focused on the specific research topic.

In order to collect sufficient data so as to answer the research questions, researcher designed two surveys; the first was a questionnaire to get quantified results. The items were developed based on previous empirical literature. Specifically most of the items were taken from the model that was developed by Wu and Tao (2012). The questionnaire has two parts; the first part aimed at the collection of demographic information of the participants such as sex, age, marital status, education level and occupation. This is to determine the category of individuals and also to test if there is relation between demographic characteristics and customer satisfaction.

In addition questionnaires (four items) related to measure level of satisfaction also included in this part. This was aimed to examine the level of customer satisfaction in using e-banking. The second part of the questionnaires consists of a 22-item likert scale instruments which measure e-banking service delivery. This will enable the researcher to determine which dimension has more impact on customer satisfaction. The questionnaires are structured mainly in close-ended questions by which the respondents were asked to indicate their level of agreement using a five likert rating scale measurement where: Strongly Agree= 5; Agree = 4; Neutral =3, Disagree = 2; and Strongly Disagree =1. The use of likert scale is to make it easier for respondents to answer question in a simple way.

Finally for the purpose of triangulation interviews was contacted with customer service managers of the branch that assigned on marketing position

3.6 Validity and Reliability

To secure the content validity of the instrument, the researcher referred previous researcher’s questionnaires that fit the purpose and also the e-banking supervisory staff of CBE reviewed the items before distributing. Moreover, to check the reliability of the instrument, the questionnaires were pre-tested through pilot study. Accordingly a score of 0.904 was obtained, and this is an indication of high measure of reliability.

3.7 Data Analysis

Data analysis refers to the computing of certain measures along with searching for pattern groups (Kothari, 2001). As the study aimed at investigating the impact of e-banking service quality dimensions namely (reliability, efficiency, responsiveness, security/privacy and contact) impact on customer satisfaction, Multiple Linear Regression (MLR) model was used to determine the relationship between customer satisfaction and the stated variables. The research deemed regression method to be useful for its ability to test the nature of influence of independent variables on a dependent variable. Regression is able to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value
of the dependent variable. Further the regression model for this study was basically adopted from sintayehu (2015) with some modification. Accordingly the model of the study was Customer Satisfaction in e banking = f (reliability, efficiency, security/privacy, responsiveness & contact).

\[ CSEB = \alpha + \beta_1 \text{RLB} + \beta_2 \text{EFC} + \beta_3 \text{SCR} + \beta_4 \text{RSP} + \beta_5 \text{CNT} + \varepsilon \]

Where, CSEB=customer satisfaction in e banking  
RLB= Reliability  
EFC= Efficiency  
SCR= Security/Privacy  
RSP= Responsiveness  
CNT= Contact

The above five independent variables were established from the literature review that the researcher accessed.  
Further the statistical analysis of this study has been done by SPSS software, version 23. The results of the study have been shown in inference and descriptive section. In deceptive section, tables, and statistics and in inference section, the result of multiple liner regression analyzed. Multiple regression analysis was employed to analyze relationships on variables. Mean and standard deviation was used to determine the level of customer satisfaction in e banking. Further chi-square test has been done to see the relation between demographic characteristics and e banking service. To validate the model the researcher use ANOVA, and produces R- square and F statics. Here the relationship between demographic characteristics and customer satisfaction on e-banking has been tested using Chi-Square test. The test statistics is chosen because the variable under study is categorical.  
Moreover the four assumptions of multiple linear regressions have been tested. This includes the diagonal tests such as multicolinearity, homoscedasticity, linearity and normality test. In order to check multicolinearity a correlation matrix has been used to ensure the correlation between explanatory variables. In addition to test homoscedasticity a plot of residuals done in which is a scatterplot of standardized residuals against standardized predicted values was tested. Further Plots of the regression residuals through SPSS software analyzed so as to check the linearity of the model. Finally normality test has been done by plotting a histogram of residuals with the help SPSS software.
CHAPTER FOUR
RESULT AND DISCUSSION

4.1 Introduction

This chapter describes the analysis and interpretation of the collected data. Out of the 393 questionnaires distributed to the customers of eight CBE branches 386 questionnaires were collected and valid. This indicates the response rate for the study is 98.2%. The questionnaires were handed personally to respondents and close follow up on filling the questionnaires has been made with the help of marketing officers of the selected branches. The data was analyzed using SPSS 23.

To check the reliability of the questionnaire initially a pilot sample of 40 respondents where 5 from each branches selected and cronbach alpha was computed. The result of cronbach alpha for both sample pilot and total sample test has been presented as follows.

Table 4.1 Cronbach Alpha Test

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Coefficient</th>
<th>No items</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% sample pilot test</td>
<td>40</td>
<td>0.904</td>
<td>30</td>
</tr>
<tr>
<td>Total Sample</td>
<td>386</td>
<td>0.826</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: SPSS output

A high value of the Cronbach alpha coefficient suggests that the items that make up the scale ‘hang together’ and measure the same underlying construct. George & Mallery (2003) stated the value of alpha should be greater than 0.7 so as to accept the instrument. Accordingly the above table shows that the result of the cronbach alpha in both cases (i.e pilot & total sample) is above 0.7. This indicates there is a high internal consistency of the questionnaires.

4.2 Descriptive Analysis

4.2.1 Demographic Information of Respondents

Demographic profiles of the study were analyzed using descriptive analysis with the help of SPSS. The result of the survey is shown in Table 4.2 as follows.
The above table shows that 53.6% of the respondents are male while 46.4% are female. It also identified by other researchers (Abebe, 2016; Yalew 2016). The respondents were mostly (42.5%) were in the age of 26-35 and 20% of the respondents were in the age of 15-25. These
forms 67.1% of the respondents were in the age below 35 years old. On the other hand 26.4% of the respondents were found in the age of 36-50, 10.6% found in the age of 51-60 and 0.8% above 60 years old. This indicated that the younger strata of population was more inclined towards the use of e banking services.

As indicated in the table the sample of the respondents is made up of 59.4% married, 40.6% unmarried. This means that the majority of the respondents were married and also this findings are consistent with the findings on age of the respondents which shows that majority of the respondents were above 25 years of age. The age analyses above shows only 20% of the respondents are less than 25 year old.

More over majority of the respondents (36.6%) are first degree holder. This was followed by secondary school (23.8%), second degree (15.8%), TVET (13.2%) and primary school (10.6%). Interestingly there was no illiterate in the given sample and most of the respondents (65.6%) have TVET and above education level. These findings are very much consistent with earlier studies that were done that showed the majority of the people who seeking banking services are more knowledgeable. This may be indicates level of education matters in easy understanding of the technology.

Further the occupational type of the respondents analysis shows that most of the respondents (58.8%) are salaried in their occupation and this followed by business man (31.9%), student (6.5%) and other (2.9%) and no respondents are unemployed. In addition 57.8% of the respondents replied that mostly they are using e banking while the remaining 42.2% of the respondents are using manual banking though they have e banking technology on their hand. As it is supported by the interview this may be due to the fact customers are not aware (knowledgeable) of on usage of e banking. Finally while the respondents were asked the type of e banking they are using frequently, majority of them (58.3%) use ATM, followed by Mobile banking (27%), POS (7%), Internet banking (5.2) and other (1.5). This indicates ATM users are large in number, because ATM is a pioneer banking product in Ethiopia and customers are adopt the function and service of ATM than other e banking products.

4.2.2 Mean and Standard Deviation

In order to compare the different factors that affect the level of customer satisfaction, mean and standard deviation of the respondents have been computed. The result of the analysis is shown in the table 4.3 below.

**Table 4.3 Mean and Standard Deviation**

<table>
<thead>
<tr>
<th>S/no</th>
<th>Variables</th>
<th>No of Items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RLB</td>
<td>4</td>
<td>386</td>
<td>3.2</td>
<td>1.02311</td>
</tr>
<tr>
<td>2</td>
<td>EFC</td>
<td>4</td>
<td>386</td>
<td>3.23</td>
<td>.87250</td>
</tr>
<tr>
<td>3</td>
<td>SEC</td>
<td>4</td>
<td>386</td>
<td>3.38</td>
<td>.93109</td>
</tr>
<tr>
<td>4</td>
<td>RSP</td>
<td>4</td>
<td>386</td>
<td>3.13</td>
<td>1.13849</td>
</tr>
<tr>
<td>5</td>
<td>CNT</td>
<td>3</td>
<td>386</td>
<td>2</td>
<td>.99854</td>
</tr>
<tr>
<td>6</td>
<td>EBCS</td>
<td>4</td>
<td>386</td>
<td>3.42</td>
<td>.82736</td>
</tr>
</tbody>
</table>

Source: SPSS Out put
As it is indicated in the above table the mean value of overall e banking satisfaction (EBCS) is
3.42. This shows customer’s satisfaction is above satisfactory level with present service of CBE
and Standard deviation was also found less than 1. Hence, the information provided by customer
is near to the average. The finding is consistent with other similar studies (Sintayehu, 2015 found
a mean 3.3).

As far as the mean value is concerned out of the listed quality dimension security shows the
highest mean value which is 3.38 with standard deviation of .93109. This indicates the customer
feeling is above satisfactory level on the dimension. This means on the overall perception, the
respondents agreed that e banking is more secure and they are more comfortable using the
services without fear. Therefore the variable has relatively major role in e banking service
quality and in turn over all customer satisfaction. Further the finding is similar other studies
(Ongori, 2013, Sintayehu 2015). This is because the bank put several controlling method such as
pin (password) to log in, limiting on volume of transaction and so on.

The table 4.3 above shows that efficiency has the mean value of 3.23 with standard deviation of
.8725. The result indicates the customers are satisfying on the dimension of efficiency as far as
the mean value is concerned. The finding is consistent with other similar studies (Ongori, 2013;
Sintayehu, 2015; Simon 2016). This level of comfort on virtually in the aspects of efficiency
translates to increased levels of satisfaction amongst the users of the services and serves to
encourage the usage of the facilities as intended by bank.

Further the analysis the response indicates that reliability have a mean score of 3.2 with the
standard deviation of 1.023. Still the customer rates the variable above satisfactory level.
Moreover the finding is consistent with several researches ( Meron, 2015; Ongori, 2013; Zhou,
2004 ). This indicates the customers acknowledge CBE that it is relatively accurate in billing,
reduces time wasted on queries, minimize about costs of services. With this perception it is clear
that this dimension will significantly influence the levels of customers’ satisfaction. This may be
achieved since the bank is aggressively working on branch expansion, deploying ATM machine
and giving due attention for marketing tasks.

The above table also shows responsiveness has 3.13 with standard deviation of 1.1383. What
this implies, customers are feeling above satisfactory level on the variable. Further the finding is
supported by various studies (Meron, 2015; Johnston, 1995; Kumbhar, 2011). This means the
respondents are actually happy with the responsiveness offered by their banks while they met
problem in using e banking. Possibly this may be happen since the bank give due attention to
marketing manager and marketing officer to handle this task at the branch level.

Finally out of the study variables contact has the least value which is about 2 with standard
deviation of .9954. The customers are dissatisfied or they are feeling below satisfaction level as
far as mean score is concerned. The finding is consistent with some previous researches (Ongori,
2013; Hassen, 2012). The result indicates that it is not easy for customers to contact e bank
administrator in CBE. This is may be due to the fact that the bank do not facilitate means of
contacting the e bank officers (administrator) by using online, e mail or phone at branch level
though there is a 3-digit phone number (951) for e banking center at head office level.
4.3 Inferential Finding

4.3.1 Chi-Square tests

The Chi-square test for independence can be used in situations where there are categorical variables. It works with the simplest form data such as gender or country; data that has been placed in categories, such as age group. Here also chi square is applied to test the relationship between customer satisfaction and demographic profiles (i.e. sex, age, marital status, education level and occupation).

Table 4.4 Chi square test for demographic profile

<table>
<thead>
<tr>
<th>Demography</th>
<th>Value</th>
<th>df</th>
<th>Sig (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>8.709</td>
<td>16</td>
<td>.925</td>
</tr>
<tr>
<td>AG</td>
<td>108.423</td>
<td>64</td>
<td>.000</td>
</tr>
<tr>
<td>MS</td>
<td>19.689</td>
<td>16</td>
<td>.235</td>
</tr>
<tr>
<td>EDCL</td>
<td>124.325</td>
<td>64</td>
<td>.000</td>
</tr>
<tr>
<td>OCPN</td>
<td>36.851</td>
<td>48</td>
<td>.879</td>
</tr>
</tbody>
</table>

Source: SPSS Out put

From the table 4.4 above it possible to understand that age and education level has relation with e banking satisfaction because these two variables are statistically significant since their p value is lower than even 0.01. This means that there is a meaningful relationship between the education level and age with e banking satisfaction. On the other hand the remaining three variables (sex, marital status and occupation) are not statistically significant as their p value is greater than 0.01 and even greater than 0.05. Consequently the finding shows that from the given demographic variables only age and education level has relation with customer satisfaction in e banking. The chi square value for education 124.325 with p value 0.000 indicates that there is strong relation between education level and e banking satisfaction. This is consistent with the finding in demographic parts which describes majority (65.6%) of the respondents are educated and have above TVET level. This may happen due to the fact the more the educated the customers are the more they can use the technology easily.

Similarly the calculated chi square value for age 108.425 with p value of 0.000 reveals there is also a strong relationship between age and customer satisfaction in e banking. The demographic part also states that majority (62.2%) of e banking users in CBE is below the age of 35 years.
This shows when customers are the younger; they are the more capable of using the technology without challenge. In turn this will increase the satisfaction level of e banking customers.

4.3.2 Regression analysis

Multiple regression analysis was employed for data analysis and to validate the hypotheses formulated. To use the multiple regressions however it is better first to check the diagnosis test so as to see whether the assumption is violated or not.

4.3.2.1 Diagnosis test

Multicolinearity test

Collinearity is occurred in such situation where two or more predictor variables have a higher correlation. So, the problem may be faced while drawing conclusion because of high correlation. The table below shows that the correlation matrix between independent variables: Reliability, Efficiency, Security, Responsiveness and Contact.

Table 4.5 Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>X1(RLB)</th>
<th>X2(EFC)</th>
<th>X3(SEC)</th>
<th>X4(RSP)</th>
<th>X5(CNT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1(RLB)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2(EFC)</td>
<td>.184</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3(SEC)</td>
<td>.122*</td>
<td>.434**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4(RSP)</td>
<td>.725**</td>
<td>.174**</td>
<td>.079</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>X5(CNT)</td>
<td>.214**</td>
<td>.209**</td>
<td>.109*</td>
<td>.325**</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: SPSS output

According to cooper and schindiler (2009) a correlation coefficient that is above 0.8 in explanatory variables is a symptom of creating multicolinearity problem. Similarly, Hair et al. (2006) argued that correlation coefficient below 0.9 may not cause serious multicolinearity problem. The correlation matrix table above shows there is no variables that have the correlation coefficient above 0.8. Thus, it possible to conclude there is no multicolinearity problem in the explanatory variable.
Normality

A very important assumption in regression is that the dependent variable is normally distributed. Normality is used to describe a symmetrical, bell-shaped curve, which has the greatest frequency of scores around in the middle combined with smaller frequencies towards the extremes (Pallant, 2005). The distribution of the frequencies on either side of the maximum ordinate of the curve is similar with each other. The normality test of the data is presented in the figure below.

Figure 4.1: Frequency Distribution of Standardized Residuals

![Histogram](https://via.placeholder.com/150)

Source: SPSS Output

The figure 4.1 above shows the histogram is bell shaped that indicate the disturbance is normally distributed. In addition as it is clearly observed in the figure most of the frequencies are fairly close to the curve. These shows the residuals (disturbance) of the data are normally distributed. Thus the assumption is not violated.

Further whenever the sample size is large enough (300 and above) the normality of the model is not as such problem (Manly, 2004). If the study have several 5-point items, all intended to measure the same underlying theoretical construct, summing the items will give you a scale that might be sufficiently continuous (and bell-shaped) to justify assuming normality (Figelman, 2009).
Descriptive Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Std. Error</th>
<th>Kurtosis</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLB</td>
<td>386</td>
<td>3.1975</td>
<td>1.02311</td>
<td>.031</td>
<td>.124</td>
<td>-1.259</td>
<td>.248</td>
</tr>
<tr>
<td>EFC</td>
<td>386</td>
<td>3.2293</td>
<td>.87250</td>
<td>-.064</td>
<td>.124</td>
<td>-.478</td>
<td>.248</td>
</tr>
<tr>
<td>SEC</td>
<td>386</td>
<td>3.3815</td>
<td>.93109</td>
<td>-.469</td>
<td>.124</td>
<td>-.557</td>
<td>.248</td>
</tr>
<tr>
<td>RSP</td>
<td>386</td>
<td>3.1308</td>
<td>1.13849</td>
<td>-.277</td>
<td>.124</td>
<td>-1.344</td>
<td>.248</td>
</tr>
<tr>
<td>CNT</td>
<td>386</td>
<td>2.0060</td>
<td>.99854</td>
<td>1.141</td>
<td>.124</td>
<td>.354</td>
<td>.248</td>
</tr>
<tr>
<td>EBCS</td>
<td>386</td>
<td>3.4223</td>
<td>.82736</td>
<td>-.215</td>
<td>.124</td>
<td>-.673</td>
<td>.248</td>
</tr>
</tbody>
</table>

Valid N (listwise) 386

Source; SPSS Out put

In addition the in descriptive statistics skewness and kurtosis help to determine normality of the study. A perfect normal will have 0 skewness and 3 kurtosis. But usually it is acceptable -1<skewness<1 and also small variation in kurtosis may not lead the data not to be normal. Accordingly except contact all variables have skewness of between -1 and 1. Similarly the kurtosis is also not as such far from 3. Here the in calculating kurtosis SPSS reveal the result by subtracting 3 from each. Thus, to get the exact value it is must to add 3 on the SPSS result.

Linearity

The second assumption to be tested out is linearity or assumption of linear relationship observed between two variables. Linearity implies that slope of the population regression function is constant; thus, non-linearity means, in other words, that a change in the dependent variable does depend on the value of one or more of the independent variables (Stock, 2007). The linearity test of the disturbance has been presented in the following figure.
The linearity test on figure 4.2 above aimed at testing whether the relation between the dependent variable (customer e banking satisfaction) and independent variables (reliability, efficiency, security, responsiveness and contact) is linear or not. As it is shown on the graph the scatter plot of the residuals are exactly lie on the linear line end to end. Therefore this result suggests the relation we are going to predict in the regression result is linear. To end, again linearity assumption is not violated.

**Homoscedasticity**

As regression models should be assumed to have a constant variance of residuals (homoscedasticity). The next assumption to test out is homoscedasticity, which is the Violation of this assumption is called heteroskedasticity. One way of doing this is to look at the plot which is a scatterplot of standardized residuals against standardized predicted values. The graph should show a random array of dots that are evenly dispersed around zero. Accordingly Figure 4.3 below shows homoscedasticity of the study.
The graph shows a random dispersion around zero, and one can conclude that the assumption of homoscedasticity has been met.

4.3.2.2 Correlation Analysis between Explanatory and Explained Variables

The coefficient of correlation shows the direction and strength of the relation between the variables. Accordingly the result of the analysis has been discussed in the following table.

Table 4.6 Correlation analysis between explanatory (reliability, efficiency, security, responsiveness and contact) and explained variables (e banking customer satisfaction)

<table>
<thead>
<tr>
<th>Variables</th>
<th>EBCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>.434**</td>
</tr>
<tr>
<td>Efficiency</td>
<td>.471**</td>
</tr>
<tr>
<td>Security</td>
<td>.354**</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>.574**</td>
</tr>
<tr>
<td>Contact</td>
<td>.454**</td>
</tr>
</tbody>
</table>

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

Source; SPSS Out put
The above table 4.6 shows the correlation coefficient between the dependent variables (e banking customer satisfaction) and the independent variables: reliability, efficiency, security, responsiveness and contact. Responsiveness has relatively high coefficient which is 0.574 at 0.01 significant levels. This shows responsiveness in service delivery has significant relationship with customer satisfaction. This is followed by efficiency that has a correlation coefficient of 0.471 and 0.01 significance level. Similarly contact and reliability has 0.454 and 0.434 coefficients respectively and both are significant at 0.01.

Finally security has 0.354 correlation coefficients with 0.01 significance level. This shows security has the least correlation coefficient with customers’ e banking satisfaction which means it is the least predictor of e banking satisfaction. However in previous analysis the mean value for security (3.38) was higher than the other variables. Probably this shows customers are simply happy with the security related with e banking but their overall e banking satisfaction is not as such depend on this variable.

### 4.3.2.3 Regression analysis

A multiple regression model was applied to determine the form of relationship between e banking customer satisfaction and reliability, efficiency, security, responsiveness and contact. Below is the summery of the result.

#### Table 4.7 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>RStd. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.756&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.572</td>
<td>.566</td>
<td>.54490</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CNT, SEC, EFC, RLB, RSP  
b. Dependent Variable: EBCS

The adjusted R-squared was used to establish the predictive power of the study model and tells us how the e banking customer satisfaction in commercial banks varied with reliability, efficiency, security, responsiveness and contact. It was found to be 0.566 implying that 56.6% of the variations in customer satisfaction are explained by the dependent variables of the study: reliability, efficiency, security, responsiveness and contact. Leaving 43.4% unexplained.

#### Table 4.8 ANOVA ` Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>150.714</td>
<td>5</td>
<td>30.143</td>
<td>101.519</td>
<td>.000&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>112.829</td>
<td>380</td>
<td>.297</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>263.543</td>
<td>385</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: EBCS
b. Predictors: (Constant), CNT, SEC, EFC, RLB, RSP

ANOVA was used to establish the appropriateness of the regression model in giving reliable results. Usually the regression model is deemed appropriate when the confidence level is 95% and above.

Table 4.8 above shows that F-significance value of p<0.001 was established. This means that the regression model has a less than 0.001 likelihood (probability) of giving a wrong prediction. Hence the regression model has a confidence level of above 95% which confirms that our regression model was appropriate and the results are reliable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.044</td>
<td>.142</td>
<td>7.337</td>
</tr>
<tr>
<td></td>
<td>RLB</td>
<td>.253</td>
<td>.040</td>
<td>.313</td>
</tr>
<tr>
<td></td>
<td>EFC</td>
<td>.115</td>
<td>.036</td>
<td>.122</td>
</tr>
<tr>
<td></td>
<td>SEC</td>
<td>.030</td>
<td>.033</td>
<td>.034</td>
</tr>
<tr>
<td></td>
<td>RSP</td>
<td>.311</td>
<td>.037</td>
<td>.428</td>
</tr>
<tr>
<td></td>
<td>CNT</td>
<td>.061</td>
<td>.030</td>
<td>.073</td>
</tr>
</tbody>
</table>

a. Dependent Variable: EBCS

From the above table 4.9 looking at the significance levels, the study established that there is a significant relationship between e banking customer satisfaction and four dimensions namely; reliability, efficiency responsiveness and contact at 5% significance level. This means that these four dimensions account for the greatest contributions on the attainment of the customers’ e banking satisfaction. On the other hand the significance value of security is .370 that is greater than .05. This indicates it has no significant impact on e banking customer satisfaction.

Accordingly the coefficient (beta) of the variable RSP is about .311. The results showed the presence of a statistically significant positive relationship between the responsiveness and customer satisfaction in e banking. In other word the finding tell us a 100% change in responsiveness will result in 31.1% change in e banking satisfaction. Moreover the finding is
consistent with several previous studies (Mudassir Husnain 2016, Khurana 2009, Nupur 2010) concluded that responsiveness is the core determinates of customer satisfaction. Further the responses from the managers also confirms the finding in which they describe that the bank has a call center at head office level and the call number is available on the e banking platform to get help. In addition at branch level Marketing manager and marketing officers take this responsibility so as to give quick response for any customer query.

Similarly table 4.8 above shows RLB has a coefficient (beta) of .253. This indicated that reliability dimension positively affected the customer satisfaction levels, and a 100% increment in this factor would lead to a consequent increment in 25.3% on customer satisfaction. Moreover such familiarity with the field of reliability has also been reported by other researchers (Khan and Mahapatra 2009, Yang, Jun and Peterson 2004).

Further as it is shown on the above table Customer satisfaction and EFC has a regression weight of .115 as the beta for EFC is concerned. This indicates there is significant positive relationship between customer satisfaction and efficiency on the use of e banking service offered by CBE. This means when there is a 100% improvement in efficiency of e banking there would be 11.5% improvement in customer satisfaction by using e banking. The finding is also consistent with several researches done so far (Ogunlowore and Oladele 2014, Fatemeh S, Sanaz N 2012, Reihaneh A Khurana 2009) those found there is significant relation between customer satisfaction and efficiency. The response from the managers also indicates that the bank is working to raise the e banking service satisfaction levels, by making the website highly efficient, with minimal time intervals in transmission of information.

The table also describes that CNT has a beta of .061 with sig, of .042. The results of the model test show a positive and statistically significant relationship between contact and customer satisfaction. In other word when there is a 100% increment on contact service there would a 6.1% increment in the e banking customer satisfaction. Here though the coefficient for contact is small it is significant at 5%. Similar studies (Namugera, 2013, Hassen 2012) identified that contact has significant relation with e banking satisfaction. Further the interview with the marketing managers suggested so far the bank do not arrange any online contact with customers by using like e mail, website and like.

Finally the despite security has a beta value of .03, its significance value is .370 which greater than the accepted significance level which is .05.

It therefore means that CBE need to satisfy these dimensions (efficiency, reliability, responsiveness and contact) by all means in order to achieve customer satisfaction in e banking.
CHAPTER FIVE

SUMMERY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction
Today, the banking industry across the globe is embracing Information and Communication Technology as part of business strategy for enhancing its performance towards customer satisfaction by creating competitive advantage among banking institutions. The bank needs to take into account customer satisfaction by measuring and evaluating their opinions and use this data to improve the quality of the system if they wish to stay in the market because customer is the determinate for the existence of any business.

Measuring e banking satisfaction is somewhat a complex task as there is no universally accepted e quality model for e banking. Frequently most researchers used models (SERVQUAL, E SERVQUAL WEBQUAL, SITQUAL E- S –QUAL) which are e service quality model focusing on e retail not specifically for e banking service quality. Applying these models to measure e banking service quality may be inappropriate. Thus Wu and Tao (2012) aimed at creating holistic e banking service quality model and determine 21 questions and five e banking service dimensions namely Efficiency, privacy/security, reliability, responsiveness and contact. Therefore this study was conducted based on this variable. The purpose of this study was to identify the impact of e banking on customer satisfaction in the case of CBE. In addition the study tried to examine the level of customer satisfaction in using e banking service. Thus, based on the analysis done, the conclusion and recommendation of the study stated as follows.

5.2 Summery of Finding

The objective of the study is to examine the effect of e banking on customer satisfaction in the case of CBE. Accordingly this part of the research summarizes the major findings of the study.

The result of the background information of respondents indicated that the majority of the respondents are younger which is below 35 years age. These shows the younger strata of population were more inclined towards the use of e banking services. The finding also shows that majority of the respondents are educated which is above TVET level.

Further to measure the satisfaction level of customer the study calculate mean and standard deviation of responses. Accordingly out of the study variables the finding reveals that except contact all variables (i.e. reliability, efficiency, security and responsiveness) are above satisfactory level. In addition the chi square result indicates that out of demographic variables only age and education levels have significant relation with e banking customer satisfaction.

In addition the finding from the regression result indicates except security all the stated service quality dimensions have a positive significant effect on customer satisfaction and
responsiveness is the dominant service quality dimension which affects customer satisfaction in CBE. Beside From the R square value it is depicted that 56% of variation in customer satisfaction is explained by the service quality variables (i.e. reliability, efficiency, responsiveness and contact).
Thus the findings are important to enable the bank to have a better understanding of customers perception of service quality of banking and consequently of how to improve their satisfaction with respect to aspects of this service quality.

5.3 Conclusion

The finding of the study is concluded as follows:

- The finding of the study reveals reliability, efficiency, responsiveness and contact have significant positive impact on e banking customer satisfaction. Therefore, the alternative hypothesis (i.e. reliability, efficiency, responsiveness and contact have significant effect on customer satisfaction) is accepted.

- Any 100% increase in reliability, efficiency, responsiveness and contact will lead to an increment in customer satisfaction by 25.3%, 11.5%, 31.1% and 6% respectively at 5% significances.

- The descriptive analysis shows the level of customer satisfaction for e banking is above satisfactory level with mean value of 3.42 on a 5 point likert scale. The mean value of the variables is security (3.38), efficiency (3.23), reliability (3.2) and responsiveness (3.13). Further the analysis indicates that majority of e banking users are in the age of 15-35, education wise majority of them are first degree and secondary school level, occupationally majority of the respondents are salaried, moreover majority (59%) of the respondents are predominantly use ATM than other e banking service.

- The chi-square result indicates that out of the demographic characteristics only age and education level has significant relation with e banking satisfaction.

- The interview response indicated that the bank has problem related with infrastructure like breakdown of network and power supply, and also problem with customers’ attitude and knowledge in using e banking.
5.4 Recommendation

Based on the findings and conclusions of the study, the following recommendations are forwarded to the management of the bank.

- In this study reliability, efficiency, responsiveness and contact have a positive significant impact on customer satisfaction. Therefore the bank should work on the indicators of these dimensions.

- By identifying their need, the bank should increase the users of e banking from different age category, occupation and education status.

- As majority of the respondents are ATM users, the bank should work to attract the customer to use also the other e banking services like POS, mobile and internet bank.

- Regarding the ICT infrastructures and low internet access, the support of government is not questionable. However, it is recommendable to strive along with all banks in Ethiopia with the help of Bankers association for having dedicated infrastructure to financial institutions as their smooth flow of the system has positive impact to the development of the country.

- As customers’ attitude and knowledge is a challenge in using e banking, the bank expected to build customers’ confidence by presenting the security used in technical and non-technical terms; outline the procedure and information on how to cope with problem if happen, and provide instruction on how to use e banking safely.
References


APPENDIX I

A. Questionnaire for Customers
Addis Ababa University Faculty of Business and Economics
Business Administration: Post Graduate Program

Dear Sir/Madam
I am MBA student at Addis Ababa University and now I am doing research on topic entitled ‘Impact of Electronic Banking on Customer Satisfaction’. I shall be great full if you help me in filling up the questionnaire with fair and frank responses. I assure that the information supplied will be kept strictly confidential and used for the academic research purpose only.

Thank you for your cooperation !!

Part I
Please put right mark (✓) in front of your choice box that express yourself

1. Gender: Male □ Female □.


4. Current education level. Illiterate □ Primary □ High school □ TVET □ University degree □
   Master Degree □ above Doctorate Degree □.

5. Occupation: Unemployed □ Student □ Salaried □ Business man/woman □
   Other □

6. Which of these banking services do you mostly use?
   Manual banking □ Electronic banking □

7. Which type of electronic banking service delivery mostly do you use?
   ATM □ POS □ Mobile banking □ Internet banking □

8. The introduction of E – Banking in CBE has positively affected service delivery

9. You are satisfied with type service offered on e banking platform?

10. your expectations before the use of e banking have been met currently
11. Overall you have satisfied on e banking service of the bank


Part II
Customer Feelings about Electronic Banking
Please right mark (√) any no. from 1to 5 on the basis of your experience with Commercial Bank of Ethiopia.

<table>
<thead>
<tr>
<th>s/n</th>
<th>Service dimension</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Reliability</strong></td>
<td></td>
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<tr>
<td>1.1</td>
<td>E-banking deliver the service exactly as promise</td>
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<td>1.2</td>
<td>E banking service free from deficiencies.</td>
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<tr>
<td>1.3</td>
<td>Your e bank offers 24/7 services.</td>
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<tr>
<td>1.4</td>
<td>Termination during a transaction does not happen in E bank</td>
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<tr>
<td>2.</td>
<td><strong>Efficiency</strong></td>
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<td>2.1</td>
<td>Using e bank is not time consuming.</td>
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<td>2.2</td>
<td>Completing transactions through e banking is fast and easy.</td>
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<td>2.3</td>
<td>E banking is the cheapest way making transaction</td>
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<td>2.4</td>
<td>E banking language is easy to understand</td>
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<td>3.</td>
<td><strong>Security/Privacy</strong></td>
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<td>3.1</td>
<td>Making transactions through e bank is safe.</td>
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<td>3.2</td>
<td>Your e bank protects my privacy and transaction information</td>
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<td>3.3</td>
<td>Your e bank has clear transaction safety policies.</td>
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<td>3.4</td>
<td>There is restriction on large volume transaction</td>
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<td>4.</td>
<td><strong>Responsiveness</strong></td>
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<td>4.1</td>
<td>The administrator of your e bank responds to your needs happily and rapidly.</td>
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<td>4.2</td>
<td>Your e bank administrator sincerely solves whatever problems you encounter.</td>
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<td>4.3</td>
<td>E banking has knowledgeable staff to solve problem</td>
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<td>4.4</td>
<td>There is help in e banking in any query online</td>
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<td>5.</td>
<td><strong>Contact</strong></td>
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<td>5.1</td>
<td>Your e bank offers a customer service email address.</td>
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<td>5.2</td>
<td>Your e bank offers a telephone service hotline.</td>
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<td>5.3</td>
<td>Contacting e bank administer is very easy.</td>
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Appendix B

Interview questions for Marketing Customer Service Manager

Q1. What are the electronic banking services that are offered at CBE?

Q2. In your opinion why customers frequently visit your branch while they have e banking service on hand?

Q3. What sort of support you set in case customer face difficulties in using e banking?

Q4. What can you say about the quality of e banking service provided by your bank?

Q5. As per your opinion e banking has brought the expected satisfaction to the users?

Q6. Finally what are the major challenges that undermine the level of customer satisfaction in using e banking?