ST.MARY`S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

MA IN PROJECT MANAGMENT

The Effect of E-Banking Service Quality on Customer Satisfaction in The Banking Sector of Ethiopia (case study: Five Selected Grade Four Branch Customers of CBE)

By:

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ID: SGS/0333/2007B

June, 2017

Addis Ababa, Ethiopia

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A thesis submitted to the School of Graduate Studies of St Mary University in partial fulfillment of the requirements for the Degree of Masters of Arts in Project Management

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Table of Contents

Title Pages

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Abbreviations and Acronyms

ANOVA	Analysis of Variance
ATM	Automated Teller Machine
AVR	Automated Voice Response
BOLE	Bole Atlantic International
CBE	Commercial Bank of Ethiopia
ECX	Ethiopian Commodity Exchange
IBD	International Bank Division
IT	Information Technology
OCC	Office of the Controller of the Currency
PC	Personal Computer
PDA	Personal Digital Assistant
PIN	Personal Identification Number
POS	Point of Sale
SMS	Short Messaging System
SPSS	Statistics Package for Social Science
TVET	Technical Vocational and Education of Training
US	United State
VIF	Variance Inflation Factor
WAN	Wide Area Network

List of tables

List of figures

Abstract

The research is undertaking on the effect of electronics banking service quality on the customers' satisfaction in the banking sector of Ethiopia. Since customer satisfaction is a high priority as one of the goals of banks, this study aims to investigate the effect of e-banking service quality on customer satisfaction. This study has been an explanatory research regarding purpose and/or research design. Qualitative and quantitative research approach was used. The statistical population consists of 100 customers of CBE. Moreover, structured questionnaires would be used to collect the information. The questionnaires were developed in two sections by the researcher. Inferential and descriptive data analysis technique has been used. The validity of the questionnaire was confirmed by a group of experts. Furthermore, SPSS version 20 software has used to analyze the data. The major findings of this study were service quality and privacy of e-banking has been significant factor on customer satisfaction. The researcher concludes that there was a linear relationship between e-banking service quality and customer satisfaction. There is the need to create awareness and educate majority of the banking population or users on e-banking especially in mobile and internet banking as a recommendation.

Keywords - electronic banking, customer satisfaction, Access, security, service quality, ease of use, time of delivery and reliability*.*

CHAPTER ONE: INTRODUCTION

This chapter sketches the research background, statement of the study, research question, objective of the study, hypothesis, scope of the study, significance of the study, and organizations of the study leading to customer satisfaction in electronic banking of CBE.

1.1. Background of the study

While financial institutions took steps to implement e-banking services in the mid-1990s, many consumers were hesitant to conduct monetary transactions over the web. It took widespread adoption of electronic commerce, based on trailblazing companies such as America Online, Amazon.com and eBay, to make the idea of paying for items online widespread (Delvin, 1995). According to Delvin (1995) also by 2000, 80 percent of U.S. banks offered e-banking. Customer use rose slowly. In 2000, Bank of America became the first bank to top 3 million online banking customers, more than 20 percent of its customer base. In comparison, larger national institutions, such as Citigroup claimed 2.2 million online relationships globally, while J.P. Morgan Chase estimated it had more than 750,000 online banking customers (Delvin, 1995).

Others, also suggested that Electronic revolution in banking industry can be drawn back to 1970, when the computerization of financial institutions gained energy (Malak, 2007), however; a visible presence of this was obvious to the customers since 1980, with the introduction of ATM.

The banking industry and its environment in the 21st century are highly complex and competitive and therefore the requirement for information and communication technology to take center stage in the operations of banks (Stevens, 2002). The main purpose of this thesis is examining the impact of electronics banking service quality on customer satisfaction in Ethiopian banking sectors.

E-banking is critical in the transformation drive of banks in areas such as products and services and how they are delivered to customers. Thus, it is seen as an appreciated and powerful tool in the development, growth, promotion of innovation and enhancing competitiveness of banks (Gupta, 2008; Kamel, 2005).

According to Chang (2003) e-banking donates profoundly to the circulation channels of banks such as automated teller machine (ATM), mobile-banking, Telebanking, PC-banking and now internet banking. In addition, transfer of funds, viewing and checking savings account balances, paying mortgages, paying bills and purchasing financial instruments and certificates of deposits processes have improved significantly as a result of internet banking (Chang, 2003). This implies that, e-banking has occasioned in efficiency in service provision in the banking sector because customers can perform business from one side of the country to another and from both long and short distance.

Other scholars argued that, e-banking has converted traditional banking practices to the extent that it has been found to create a model shift in marketing practices resulting in positive performance in the banking sector (Gonzalez, 2008; Maholtra & Singh, 2007).

The purpose of this study is investigating the effect of electronic banking service quality on the customers' satisfaction in the banking sector of Ethiopia generally.

1.2. Statement of the Problem

In the past, customers demand for banking services was driven basically by safety of their monies as well as interest subsequent from such savings. However, the present day customers' demand has shifted from just safety of money to how banks deliver their services. The reason is that the present day customer requires efficient, fast and convenient services (Kwashie, 2012). The Ethiopian banking sector has functioned recently the e- banking service however, with the start of e-banking service; the sector is characterized by intensely aggressive competition to solicit the customer more. This technological advancement has made to make the banking process faster and easier whilst satisfying the needs of the customers. The argument has been that some of the product and services offered by the e-banking technology does not meet customers' need with quality.

A study undertaken by Philipos (2013) entitled with "customer satisfaction and electronic banking service on some selected banks of Ethiopia" listed that presently there are some factors which affect customer satisfaction in electronic banking service in the surveyed banks (commercial banks of Ethiopia, Wegagen bank, and Zemen bank) of Ethiopia. As noted in the result section among the factors which affect customer satisfaction were ATM machine out of cash, no printing recite, cards get blocked, frequent breakdown of ATM service, unreliability of ATM service, lack of sufficient technicians in all bank who solve breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of mobile banking service, lack of reliable Telebanking, lack of credit card service, under-development of technological infrastructure, low level of relevant knowledge creation and innovation, interruption of network, limit of fair distribution of E-banking service in all over Ethiopia during based on the survey of this study. Here the study found that customer satisfaction in e-banking has significant relationship with convenience, reasonable and fair fees (charges) during transaction, efficient service of e-banking, privacy, security, reliability and responsiveness of employees to solve e-banking service failure and these variable determined 84% customer satisfaction in e-banking and also recommended for future researcher to investigate the impact of e-banking service quality on customer satisfaction, customer loyalty and customer retention. As we seen the above study analysis result that it mainly focus on factors affecting

E-banking service which causes customer satisfaction and the researcher more emphasized on ATM and Mobile E-banking service it ignores other E-banking service types such like POS and internet banking service and it also forget level of customer satisfaction obtained from using E-banking service.

According to, Belay and Deribie (2012) in the study of "evaluation of customer satisfactions on bank services in Jimma city in Commercial bank of Ethiopia" found that 25% of the sample respondents answered that there was no any change the benefits they acquired from e-banking in comparison with ordinary banking and 17% of the respondents replied that they got best benefits at best level through e-banking service than ordinary banking. As we understand from the study of Belay and Ebisa that more of the respondents were not satisfied with the E-banking service offered by commercial Bank of Ethiopia. So, the results indicated that E-banking services provided by the bank are not well qualified. The limitation of this study was more focus on traditional banking service and they ignored the E-banking service qualities against the customers.

Based on the study of Yohannes (2010) noted that on the title of " key factors that determine adoption of internet banking in Ethiopia"; 85% the respondents answered that internet banking enables them to manage their account better than the ordinary banking, occupation has an impact on the adoption of internet banking, demographic factors have a relationship with the adoption of internet banking and education levels are regarded as an influential factor in consumers, use of internet banking services with high education levels being particularly significant. The survey result implies that customer support for and reaction to a particular product depends on their level of understanding of what the product can do and how they stand on to benefited from the service provided. The limitation here also not differs from the previous researchers that it gives more emphasis on the adoption of internet banking and it also not assessed the customer's side view about the given service. He also recommended that shall be studied on "the effect of E-banking service quality on customers satisfaction" the future researchers.

In spite of the increasing adoption of e- banking and its relevance towards customer satisfaction in the Ethiopian banking industry, the above mentioned empirical study or research has been conducted in understanding factors of e-banking service provision that

prime to customer satisfaction. Although, there are some empirical researches which focus on the challenges and opportunities of e-banking to adopted; they have not been assessed the customer side effect of e-banking in Ethiopia. The researcher here want to answer the above problems mentioned and findings touching them that was to investigate the "impact of e-banking service quality on customer satisfaction" have been recommended by previous researchers for future study, this research mainly focus on to know customer view about E-banking service quality, and to see the affiliation of e-banking variables listed by other researchers which causes customer satisfaction in e-banking would look like in the study area and the researcher believes that previously no research has been done in this specific topic in the city to provide empirical evidence of the effect on customer satisfaction of e-banking. Therefore, this study tries to fill the gap of empirical research by conducting a study on effect of electronic banking service quality on customer satisfaction in the banking sector of Ethiopia.

1.3. Study Objective

1.3.1. General Objective

The general objective of the study is to identity the influence of electronics banking service quality on customers' satisfaction in the selected banks of Ethiopia.

1.3.2. Specific Objective

Specifically this study aims to achieving the following with the purpose of answering such specific objectives:

1. Identify the types of customer using e-banking services offered by CBE
2. To identify how the major e-banking service quality dimensions(Access, Time of delivery, Security, Ease of use, service quality and Reliability affect customer satisfaction

1.4. Significance of the Study

In the first place the study will help CBE identify the observation of the public have about the electronic banking services the banks are providing in Ethiopia. The satisfaction of the customer is the primary career of the bank, thus this study will provide indication for the improvement of these services.

Also, the study via the analysis of service quality will enable CBE judge its performance in the light of how customers judge it. It is further expected that the study will provide the needed suggestion to the commercial Banks in Ethiopia, the regulatory body and the Consumer Protection Agency to further strengthen their decide in ensuring that customers or the banking public enjoys the best of services.

The study is also will significance to the customer and the business men in general. The outcome of the study will provide information for commercial banks to improve their service delivery and the performance of customer attention units which are geared towards the satisfaction and comfort of the customer.

Finally, the study will add to literature for the future researchers who are doing in the area of marketing, customer satisfaction and quality service delivery in the banking industry.

1.5. Scope of the Study

The scope of the study mainly focuses on two major areas in this research. This consists of the contextual and geographical scope of the study. Contextually, the research was put emphasis on electronic banking focusing its potential effect on customer satisfaction. According to various researchers noted, there are numerous and emerging types of electronic banking such as Automated teller machine (ATM), internet banking, mobile phone banking, debit cards, E-switch telephone banking, SMS banking, home banking, point of sales banking and network banking just to mention a few.

However, four of the several electronic banking has been purposively selected because of these are only advocated in Ethiopia in the banking industry. Because recently among the type of E-banking services there in Ethiopia advocate that some e-banking service types such like ATM, mobile banking, internet banking, debit card, western union, telegram banking and point of sale (POS) services etc. in Ethiopia. In doing this all the existing electronic banking services is going to be identified and out of which those available in Ethiopia would be selected from which four of them should be purposively selected by making a simple observational survey to know which ones are available to the banks chosen for the research. After the observational survey point of sale (POS) service, ATM services, mobile banking and internet banking could be selected. Because most of the bank customer in Ethiopia used, these mentioned E-banking service rather than the rest of others. There are above 19 banks in Ethiopia but some of are offering electronic banking to its customers in Ethiopia; hence the study would be limited to only one chosen bank in Ethiopia which is commercial bank of Ethiopia. Why this bank is going to be selected; it is the first bank implementing e-banking service in Ethiopia and it covers wide ranges of the country with networked branches.

Again, the geographical scope of the study is situated within the Addis Ababa city. However, CBE branches within the Addis Ababa city are many and as such it is practically impossible for the researcher to study all the customers in these branches. For this reason the scope encompasses five grade four selected branches of CBE where the four electronic banks (ATM, MOB, POS and IB) were prevalent. These included Addis Ababa branch, Arat kilo branch, Finfine branch, Arada Giorgis branch and IBD branch forms the geographical scope of this study.

1.6. Organization of the Study

The study is organized in to five chapters. The first chapter deals with background of the study, statements of the problem, objective of the study, and scope and significant of study, and organization of the research. The second chapter presents previous related research done on e-banking, and customer satisfaction both which done in the country and outside country (empirical study) and theoretical background of issues related to e-banking.

The third chapter explains types and source of data that would be used for the study, research approach, research design, collection procedures, sampling techniques used to determine the sample size, method of statistical data analysis tools and collection. The fourth chapter presents the analysis and result of the study that has been arrived using descriptive and inferential statistical tools. The last chapter had present summary, conclusion, limitation and recommendation of the study

CHAPTER TWO: REVIEW OF RELATED LITERATURE REVIEW

Introduction

This chapter presents a review of previous studies related to the present study. The chapter constitutes examination of studies related to e-banking and customer satisfaction in the service industry especially in banks. It also examines the dimensions of e-banking affecting customer satisfaction in the banking industry. The chapter also, outlines the Electronic banking services available in the Commercial Bank of Ethiopia and its history.

2.1. History of Commercial Bank of Ethiopia

Commercial Bank of Ethiopia is government owned bank, established in 1942 and now a days the bank become the leading bank in Ethiopia by introducing modern banking practices, such as branch number, number of employees, capital base and so on as compared to other banks in Ethiopia. It has more than 904 branches stretched across the country with more than twenty thousand talented and committed employees. Currently the bank has more than 8.5 million account holders and become leading African bank with assets of 242.72 billion birr as own June 30th 2014. Commercial bank of Ethiopia plays catalytic role in economic progress and development of the country.

It has strong correspondent relationship with more than 50 renowned foreign banks like commerz bank A.G, Royal bank of Canada, City Bank, HSC BC Bank etc...

Commercial Bank of Ethiopia has a swift bilateral arrangement with more than 700 other banks across the world, so it has reliable and long standing relationship with money internationally acclaimed banks throughout the world. CBE is pioneer to introduce western union money transfer services in Ethiopia early 1990’s and currently working with others 20 other money transfer agents like; Money Gram, Atlantic international(BOLE), Xpress money etc. (profile of the bank)

2.2. Introduction of E-banking in Ethiopia

The presence of E-banking in Ethiopia emerged back to the late 2001; hence the largest state possessed, commercial bank of Ethiopia (CBE) announced e-banking service such like ATM to deliver service to the local users. In addition to eight ATM Located in Addis Ababa, CBE has had Visa membership since November 14, 2005. But, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Despite being the pioneer in introducing ATM based payment system and acquired visa membership, CBE Lagged behind Dashen bank, which worked aggressively to maintain its lead in E-payment system. As CBE continues to move at a snail's pace in its turnkey solution for Card Based Payment system, Dashen Bank remains so far the sole player in the field of E-Banking since 2006. (Gardachew, 2010)

Dashen bank, a harbinger in introducing E-banking in Ethiopia, has installed ATMs at convenient locations for its own cardholders. Dashen's ATM is available 24 hours a day, seven days a week and 365 days a year providing service to Debit Cardholders and International Visa Cardholders coming to the country. At the end of June 2009, Dashen bank has installed more than 40 ATMs in its area branches, university compounds, shopping malls, restaurants and hotels. In the year 2011 the payment card services have witnessed significant strides, Dashen's ATM service expanded to 70 and 704 POS terminals (Annual report of the bank, 2011). Available services on Dashen Bank ATMs are: Cash withdrawal, Balance Inquiry, Mini statement, Fund transfer between accounts attached to a single card and Personal Identification Number (PIN) change. Currently, the bank gives debit card service only for Visa cards. Dashen bank clients can withdraw up to 5,000 birr in cash and can buy goods and services up to 8,000 to 13000 birr per day. Expanding its leadership, Dashen Bank has begun accepting MasterCard in addition to Visa cards. Dashen won the membership license from MasterCard in 2008. Harnessing its leadership with advanced banking technology, Dashen Bank signed an agreement with iVery, a South African E-payment technology company, for the introduction of mobile commerce in April 21, 2009.

According to the agreement, iVery Payment Technologies has licensed its Gateway and MiCard E-payment processing solution to Dashen Bank. Dashen's Modbirr users can transfer 500 birr to other Modbirr users in 24 hours a day. This would make Dashen Bank the first

private bank in Ethiopia to acquire E-commerce and mobile merchant transactions (Amanyehun, 2011). Although Dashen's new technology is one step ahead in that it allows transfer of funds from one's account to others, the first ever E-banking gateway was signed between Ethiopian Commodity Exchange (ECX) and Dashen Bank and CBE. The E-banking system being developed with both banks is designed to give a secure electronic data sharing gateway between clients, banks and ECX, by facilitating a smooth transaction (Abiy 2008) By the end of 2008 Wegagen Bank has signed an agreement with Technology Associates (TA), a Kenyan based information technology (IT) firm, for the development of the solutions for the payment system and installation of a network of ATMs on December 30, 2008.

Zemen Bank, the only Ethiopian bank attached in the idea of single branch banking, by launching full-scale internet banking, a service which is new to Ethiopian banking industry in the year 2010. The bank tested the venture through its first phase of the online service, and now it is already started the full-fledged version, which enable customers to make online money transfer freely. Previously, the online banking service, delivered by the bank, only gave access to bank statements and exchange rate information. The new and never-been-tried service proposed by the bank is to include free account money transfer, corporate payroll uploading system where employers could upload payroll to the system and make payments to individual worker's accounts online and online utility bill settlement system, when utility companies are ready(Asrat, 2010). The agreement signed by three private commercial banks to launch ATM and POS terminal network, in February 2009 is welcoming strategy to improve electronic card payment system in Ethiopia.

Three private commercial banks Awash International Bank S.C., Nib International Bank S.C. and United Bank S.C. have agreed in principle to establish an ATM network called Fettan ATM network. If everything goes as planned, fast ATM will install over 140 ATM machines and over 340 POSs across Ethiopia. There will be one ATM at every branch of the grouping banks, all domestic airports serviced by Commercial service, shopping complexes and merchants. The agreement is the first significant cooperation between competing banks in Ethiopia, which others should be encouraged to follow as there is no single bank in Ethiopia that can afford to provide Extensive geographical coverage and access (Binyam, 2009)

2.3. Definitions of E-banking

The concept of electronic banking has been defined in many ways by various researchers. According to, Daniel (1999) defines electronic banking as the carriage of banks' information and services by banks to customers through different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television.

Pikkarainen et al (2004) defines also electronic banking as an "internet portal, by which customers can use different kinds of banking services ranging from bill payment to making investments". In fact the use of electronic banking as an opportunity for the spreading of financial institutions has revolved into a good tool rather than only an approach to accomplish competitive advantage of preference with the presence of globalization and violent rivalry (Flavián et al, 2004; Gan and Clemes, 2006).

According to, Timothy (2012) also defines that electronic banking alludes to the utilization of the Internet as a remote conveyance channel for giving administrations, for example, opening a bank account, transferring funds among diverse accounts and electronic bill presentment and payment. This can be offered in two principle ways. A bank with physical offices can build up a Website and offer these services to its clients notwithstanding its customary conveyance channels. Second, is to set up a virtual bank, where the PC server is housed in an office that serves as the lawful location of such a bank. The banks offer their clients the capacity to make deposits and withdraw funds by means of ATMs (Automated Teller Machines) or other remote conveyance channels claimed by different foundations, for which an administration expense is acquired. Electronic banking is modern delivery channel of banking services (Ahasanul, 2009).

2.4. Types of E-banking

In this aspect different scholars demonstrates various assumptions or analysis. According to, For instance, Salehi and Zhila, (2008) noted that e-banking involves an electronic connection between bank and customer in order to prepare, manage and control financial transactions of the customer via the bank. This type of banking has been found to be driven through the following channels:

- Internet banking (or online banking),
- Telephone banking,
- TV-based banking, and
- Mobile phone banking (or offline banking)

According to Gan and Clemes (2006) E-banking can be also defined as a variety of platforms such as internet banking or (online banking), TV-based banking, mobile phone banking, and PC (personal computer) banking (or offline banking) whereby customers access these services using an intelligent electronic device, like PC, personal digital assistant (PDA), automated teller machine (ATM), point of sale (POS), kiosk, or touch tone telephone.

There are also different forms of electronics banking stated by various scholars; it will be mentioned as follows.

2.4.1. Automated Teller Machines (ATMs)

According to, Rose (1999) as cited in Prince, defines that "an ATM combines a computer terminal, database system and cash vault in one unit, permitting customers to enter the bank's book keeping system with a plastic card containing a PIN or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day". So, it provides an important clue or information about the use of e-banking for clients.

Hence, as a result of the rapid increase in technology, ATMs go to the extent of given accounts balances and bill payments. Banks use this electronic banking device payment system, to gain competitive advantage. The combination of automation and human tellers gives more productivity for the bank during banking hours (Rose, 1999).

2.4.2. Telephone Banking

"Telephone Banking (Telebanking) can be defined as a form of remote or virtual banking, which is essentially the delivery of branch financial services via telecommunication devices where the bank customers can perform retail banking transactions by dialing a touch-tone telephone or mobile communication unit, which is connected to an automated system of the

bank by utilizing Automated Voice Response (AVR) technology" (Balachandher et al, 2001). As indicated by Leow (1999), also telephone banking provides numerous benefits for customers and banks. It provides convenience, easy access and customers also saves time. On the part of the banks telephone-banking services are less costly than those of branch based services. Customers get access to banking services at their various offices and homes without visiting bank branches. It has almost all the benefits of ATMs, except that it lacks the productivity generated from cash dispensing by the ATMs

2.4.3. Personal Computer Banking

According to, Abor (2005) defines that Personal Computer Banking is a sort of service which provides the bank's clients to access their banking data through a restrictive system, through software installed on their personal PC. By having access the customer can perform a great deal of banking services. The significance of PC proficiency has brought about expanding the utilization of PCs. This positively encourages the development of PC banking. Customers have access banking services even at their homes and offices (Abor, 2005).

2.4.4. Internet Banking

According to Essinger (1999) internet banking is: "to give customers access to their bank accounts via a web site and to enable them to enact certain transactions on their account, given compliance with stringent security checks". Based on, the Federal Reserve Board of Chicago's Office of the Controller of the Currency (OCC) Internet Banking Handbook (2001), Internet banking is described as "the provision of traditional (banking) services over the internet". Internet banking provides convenient and flexible services to customers. It enables customers to transact almost all their banking transactions online. One could check accounts, query the bank and also transfer funds to other people on different accounts, it is the most financially savvy innovative method for yielding higher profitability. Another feature of internet banking is that, it gives a 24/7 access to customers.

2.4.5. Branch Networking

Networking of branches can be showed as the computerization and between associating of geographically diverse stand-alone bank branches, into a framework of Wide Area Network

(WAN) for making and sharing of solidified client data (Abor, 2005). It provides quick inter-branch transactions and hence the effect of time and distance are eliminated. Almost all banks in Ethiopia have various private and public banks branches across the country are networked. Regardless of where a customer opened his or her accounts, he or she can operate it anywhere.

2.4.6. Mobile Banking

Currently in addition to the electronic banking products in Ethiopia mobile banking is adapted widely. Literally this is getting banking service on the mobile phone. Based on, Clottey (2008) Mobile banking is a system or platform in which customers are automatically updated on any changes in their account. These changes are may come in the form of account debits and credits or any charges to the account. All it needs for mobile banking is a mobile phone with a well-functioning text messaging system. SMS banking falls under this category. This system uses short text messaging system to inform customers of their account (Clottey, T. A., and Collier, D.A. 2008)).

2.4.7. Point-of-Sale Transfer Terminals (POS)

It agrees to consumers to pay for retail purchase with a check card, a new name for debit card. This card looks like a credit card but with a significant difference. The money for the purchase is shifted immediately from account of debit card holder to the store's account (Malak, 2007).

This type of e-banking handles cheques verification, credit authorization, cash deposit and withdrawal and cash payment. It enhances electronic fund transfer at the point of sales. Thus customers account would be debited immediately with the cost of purchase in an outlet such as a petrol station or supermarket. The implication of this is that customers can make payment for goods and services without necessarily coming in contact with physical cash as the purchase price would be debited on the buyer’s card and credited on the seller’s account (Olanipekun et al, 2013).

2.5. Benefits of e-banking

It provides a lot of benefits both to the customer and the bank itself.

2.5.1. Benefits from Bank side

To begin with the banks benefit e-banking service is competitive branding and as well as better appreciation to the market demands. As such banks that provide electronic banking services are known to be leaders in technology implementation and advancement. Thus, the better image brand they will bring from the customers. The other returns may be measured in terms of money.

The main objective of every organization is to maximize profits including banks. As indicated viewpoints communicated by Mols (1999) it was opined that the Internet is a revolution that will do away the old request holds much influence. The internet revolution in electronic-banking transaction is much less expensive than branch or even telephone transactions.

The other benefits that e-banking enables banks to offer are low-cost, high value added financial services and also benefit from the promotional opportunity to cross sell products such as credit cards and loans (Hawkins, 2001).

According to, Karjaluoto (2002) also denotes that helps to banks are cost savings, reaching new segments of the population, efficiency, enhancement of the bank's reputation and better customer service and satisfaction, the online banking strengthens the relationship between the service provider (e.g. bank) and the customer.

2.5.2. Benefits from Customers' side

According to Jen and Cheng (2006) electronic-banking has made common role for banks and businesses around the world, and that is clear in the way they perform financial transaction. Electronic banking customers can also check accounts, transfer money and can have access to numerous banking products and services. There is no need for Customers to visit banks branch to make transactions, (Cheng et al., 2006). Electronic banking has a vital role in the economy helping buyers and sellers to make financial transaction through the exchange of

goods and services without physically meet (Cheng, 2006). Customers are able to shop worldwide without the need of carrying paper money.

Howcroft et al., (2002) in a study, found that an important influences encouraging consumers to use online banking are lower fees followed by dropping paper work and human error, which subsequently minimize disputes (Howcroft et al., 2000)

2.6. Challenges of e-banking

Although opportunities to banks, there are various difficulties such as the innovation of IT applications, the obscuring business sector limits, breaking modern boundaries, the passage of emerging competitors, and the development of new plans of action (Liao and Cheung, 2003).

Another security issue associated with E-banking as introduced by the Economist journal (1999) recounts that E-banking insecurities is classified into three categories, firstly those associated with fraud and theft secondly those by hackers and lastly flaws in systems design or set up leading to security breaches (genuine users seeing being able to transact on other users accounts). All of these insecurities have financial and legal reputations.

According to, Earl (2000) other challenges in line with electronic banking spans from the type of technology selected, lack of knowledge and lastly implementation. In this regard, we understand that bank managers know very well their business operation, its process and behavior of employees and their experience as well as educate the customers.

2.7. Dimensions of E-banking influencing Customer Satisfaction

In the study of e-banking different researcher found different e-banking dimensions affecting customer satisfaction as a result. For instance, Yang et al., (2004) announced that reliability, accountability, and adequacy, ease of use, security and product carrier or factors for online e-banking quality. According to Cronin & Taylor (1992) also determined the user interface, main services and services supplement as important aspects of e-banking quality. Other traits for measuring services quality in e-banking are as follows: website appearance, ease of use, relationships, design and content, reliability, efficiency, support, communication, security,

motivation, functions, storage capabilities, services, confidence, customizing store policies, reputation and empathy (Madu, C.N. and Madu, A.A.2002; Santus, 2003).

Although, different scholars found that various types of electronic banking dimensions or factors influencing customers satisfaction, the researcher is solely examining the six e-banking dimensions such as ease of use, time of delivery, privacy or security, reliability, access and service quality. Because in the context of the countries like Ethiopia the concern of these six dimensions of E-banking service are very important. However, peoples strongly like the technology's the bank using is reliable, secure, fast, easy, and accessible as well as qualified. So, in order to know the feelings of customers using E-banking services needs this research undertaking. Due to this reason the researcher examining the six e-banking service qualities namely, ease of use, security, access, reliability, time of delivery and service quality.

2.8.1. Ease of Use

Davis (1986) noted while the technology is no need of more effort, therefore it would have a power of acceptance by its users. Literally, Davis defined ease of use as "the degree to which a person believes that using a particular service would be free of effort" (Davis, 1989).

Dabholkar (1996) also indicated that when there are different technologies in choosing them option, customers likely to take the one which is ease to use. Later, Davis et al. (1989) and Bagozzi (1990) discovered that effort and complexity were the face of one coin in the "ease of use" attribute. As we understand form both authors, ease of use is also an important contribution to individuals that use computer or similar technologies.

Additionally, Guriting (2006) surveyed the determinant to use internet banking in Malaysia Borneo. The researcher found out that "the perceived ease of use and perceived usefulness factors are considered to be fundamental in determining the acceptance and use of various information technologies" Dabholkar (1996) supported that most persons are concerned about ease of use in so as to save time and effort but also to reduce social risk. Szymanski and Hise (2000) posited that "convenience" is similar to the element "ease of use" (Dabholkar & Bagozzi, 2002). In the views of the authors, convenience looks to be an essential factor of satisfaction with internet banking.

2.7.2. Time of delivery

According to, Bateson (1985) customers are sensitive in speed of service delivery; while they are getting service from others. In addition, a lot of researches revealed that customers are wants to rate the processing time service. Mols (1999) also noted that sometimes customers have a strong liking to make the service by themselves. This indicated that customers are more interested to gain the service very soon or without taking more time.

Mols (1999) additionally putted that slow service providing has a negative impact on over all perceptions of service quality. As we know once customer dissatisfied with your first service rendering, even they will stop usage of the service or the product let alone you improve your service delivery system. To this point, Dabholkar (1996) strengthen that individuals are expecting rapid service delivery system.

Similarly, Langeard et al. (1981) discovered also that time was a significant factor for individuals in using a new service or technology. And in the same way, Ledingham (1984) discovered that time savings were essential to individuals who use electronic banking and shopping (Dabholkar, 1996).

2.7.3. Reliability

It involves two concepts, dependability and uniformity in performance. Reliability also means worship the promises in areas such as billing accuracy, proper record maintenance and delivering the service within acceptable time limit (Saha and Zhao, 2005). It also “refers to the correct technical functioning of a self-services technology and the accuracy of service delivery” (Weijters et al., 2005). Many authors have detected that reliability is significant in the determination of service quality (Bagozzi, 1990; Davis et al., 1992; Parasuraman et al., 1988; Zeithaml & Bitner, 2000).

In addition, Cronin & Taylor (1992) suggested that reliability is the most critical characteristics for customers in the assessment of service quality. Zeithaml and Bitner (2000) advised that customers should be specifically influenced by the reliability of new technology because they might be associated with risks such as the technology mal functioning. Parasuraman et al. (1988) also considered reliability of the service as an important factor of

service quality. Research on the use of computers or technologies which share similar characteristics also affect performance (or dependability) as it is an important attribute (Davis et al., 1989; Bagozzi, 1990; Davis et al., 1992).

Finally, Dabholkar (1996) in his study revealed that reliability and accuracy are appropriate measure for assessing service that has to do with technology. This shows that if there is no technology reliability, the customers may not use it and doing things very well. So, we can conclude that reliability has a positive impact on customer satisfaction using e-banking service based on the literature review assessed.

2.7.4. Privacy or Security

This is an important factor for e-banking users against their account information guarantee that the record showing banking activities and security of account information is not shared (Yang and Fang 2004).

According to Madu (2002) indicated that security is another common interest of customers to decide usage of Internet banking. So, while the privacy of customers is not well kept with the given bank the service offered; the customer will totally cease their usage. Pavlou (2003) study indicated that security concerns kept both bankers and customers away from e-banking. Polatoglu and Ekin (2001) also indicated that risk in terms of financial, physical and social characteristics was the main cause of slow growth of internet banking usage. Clottey and Collier (2008) in their study also found out that most individuals had faint knowledge and understanding of online banking security risks though they know of the risks. A further finding shows that individuals are aware that their bank will protect their privacy hence their strong confidence in their bank but have a weak confidence in technology use for online banking. Oliver (1981) stated in the findings that security issues are the major factor preventing customers from using the Internet for financial transactions .The study further concludes by indicating that customers do not see the benefit of using the internet for commerce and that an educational campaign would be needed to make new internet offering successfully (Oliver, 1981). Finally, Churchill (1982) indicated that one of the most important future challenges facing individuals or customers of a bank is the fear of higher risks associated with using the Web for banking and financial transaction.

2.7.5. Service Quality

Research on “quality” in the goods sector has been in existence long before it started in the service sector (Gummesson, 1998). All the same, the meaning of quality in the goods sector is inadequate for it application into the service sector due to the fundamental difference between the two terms (Parasuraman, Zeithaml, and Berry, 1985). Parasuraman, Zeithaml, and Berry (1985, pp. 42) posit that service quality is ‘performance based’ rather than object oriented, therefore “precise manufacturing specifications concerning uniform quality can rarely be set”. Clottey and Collier (2008) also indicates that the definition of the term quality differ from author to author and it is usually based on the person making the definition, the measures applied and the context within which it is considered. Service quality is an important contemporary issue in service management and marketing (Clottey and Collier, 2008).

Banking is seen as a service that captures all the characteristics of service notwithstanding this, literatures sampled from the 1980’s and 1990’s have examined service quality from two points of view. Researchers like Carman (1990), Garvin (1983), Parasuraman et al. (1985, 1988) have defined and measured service quality by looking at its contributions contrary to Bitner and Hubbert (1994), Iacobucci, Grayson, and Ostrom (1994), Oliver (1993), and Parasuraman, Zeithaml, and Berry (1994) who examined the application of services to conceptualize the relationship between service quality and customer satisfaction. Donnelly et al (1995) also defines service quality as the degree of excellence or superiority that an organization's product possesses and further argues that it is influenced by three service quality dimensions.

These three dimensions are customer service, service knowledge and service infrastructure and technology. Just like customer satisfaction, service quality is equally difficult to measure elusive and an abstract construct (Carman 1990). Parasuraman et al. (1985) also argues that service quality goes beyond results and involves the delivery process. Based upon available literatures sampled, service quality shares some similarities with customer satisfaction, although the two are not the same (Cronin and Taylor, 1992; Parasuraman et al., 1985). This according to Clemes et al has led to the combination of service quality and customer satisfaction literature as the basis service quality theory (Clemes et al., 2007).

2.7.6. Access

According to Timothy, (2012) it deals with getting Availability to help ATM, Phone access, E-mail access, and account access when abroad. It involves approachability and ease of contact (Timothy T. 2012).

The major motivator for internet banking examined by US survey is access which it can provide time saving and 24/7 access (Pew, 2003). Furthermore, the adoptions of e-banking have been linked to high levels of workplace internet use (Durkin, 2004). Access has increasingly been linked to internet customer choices.

With more convenient way, online banking also permits consumer to have direct access to their financial information and to undertake financial transactions (Rotchanakitumnuai and Speece, 2003). The banking industry is now utilizing the new communication media (internet) to provide its flexible services to the customers with easy and convenience (Haque, 2009).

2.8. Customer Satisfaction

Although there are numerous articles on customers' satisfaction, there is no unique or common definition in theoretical literature. According to Jamal, (2004) noted that during the last four decades, satisfaction was considered as one of the most important theoretical and practical subject for most of the marketers in this field.

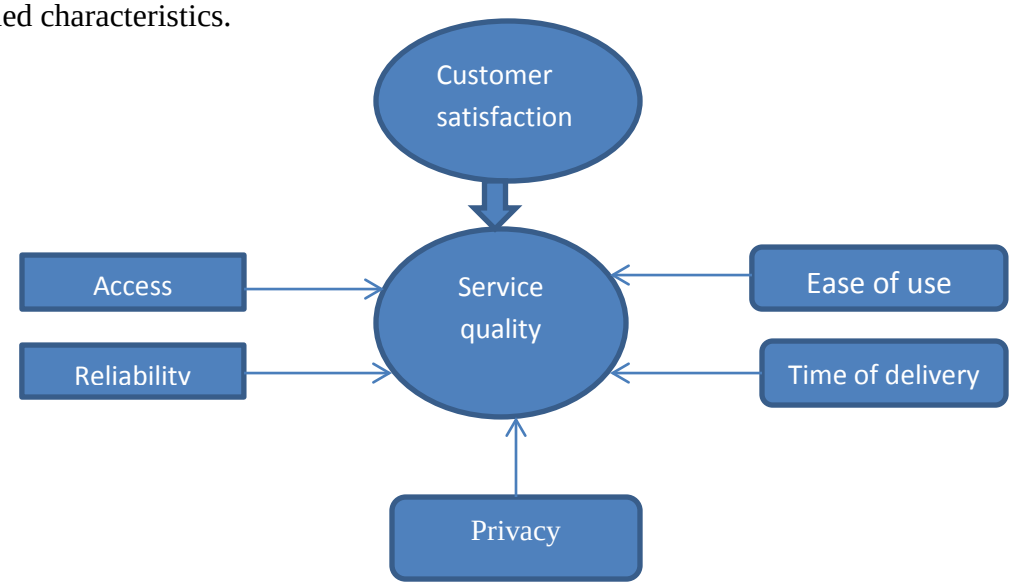
Generally, there are two different perceptions for customers' satisfaction: cumulative satisfaction and exchange satisfaction (Olsen & Johnson 2003). Cumulative satisfaction means that customers' satisfaction is not only based on recent shopping experiences, but also customer evaluation on all of his/her shopping experiences (Johnson, M. D., & Fornell, C. 1991). Exchange satisfaction refers to customers' satisfaction of product evaluation based on recent experiences (Oliver 1997). Today, cumulative satisfaction is used in most customers' satisfaction research (Gupta, S. & Zeithaml, V. (2006).

Cumulative satisfaction has more influence in the banks performances and services and is necessary for predicting the behavior of customer shopping (Parasurman et al., 1998). By considering these two perceptions, there are many definitions for customers' satisfaction. In

academic literature, customers' satisfaction is defined as a function of the difference between past experiences and current perceptions based on shopping (Churchill, G.A. J. & Surprenant, C. 1982). Based on Jamal and Nasser (2003) also defined customers' satisfaction as a feeling or attitude in the customer related to one service or product after using it. Customers' satisfaction can be defined as evaluating one product or service based on customer needs and perceptions (Oliver 1980). As such, customer satisfaction is the customer perception of meeting his/her expectations after using the product which influences future behavior (Adamson et al., 2003)

2.9. Conceptual Framework

The basic objective of this study is to investigate the effect of e-banking service on customer satisfaction. The research model for this research is given in Figure 1. The independent variables will be taken into account in the explanation of e-banking service are the six identified characteristics.



Source: (Yang et al., 2004)

Figure 1: Structured Model

From the above conceptual model can estimated one multiple regression. The model that is presented below:

Satisfaction = βo+β1access+β2reliability+β3ease of use+β4privacy or security+β5service quality+β6time of delivery

2.11. Research Hypothesis

The alternatives hypotheses were:

- Ha1: e- banking service quality does influence customer satisfaction
- Ha2: Access does impact on customer satisfaction
- Ha3 Ease of use does impact on customer satisfaction
- Ha4 Reliability does impact on customer satisfaction
- Ha5 Privacy/security does impact on customer satisfaction
- Ha6 Time of delivery does impact on customer satisfaction

CHAPTER THREE: RESEARCH METHODOLOGY

Introduction

This chapter framework the research methodology, research purpose, research approach and design used to answer the research questions and test the two hypotheses regarding service quality measurements leading to customer satisfaction in e-banking. The chapter also discusses how the sample should be derived, data source, the sample size, the research instrument, data collection procedures, the data analysis tools and the ethical considerations.

3.1. Research Approach

In research there are three basic approaches, these are qualitative, quantitative and mixed. The quantitative research approach makes use of statistics and numbers which are mostly presented in figures whiles qualitative approach relies on describing an event with the use of words. According to Yin (1994), a research approach chosen should be done according to the research questions in that particular situation since each approach has its own merit and demerit and how empirical data is collected and analyzed.

Additionally, the degree of focus on either contemporary or historical event as well as the type of questions asked should be the main basis on which a research approach should be chosen. In conducting this study a comparison of both quantitative and qualitative research approaches would be used and the quantitative research approach had used for the study more. A quantitative research design was selected for this study because it is a formal objective, systemic process in which numerical data are utilized to obtain information (Creswell, J.W. 2003). The researcher therefore combined quantitative and qualitative (mixed) approaches.

3.2. Research Design

Based on, Mouton (2001) defines research design as a plan or blueprint of someone intending to conduct research. Research design involves how the researcher has planned to carry out the research.

Again, Sekaran (2003) indicated that after identifying the variables in evolving the conceptual framework, the consequent step is to design the research in a way that the data can be screened and analyzed. According to Malholtra (2004), research design is a framework or draft for conducting a given research project. It provides details of the necessary procedures for gaining the information needed to structure and to solve this research problem.

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

3.3. Sampling Procedure

3.3.1. Population Universe

The universal population for this study included of all customers of the various banks that used electronic banking in Ethiopia. In other words, the study would be interested in assessing the effects of electronic banking on satisfactions of all customers in Ethiopian financial institutions.

3.3.2. Study Population

It is because of the fact that financial institutions are quite many in Ethiopia and thus, the researcher should not have studied all customers in the institution. For this reasons customers in CBE five selected branches formed the study or target population. The reason why the researcher choice these branches are that their capacity of serving a large number of customers and their performance grade is higher than other branches there in Addis Ababa. This implied that the study concentrated on the customers of commercial bank of Ethiopia in the selected branches as well as in the country as a whole.

3.3.3. Sample Size and Sampling Technique

The researcher was not have access to the sampling frame (list of customers) because of the security inferences for the banks as financial institutions as well as the huge number of customers contain.

The sampling selection technique for this study has been the non-probability sampling. Nonprobability sampling may be defined as any sampling method where some elements of the population have no chance of selection, or where the probability of selection cannot be accurately determined. According to, Twumasi (2002) writes "as the name implies, the researcher, adhering to the objectives of the study, selects respondents who can answer his research questions. With good calculation and a relevant research strategy he picks the respondents he wants to be included in his sample". Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher (Black et al, 1999). From which the types of non-probability sampling the researcher was used purposive (convenience) sampling technique. Because of the following reason; first, as the researcher observed through many previous visits to the selected branches that not all individuals present at the banking halls are necessarily the banks customers. Some indeed passer byes either sent to clear cheques or deposit cash as well as other purposes.

Second, as the researcher read other related journals which conducted previously used this type of sampling technique. For instance, Prince Adiyia Kwarteng (2015), Martin Otu Offei and Kwaku Nuamah-Gyambrah (2016) etc. were used purposive sampling technique. For this reason the researcher could be intended to purposively select participants who are active customers of the selected bank branches. Therefore, the sample size of this study will be 100 customers of the bank with purposively selected among the whole customers of the population universe. Why the researcher is taking 100 customers as a sample? Because, even if the electronic banking is operated by the persons, the employees are not giving the service to the customers directly; rather the customers are obtaining the e-banking service directly from the machine or/and internet system. If the machine is not working properly for the time being, the customers might not get money through ATM and POS. For this reason the customers become dissatisfied. The same is true that if the internet connection is not working

while the customers need the service it will cause for their dissatisfaction. So, the machine improper working and system fail will have an influence on satisfaction for all customers of E-banking service and its service quality. Due to this whether you use all the customers or 100 samples will not have an effect on the research because their response will be the same for using e-banking service. 100 customers can the representative for all customers of e-banking service.

The system is not biased among the customers. Therefore, sample size meant that 20 customer's was conveniently selected from each of the five (5) grade four branches.

3.4. Sources of Data

Primary Data and their sources: The sources of the primary data for this study have been e-banking customers of CBE selected branches. The required data obtained from the sample respondents via structured questionnaires'.

Secondary Data and their sources: The secondary data had used for supporting the study and to get the findings of other researchers in the area (empirical study). The sources of secondary data are library books, journals, newspapers on business, and magazines on business; from these secondary source, the related concepts of the study would be obtained, such like definitions of E-banking, history of e-banking, benefits of e-banking, relation between e-banking and customer satisfaction and etc. annual reports of different commercial banks, reports of national bank of Ethiopia, internet sources, and other related materials have been used. From such secondary sources also obtained the data related with commercial bank of Ethiopia history and to gain about e-banking introduced in Ethiopia.

3.5. Research Instrument

The main research instruments used for this study were the questionnaire survey. This means the type of questionnaires would be close-ended. The questionnaire used for the study has been divided broadly into two sections. These are the demographic section or general questions and the dimensions of e-banking services section. Under the demographic section variables such as age of the respondent, gender, income level, marital status, occupation and educational status was asked. The section on e-banking service has also sub-divide into six

sub section. The six subsections was also group into the various dimension of e-banking service outlined in the conceptual framework. These subsections are time of delivery, ease of use, reliability, access, service quality and privacy on customer satisfaction. The six subsections could be used a five point Likert Scale where respondents was asked to indicate the extent to which they agree/disagree with various statements. Each the six dimensions of e-banking service would be consisting of five questions total would have 30. The Five-Point Likert's scale having the ratings of "strongly disagree" (1) and "strongly agree" (5) was used.

3.6. Data Collection Procedures

A self-administered, structured questionnaire was used to gather data from respondents to the study (Cooper and Schindler 2006; Malhotra and Birks, 2007). The researcher first required permission from the Branch Manager of all the five (5) selected bank branches used for the study. The permission would to allow their premises to be used for this study. Each respondent to the study has been made to fill a questionnaire after a brief introduction and objective of the study was explained. The research questionnaires would be distributed in front of the five branches during business hours while customers get in the bank hall. And then the questionnaire immediately returned after they fill the appropriate choice of their respect.

3.7. Data Analysis Method

After the relevant information has been collected, the data was analyzed using two statistical techniques. These techniques were descriptive and inferential statistics. The general questions were analyzed by using descriptive statistics, such as percentage, frequencies. And the e-banking concerned questions should be analyzed using inferential statistics, such as multiple linear regression analysis, ANOVA and analysis of variance and the hypothesis were tested using t-test. The use of multiple regression analysis was to help test the conceptual framework or model. The data gathered from the survey which through the questionnaires administered has been recorded and coded into Statistical Package for Social Science (SPSS) software version 20. The questionnaires survey data has been analyzed by multiple linear regression analysis, ANOVA and the value of R^2

In analyzing the data gathered from the survey (questionnaire), and reliability would be primarily calculated using SPSS by Cronbach's Alpha, and content validity of the questionnaire was also established by reviewing existing literature.

3.8. Model Assumptions

Normality

- For each value of the independent variable, the distribution of the dependent variable must be normal.
- The error term has a normal distribution with a mean of 0.

Equal variance

- The variance of the distribution of the dependent variable should be constant for all values of the independent variable.
- The variance of the error term is constant across cases and independent of the variables in the model.

Linearity

- The relationship between the dependent variable and each independent variable should be linear, and all observations should be independent.

Multicollinearity

- Moderate to high inter-correlations among the independent variables
- It limits the size of R.
- The model is unstable in terms of prediction.
- It is hard to interpret the significance of predictors.

3.9. Validity

Validity as would be used in research refers to the degree to which how far the outcome of a study accurately reflects the variable which is being measured or which the researcher is attempting to measure. According to Eriksson and Wiederscheim-Paul (1997,p. 38), validity is defined as: “The ability of a scale or measuring instrument to measure what is intended to be measured”. Validity is therefore concerned with the success rate at which the study measure what the research sets out to measure. There are various types of validity (Hardy and Byrman, 2004) use in research studies but for the purpose of this study the face validity is used. This is because the study should be proven through pre-testing, rewording and re-evaluation of the instrument used (Hardy and Byrman, 2004).

Table 1. The Summary of the Questionnaire`s Information

Questionnaires sections	Numbers of questionnaires
General question	7
Access	5
Reliability	5
Ease of use	5
Time of delivery	5
Privacy or security	5
Service quality	5
Customer satisfaction	5
Total	45

Source: own survey, 2017

In order to evaluate its validity, the questionnaire was provided to a group of experts, including professors and specialists of the field; it was evaluate regarding content and comprehensibility and necessary alterations were made. Therefore, the questionnaire is adequately valid in accordance with the research objective as viewed by the experts.

3.10. Ethical Consideration

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

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction

In this chapter, the data collected from the sampled bank branches customers in which commercial bank of Ethiopia is presented, and analyzed by using different statistical tools based on data analysis method. The findings of the study should be discussed in the later section of this chapter.

100 questionnaires distributed to 100 sampled respondents from the grade four branches of CBE namely IBD, Addis Ababa branch, Arat kilo, and Selassie, Finfine and Arada Giorgis branches collected successfully and analyzed the general question using SPSS without any missing.

This chapter has three sections the general information analysis, reliability test and the specialized information analysis (Regression analysis) based on the information collected. So the general analysis was analyzed using descriptive analysis via frequency and percentage and the specialized questions was analyzed using SPSS version 20 via multiple regression models and the hypothesis tested using t-test.

4.1. Descriptive Analysis for Demographic Data

This descriptive analysis is used to look at the data collected and to describe that information. It is used to describe the demographic factors for more clarification. It is mainly important to make some general observations about the data gathered for general or demographics questions. The demographics factors used in this research are gender, age, education qualification, occupation, monthly income, and types of service they used the banks services.

4.1.1 The Demographic Data Analysis

The demographic analysis that means age, gender, marital status, educational level, income level of customers of e-banking used could be analyzed as follows.

Table 2. Age of Respondents

Years		N	%
Valid	18-29	61	61
	30-49	29	29
	50-69	8	8
	Above 69 year	2	2
	Total	100	100

Source: own survey, 2017

As the above table 2 shows that the age statistics indicated that the least age groups were those above 69 which were represented 2% of the respondents sampled for the study. Additionally, the highest age groups from the study were those between 18-29 years. These age groups were made up of 61 respondents which represented 61% of the respondents. The highest age group was followed by those between 30-49 years and 50-69 years old. This age group represents 29% and 8% of the respondents respectively. This implies that the more customers used e-banking are youngsters.

When we connect it with the objective of the study we could identify the types of customers based on the age group. In this case, the bank should have to go the elderly and other age groups in order to duplicate its service. Here, the researcher would have understood one thing; that was youngsters are egger or keen to change or to use technology immediately without any incentives.

Table 3. Gender of the Respondents

Gender		N	%
Valid	Male	76	76
	Female	24	24
	Total	100	100

Source: own survey, 2017

As the above table 3 age categorization of the 100 respondents showed that, 76 representing 76 % were males and 24 representing 24% were females. This means that the highest users of e-banking in Ethiopia based on the survey of CBE selected branches are males. Based on the objective of this study, the types of customers were male and female in the category of gender.

But among these male and female customers of e-banking service in the surveyed bank most of them were males. According to the researcher males were near to usage of e-banking technology than females. For instance, when we see the previous researcher on the same topic or title most of their findings were males were took e-banking service than females the researchers like, Parasuraman et al (1985), Bambore PL (2013), Kwashie W. (2012) of Ghana etc.

Table .4. Marital Status

Marital status		N	%
Valid	Single	59	59
	Married	37	37
	Separated	2	2
	Widowed	2	2
	Total	100	100

Source: own survey, 2017

Furthermore, the marital status of respondents shows that 59 have never been married, 37 were married, 2 were separated and 2 were widow. Percentages of 59 % were never married, 37% were married, 2% were separated and 2% were widow. This result shows that the highest users of e-banking were single or youngsters and the next largest customers were married. When, it comes to marital status of the customers.

According to, the objective of the study the type of customers in accordance with marital status most of customers of e-banking were single. This implies that as mentioned in age

section most of the customers were youngsters that directly reflects to marital status; due to that large numbers of customers have not been married. So, singles are more approach or close to e-banking technology than the rest of others.

Table 5. Education Level

Qualification		N	%
Valid	No formal education	1	1
	Basic education	6	6
	TVET	2	2
	Diploma	14	14
	Degree	60	60
	Masters and above	17	17
	Total	100	100

Source: own survey, 2017

In terms of education, as the above table 5 noted that from the total respondents of sampled e-banking users 1 of the respondent was without any formal education. The most represented educational levels were those with a Bachelor degree which was made up of 60 respondents or 60% of the respondents. This was followed by 17 respondents representing 17% who were with a master's degree and above, and 14 respondents representing 14% who were with a diploma. 6 respondents of the study which accounts for 6% were a holder of basic education. The least represented educational level were those with TVET who were 2 in number or 2% of the respondents.

Based on the objective of the study, the customers using e-banking in the sampled bank were mostly first degree and second degree types of customers with respect to education.

Table 6. Income Level

Level of income		Frequency	Percent
Valid	less than Br.2,000	8	8
	Br.2,001-10,000	60	60
	Above Br.10,000	32	32
	Total	100	100

Source: own survey, 2017

As indicated in table 6 above, 8 of the respondents or 8% of the respondents earned Less than br. 2,000; 60 or 60% earned between br.2,001-10,000; and 32 respondents or 32% earned abovebr.10,000. A large number of respondents or customers have been with the monthly salary of between Birr 2,001-10,000. This implies that, they were middle income group of customers; because CBE doesn't ask that much high requirement to open an account. Any persons who possess the minimum age requirement can open an account in Commercial bank of Ethiopia with the minimum amount of 25 Br.

Table 7. Types of e-banking Service Customers Used

Service type		N	%
Valid	ATM	39	39
	Point of Sales(POS)	3	3
	Internet banking(IB)	8	8
	Mobile Banking(MB)	1	1
	ATM, POS & MB	19	19
	ATM & MB	18	18
	All	12	12
	Total	100	100

Source: own survey, 2017

As represented in the above table 7, 39 or 39% of the respondents were the users of ATM, 3 or 3% were uses POS, 8 or 8% of the respondents were using IB, 1 or 1% of the respondents

were using mobile banking, and 19 or 19% were the users of ATM, POS & MB as well as 18 or 18% were uses ATM and MB, and finally 12 or 12% were the users of all types of e-banking in CBE.

This implies that the large numbers of the respondents were the users of ATM, the second large numbers of customers were used ATM, POS and MB; the third, the fourth and the fifth were ATM and MB, all e-banking services and IB respectively. Large numbers of customers have been using ATM e-banking service rather than other e-banking services. The reason for this was ATM service simply accessible for any types of customers easily.

Table 8. Occupations of Respondents

Occupation		N	%
Valid	Self-employee	12	12
	Business men	16	16
	Private employees	27	27
	Gov't employees	45	45
	Total	100	100

Source: own survey, 2017

As indicated in the above table 8 the highest numbers of e-banking users were government employees accounted for 45 or 45% from the total respondents. The second largest users were private employees represented 27 in number or 27%. The fourth and the fifth were business man and self-employees accounted for 16 or 16% and 12 or 12% respectively. This shows that the high proportions of e-banking service were used by government employees followed by private employees. This implies that most of the customers using e-banking service were the government employees and the next private employees. The reason for this might be Commercial bank of Ethiopia is one of the big banks in the country and it is the first bank to introduce e-banking technologies.

4.2. Regression Result and Implications

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

4.2.1. Cronbach's Alpha Test of Reliability

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

Table 9 Cronbach's Alpha Score

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.968	.968	45

Source: survey, 2017

According to, Nunnally and Bernstein, (1994) the closer the Cronbach's alpha is to 1, the higher the internal consistency reliability of the research instrument. The Cronbach's Alpha score ranges from 0 to 1. The Cronbach's Alpha score greater than 0.70; show that high internal reliability of the scaled item (Nunnally and Bernstein, 1994).

In spite of this argument Garson (2002) indicated that the cut off point for the Cronbach's Alpha should be between 0.8 and 0.6 (Garson, 2002). Additionally, the Cronbach's Alpha increases when the number of items in the scale is increased which means that the Cronbach's Alpha score decreased (Garson, 2002). From table 8 above indicated that the cumulative Cronbach's alpha scores were above 0.70 or it approaches to 1, meaning that they are highly reliable.

This means that it fulfill the argument mentioned by Nunnally and Bernstein. The above reliability result shows that, the instrument in which the researcher was used essentially very

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

4.2.2. Descriptive Statistics Analysis

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

Table 10 Descriptive Statistics

Variables	Mean	Std. Deviation	N
Customer satisfaction	3.5400	.79671	100
Access	3.4900	.75872	100
Reliability	3.5300	.80973	100
Ease of use	3.6500	.71598	100
Time of delivery	3.7200	.71181	100
Privacy	3.6500	.90314	100
Service quality	3.6500	.80873	100

Source: own survey, 2017

As we see from the above descriptive statistics table 10 it contains the means and standard deviations value. According to, Best (1997) the mean score that ranges from 1-1.80 is considered to be lowest, from 1.81-2.61 is lower, from 2.62-3.41 is deemed to be average/moderate, from 3.42-4.21 is good/high and from 4.22-5 is going to be considered as very good/excellent.

Besides this, the decision rules used in any analysis fall in the average mean less than 3 was considered as low, average mean equal to 3 has to be considered as medium and the average mean greater than 3 was deemed as high throughout the study (Best and Khan, 1995). As we understand from the above table 10 based on the mean measurement of the mentioned authors, the mean score of all independent and dependent variables were greater than 3. This implies that the dependent variable highly described by the independent variables. Means that the independent variables have been influence the e-banking customers positively. This

leads to customer delight. The reason for this may the customers have been got high service quality, the bank might have good account information privacy, the employees of the bank have been good service providing and treatment, and also the bank management system has been better. This leads to the improvement of banking profitability while the customers are being delighted.

4.2.3. Multiple Regression Analysis

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

The alternatives hypotheses were:

- Ha1: E-banking service quality does influence customer satisfaction
- Ha2: Access does impact on customer satisfaction
- Ha3:Ease of use does impact on customer satisfaction
- Ha4: Reliability does impact on customer satisfaction
- Ha5: Privacy/security does impact on customer satisfaction
- Ha6: Time of delivery does impact on customer satisfaction

The hypotheses formulated above have been tested empirically by employing regression model. The regression model is as follows: $Y= \beta+ \beta1 + \beta2 + \beta3 + \beta4 + \beta5 + \beta6 + \varepsilon$. Where the dependent variable is satisfaction of the customers denoted by Y and the independent variables are: Access (β1), Reliability (β2), Ease of use (β3), time of delivery (β4), privacy/security (β5) and Service quality (β6). The error term (ε) contains the extraneous variables a side from independent variables that determine the value of the dependent variable (Y) for a specific observation. Enter regression method has been used to evaluate the data. Regression technique has been employed using weighted average scores. Regression results have been shown in below Tables.

Table 11 Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
.783[a]	.613	.588	.51138	1.985

Source: own, survey, 2017

Table 11, shows that R^2 = 61.3 percent and Adjusted R^2(adjusted for d.f.) = 58.8 percent which means existing model has explained 61.3 percent variance in dependent variable which has been caused by independent variables. R^2 = .613 which indicates that about 61.3% of the variation in customer satisfaction of e-banking service quality explained by the variation in the independent variables remain constant the variations are unexplained by the model. So, the regression equation has a very high explanatory power and that the regression line is a **"good fit"**

Table 12 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	38.520	6	6.420	24.550	.000[b]
Residual	24.320	93	.262		
Total	62.840	99			

Source: own survey, 2017

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Service quality, Ease of use, Access, Reliability, Privacy, Time of delivery

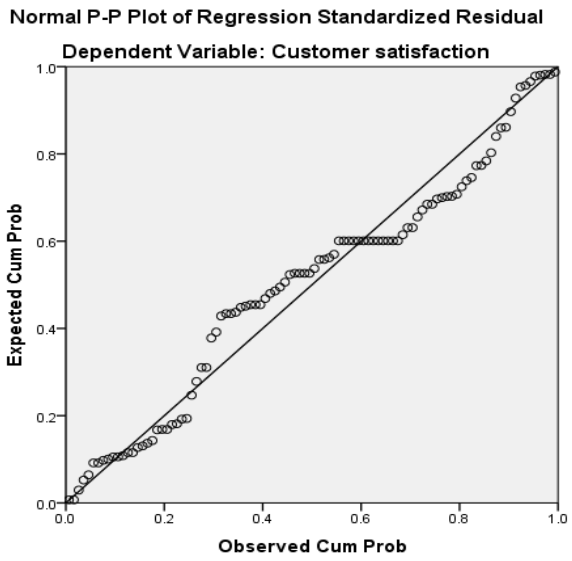
F-value of the model has been found to be significant at 5% level of significance showing that model is best fit to use and model is significant in explaining variation in the dependent variable (refer Table 12).

4.2.4. Model Assumption Testing

According to, the model assumption was described in chapter two that was multiple regressions has an assumption of linearity, normality, equal variance and multicoliniality. Due to that, here the researcher would try to test it based on assumption.

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

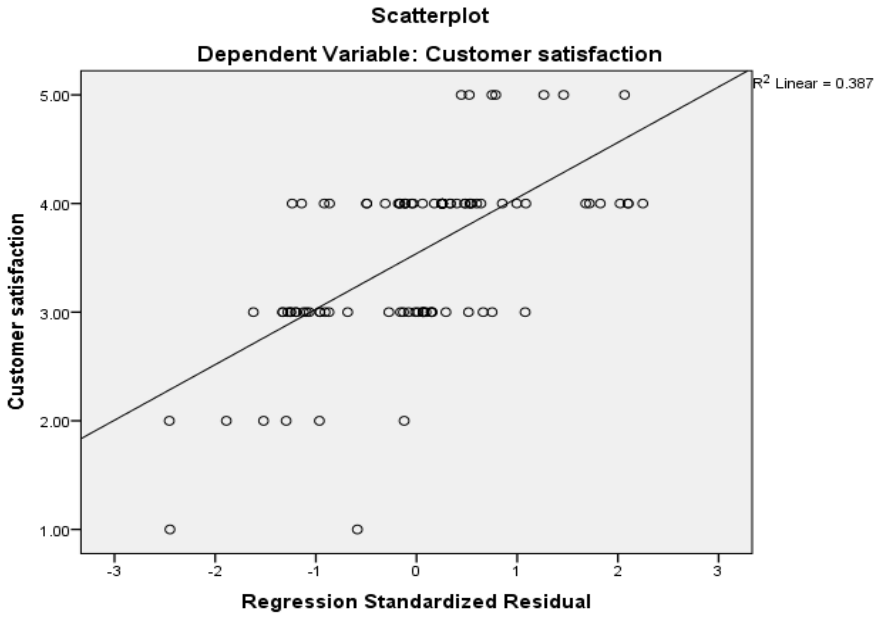
Finger 2. Normality of the Model



Source, own survey, 2017

This implies that the normality of independent variable with respect to dependent variable.

Figure 3 Linearity of the Model



Source, own survey,2017

The above scatterplot also described that the linarity model test of the study. As we seen from the above scatterplot the model was fit the assumption of linarity. This implies that, there were the positive relationship between dependent and independent variables.

When we come to the multicollinearity assumption, It shows that multi Collinearity is under the tolerance limit or there is no multi Collinearity has been observed in the model. Generally, according to Kutner, (2004) 10 have been proposed as a cut point value for checking the VIF for the research result.

4.2.5. Hypothesis Testing

Table 13 Coefficients and Collinearity Statistics

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.256	.316		.811	.420		
Access	.041	.092	.039	.443	.659	.546	1.832
Reliability	.115	.095	.117	1.214	.228	.446	2.240
Ease of use	.074	.101	.067	.738	.463	.509	1.966
Time of delivery	.100	.108	.090	.929	.355	.447	2.239
Privacy	.189	.085	.214	2.236	.028*	.453	2.208
Service quality	.384	.108	.390	3.554	.001**	.346	2.887

Note: *, ** indicates that significant at 5% level of significance

Source: own survey, 2017

The regression results have indicated that the impact of six dimensions of e-banking service quality on customer satisfaction in the banks in Ethiopia with the survey of CBE selected grade four branches. In the present study, it has been represented that out of the six dimensions; two dimensions have significantly influenced customer satisfaction of e-banking service. Service quality ($\beta = .384$, $p = .001$) and Security/ Privacy ($\beta = .189$, $p = .028$); and have been found to be significant at 5 percent level of significance. From the customers' point of view, service quality, and Security/Privacy are the most important dimensions in the context of using e-banking services.

Furthermore, as shown in table 12 based on the standardized Beta estimates, Service quality ($\beta = .390$) has occurred as the most important dimension which has highest impact on the customer satisfaction, followed by Security/Privacy ($\beta = .214$). Today, more and more services are being delivered through technology, particularly with the advent of mobile and internet applications. According to this study in the e-banking services encounters, customers

always seek about the security/privacy in transactions, and service quality. In addition based on this study the four dimensions were not have significant influence on e-banking customer satisfaction depend up on the view point of the respondents.

Which dimension are Access, ease of use, time of delivery, and reliability doesn't have an influence on customer satisfaction based on the t-test coefficients. VIF (Variance Inflation Factor) has been used to check the condition of multi Collinearity. It shows that multi Collinearity is under the tolerance limit or there is no multi Collinearity has been observed. Generally, according to Kutner, (2004) 10 have been proposed as a cut point value for checking the VIF for the research result. (Kutner et al, 2004).

Finally, the Model Equation:

Customer satisfaction = 0.256 + 0.041(Access) + 0.115(Reliability) + 0.074(Ease of use) + 0.100(Time of delivery) + 0.189(Privacy) + 0.384(Service quality) + 0.51138

4.2.5.1. Decisions of Regression Result on Hypothesis Testing

In this section the researcher tried to split the alternatives hypothesis in to for each dimension of e-banking service quality in order to clear the acceptance or rejection of the alternatives hypothesis using table form.

Table 14 Decision of Hypothesis

Alternative	Hypothesis	Decision
Ha_1	Service quality of e-banking does impact on customer satisfaction	Accepted
Ha_2	Access does impact on customer satisfaction	Rejected
Ha_3	Ease of use does impact on customer satisfaction	Rejected
Ha_4	Time of delivery does impact on customer satisfaction	Rejected
Ha_5	Privacy/security does impact on customer satisfaction	Accepted
Ha_6	Reliability does impact on customer satisfaction	Rejected

Source: own survey, 2017

The regression results in table 14 have indicated that out of the six dimensions; two dimensions have been found to be significant in influencing customer satisfaction of e-banking in Ethiopia. Based on view point of customers, Service quality and Security/Privacy were the major factors that strongly lead to customer satisfaction of the e-banking customers. It has been further found that Access, Reliability, Ease of use, and time of delivery were the four dimensions which have insignificant impact on the customer satisfaction.

As the above table 14 shows that from the alternatives hypothesis service quality and privacy were accepted because they have a strong significant effect on customer satisfaction; the reverse of this the researcher reject the Null hypothesis. And also the Null hypothesis in which access, reliability, ease of use and time of delivery were accepted because they didn't have a significant impact on the customer satisfaction based on the regression result. Therefore, it may be interpreted from the above analysis that banks provide the facilities to its customers more comfort through prompt services delivery via the internet usage and

customers visit on websites. Customers can get services without any interpretation and delay at their access through internet banking, mobile banking, ATM and POS banking. As concerning the insignificant influence of the factors Access, reliability, Ease of use and Time of delivery; since, so such dimensions may not be that significantly unpleasant dimensions for customer satisfaction. However, Banks must secure the information regarding customers' internet banking activities and should not share customers' personal information with others users to be reliable in e-banking services.

4.3. Interpretations and findings

The objective of this study was to examine the impact of e-banking service quality on customer satisfaction with in CBE. Demographic factors such as gender, age, occupation, education qualification, monthly income and types of e-banking service have been used to know the general characteristics of the respondents.

According to this study the research used 76% male and 37% of female were users of e-banking service. This implies that the majority of e-banking users in CBE are males. As presented in the age analysis shows that the age statistics indicated that the least age groups were those above 69 which were represented 2% of the respondents sampled for the study. Additionally, the highest age groups from the study were those between 18-29 years. These age groups were made up of 61 respondents which represented 61% of the respondents. The highest age group was followed by those between 30-49 years and 50-69 years old. This age group represents 29% and 8% of the respondents respectively. In terms of age, the majority of respondents are in between 18-29 years old which was accounted 61% and followed by 39- 49 which constituted 29%. This result indicated that the user of e-banking service in CBE more of youngsters.

Furthermore, the marital status of respondents shows that 59 have never been married, 37 were married, 2 were separated and 2 were widow. Percentages of 59 % were never married, 37% were married, 2% were separated and 2% were widow. This result shows that the highest users of e-banking were single or youngsters and the next largest customers were married. In terms of education, noted that from the total respondents of sampled e-banking users 1 of the respondent was without any formal education. The most represented educational levels were those with a Bachelor degree which was made up of 60 respondents or 60% of the respondents. This was followed by 17 respondents representing 17% who were with a master's degree and above, and 14 respondents representing 14% who were with a diploma. 6 respondents of the study which accounts for 6% were a holder of basic education. The least represented educational level were those with TVET who were 2 in number or 2% of the respondents.

With regard to the education qualification of respondents, the majority were first degree holder with 60% which is followed by Master's Degree holder which accounted 17%. This implies that the reason large number of customers were BA degree and Master's degree that e-banking service needs to more understanding especially internet banking.

When we see the occupation of the respondents, most of them were working in government sector which accounted 45% and followed by 27% working in private sector. This means that most of the customers that CBE have government employees. The reason why this result was recorded based on the view point of the researcher most of the peoples using banking service in CBE because of it is the leading bank in introduction of banking technologies and it has public image. In terms of the monthly income of the respondents, the majority had income of between Birr 2,001-10,000 which accounted 60% and followed by 32% having income in above birr 10,000. In regarding to the types of e-banking that most of customer's are using ATM accounted 39% followed by ATM, POS and MB accounted 19% and, ATM and MB accounted 18%. As we understand from this result most of the customers of CBE are using ATM, POS and MB respectively. This implies that it is ease to using ATM and Mobile banking rather than internet banking due to different reasons like using ATM may not need online internet network, it may not requires further understanding and much cost.

This study have been also found that two main outcomes by using inferential statistic. That means the first finding was there is a strong impact of service quality on customer satisfaction and customers need a high privacy/security from the given bank e-banking service. The second outcome of this study, there was no significant effect of Access, Ease of use, Reliability and time of delivery on customer satisfaction. According to the finding for the sampled banks in Ghana empirical work of Parasuraman et al (1985) these dimensions have been a strong significant effect on customer satisfaction. So, this study doesn't conform to the result of Parasuraman (1985). The similarity between this study researcher and Parasuraman et al (1985) were that the same result they found on the variable of service quality effect on customer satisfaction. The issue of time as discussed in the literature by Churchill (1982) shows that time savings were essential to individuals who used electronic banking and shopping. But in this study even if time of delivery is very important the bank didn't gave time saving services according to the result. Additionally, the finding of this

study goes in line with that of by Parasuraman, Zeithaml and Berry (1988) regarding to service quality. In their empirical work they argue that “if the expected quality of service and actual perceived performance is equal or near equal the customers can be satisfy, while a negative discrepancy between perceptions and expectations or ‘performance-gap’ lead to customer dissatisfaction, and positive discrepancy leads to consumer delight”. This study found that customer of the various branches sampled bank viewed service quality to be equal to performance hence they were very satisfied with the services offered. This led to the results recorded in the study confined with Parasuraman, Zeithaml and Berry (1988). Furthering the discussion, the regression result of this study showed a positive relationship between all the service quality variable and privacy. This confirms the model used for the study. The model indicates that there is a positive or linear relationship between satisfaction and service quality.

When we come to the reliability of e-banking service quality as an influence of customer satisfaction, based on the data gathered from the given respondents it was insignificant for their measurement of the bank on their satisfaction level. Based on the respondents view point, they were not that much satisfied with the reliability of the bank. The reason for this dissatisfaction might be disseminations of their banking information, account mugger, the PIN of all e-banking services are not reliable and other reasons. This result was to the contrary of the bank slogan of “the bank always you rely on”. In this regard for the bank reliability is the primary question to answer if not their profitability fall in quotation; due to customer’s dissatisfaction. According to the previous research conducted by Deribe et al (2012), Anderson, I., Gaile-Sarkane, E. (2008) and Parasuraman (1995) have been found that it has significance effect on customer satisfaction. In this regard this result has been opposite to their study. This also leads to decreasing banks profitability while customers have not trustworthiness.

Regarding to, access using in the bank according to the respondents point of view it was insignificant impact on their satisfaction or with the variable of ‘Access’ in e-banking has not been well provided by the bank. For instance, there was no 24 hours ATM, POS and MB service; in this regard while the customer wants to withdraw money at night or at weekend the machine was not well functioned for the time being due to network breakdown and it may

not have enough balance etc. in this case the customers are dissatisfied. According to the previous study conducted in Ghana by Kwashie W. (2012) access was the prominent factor for customer satisfaction and it was significant factor. But, this study was to the contrary of Kwashie result. The same is true it was contrary to the result of Olanipekun, W.D, Brimah, A.N and Ajagbe, S.T (2013), Olsen LL, Johnson MD. (2003) and Parasuraman A, Zeithaml VA, Malhotra A. (2005).

In terms of Ease of use, according to the respondents displayed to this study 'ease of use' was not significance on customer's satisfaction. That means for customers e-banking services were not easily used or it needs understanding of text message received via Mobile, the instructions used in the internet banking is vague and the PIN of all e-banking services were that much ease to save in mind especially mobile banking and internet banking.

The degree of significance varied from variable to variable. The results show that without the exception of service quality and privacy, all the other variables were insignificant at 5% significance level. The reason for this result was because customers of e-banking were of the indicated that they did not have enough services over e-banking activities. In this case findings of this study runs contrarily to that of Bateson (1985) and Bowen (1986) who indicated that Access, Reliability, ease of use, and time of delivery are significant on customer satisfaction. A further investigation into this findings shows that customers were not interested in the fun aspect of internet banking but rather were interested in the utility that comes with internet baking hence the recorded results. This finding contradicts to the findings by Davis et al. (1992) who stated that individuals assess more positively the fun generated by internet banking

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

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

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

The main findings of this study can be summarized into three main subjects. These themes are the testing of the hypothesis, the analysis of the demographic data and the reliability test. The demographic analysis shows that more males use the e-banking services than their female counterparts.

Additionally, when it comes to age group, the modal age of users of e-banking users of the banks in Ethiopia was 18-29 year or in their youthful age. The marital status of most of the users of e-banking activities in Ethiopia were married whilst educationally, majority hold a Bachelor degree from various fields of studies. In addition to the above, the most earned income of users of e-banking activities was between Birr 2001-10,000. In Cronbach's Alpha test for the reliability of the data shows that in good way met the Nunnally and Bernstein's criteria of 0.7. That means it was 0.968. The major finding of the first hypothesis shows that the entire-banking service quality determinant was positively impacted to the customer satisfaction and was significant at 0.05 significant levels.

The second hypothesis shows that speed of delivery, ease of use, access and reliability of services were positively related, but insignificant at 5% and doesn't led to customer satisfaction. The third and finally hypothesis shows that among the independent variable privacy/security was positively related to customer satisfaction and was significant at 5% significance level. Finally, the result shows that, there was the linear relationship between service quality and customer satisfaction.

Several factors influences customer satisfactions with e-banking in worldwide, but the case of Ethiopia is quite different. The finding of the study shows that demographic variables influenced customer satisfaction with the various e-banking services of the banks visited. The age of the respondents influences their satisfaction with the e-banking services provided by the various banks especially the surveyed branches visited. Age was significance because; the young or the youth are must more interested than adult and elderly in using technology for their banking services. This is because the youth by their nature are usually breast with modern technology, egger to change and especially the used of internet in the banking industry. Additionally, the age range of the respondents to the study shows that majority of the respondents administered with the questionnaire were youthful and preferred the use of the e-banking for banking purposes rather than the elderly who were mostly not abreast with technology most especial the internet facilities provided by the various banks concerned.

In addition to the above, the educational level of respondents influences their choice of product offered by the banks involved in the study. That was the findings of the study as education of the respondents influenced their adoption of e-banking banking especially in internet banking. Literacy was a major factor, since for an individual to use the e-banking facilities provided by their banks there was a need for patrons to understand what written. Since all respondents or patrons of this study are, literate e-banking played a major role in their usage of e-banking services. The services offered by the banks, which use internet banking, have reliable banking services than those that do not have these services. But, still the use of internet banking is not that much enough with compared to ATM, POS and MB. Respondents can use it anywhere and at any time since they do not have to walk into the banking hall. Banking services can be done anywhere. The only challenge is that most of the users of internet banking services in Ethiopia are literate who are well-informed with technology and the usage of the internet. This implies that those who are illiterate cannot use internet-banking services for their daily activities. The illiterate could not easily use internet-banking services hence they were satisfied with the services provided by their bank. The key concern was the privacy and service quality.

5.2. Conclusion of the Study

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

It has been concluded that service quality and security/ privacy are the major factors that strongly lead to customer satisfaction of the e-banking customers. It has been further concluded that reliability, Ease of use, time of deliver and Access are the four dimensions which have been insignificant impact on the customer satisfaction. It can, therefore, be concluded that e-banking service quality enhances the efficiency of the banks. The researcher concludes that, as a manager, it is relevant that all the facilities in e-banking service quality programs should be strictly followed and applied successfully in the organization. With the existence of globalized business, banks are providing internet services in the economy in effective manner. Hence, in order to reap benefits, the banks should provide the best possible facilities to e-banking users.

The results of the study have proven that internet banking service quality scale is the effective indicator to measure customer satisfaction in the banks in Ethiopia and the existing scale has been validated as a determinant of customer satisfaction scale.

5.3. Limitations of the Study

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

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

5.4. Recommendation of the Study

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

E-banking conveniences enable both customers and employees of the organization to be more effective and productive in receiving, providing and delivering services. Given the insignificant valued obtained on the time of delivery, Access, Ease of use and reliability of the use of e-banking services of the various banks it is essentially recommended that banks take a critical look at those variables since they can affect the profitability and the switching intent of the customers.

It is also recommended that banks invest in understanding the needs of customers of e-banking and try as much as possible to meet their various needs associated with the services provided by e-banking especially about POS and Internet banking. There is the need to create awareness and educate majority of the banking population or users on e-banking especially in mobile and internet banking. This was because most of the customers administered with the questionnaires rejected or refused to answer the questionnaire because they did not know about the services nor had minimal education of internet banking services.

Web-site of the bank should contain relevant information explained in an easy to understand language and should be visually attractive and regularly updated because service quality is main determinant for measuring the customer satisfaction efficiently. In case of any problem, the bank employees may speak themselves with the customer through telephone or any other mode of communication.

5.5 Area for Future Research

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

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APPENDIX

APPENDIX A

ST.MARY`S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Department Of Project Management

Research Questionnaire

Dear: Respondents

I am an MBA in project management student from St. Mary University, Addis Ababa. As part of my studies, I am carrying out a research on the effect of electronic banking service quality on customer satisfaction in the banking sector of Ethiopia (CBE). This questionnaire consists of two main parts and it should only take approximately five minutes to complete it.

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

This survey will be conducted from Oct.2016 to June, 2017. If you have any queries, please do not hesitate to contact me by email at fiker.yebltal@gmail.com

Thank you for your participation

Best regards, Fikerselassie Asfaw

Section A: Demographic Data

Please encircle your appropriate answer

1. **Age**: 1. 18-29 2. 30-49 3. 50-69 4. Above 69 years

2. **Gender**: 1. Male 2. Female

3. **Marital Status**: 1. single 2. Married c. Separated d. Widowed

4. **Education Level**: 1. No formal education 2. Basic Education 3. TVET 4. Diploma 5. degree and above

5. **Income Level**: 1. less than Br 2000 2. Br 2001-10000 3. Br above 10000

6. **Which e-banking types do you use**? 1. ATM 2. Point of Sale 3. Internet Banking 4. Mobile Banking 5. ATM&MB 6. ATM & IB 7.All

7. **Types of customers**: 1. Self-employee 2. Business men 4. Private employees 5. Gov't employees

Section B: specialized questions

The purposes of these questions are to know your opinion about the e-banking service quality of CBE. So, please put ☑ mark in the box which reflects your concern 1= strongly disagree 2= disagree 3= neutral 4= agree 5= strongly agree

Access	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
1. CBE e-banking service is working 24 hours.					
2. The use of ATM service is accessed usually.					
3. It is easy to contact my bank whenever necessary.					
4. mobile banking is nice to use					
5. I can log in my account anywhere in the world using internet banking					
Reliability	**1**	**2**	**3**	**4**	**5**
6. the use of point of sale is reliable					
7. the use of all e-banking service in CBE is reliable					
8. CBE employees provide information that exactly fit my need.					

9. I can trust mobile banking service function of CBE					
10. ATM service completes a task accurately					
Ease of use	**1**	**2**	**3**	**4**	**5**
11. Mobile banking information contents and texts are easy to understand					
12. The instructions on ATM services are clear					
13. E-banking service is easy to use					
14. Internet banking is funny to use					
15. Mobile banking doesn't demands a lot of effort					
Time of delivery	**1**	**2**	**3**	**4**	**5**
16. The use of mobile banking is very fast					
17. The use of ATM is time saving					
18. The use of point of sale is stop cash holding					
19. Using E-Banking service enables me to accomplish my banking activities more quickly					
20. My bank offers all the e-banking services I need.					
Privacy or security	**1**	**2**	**3**	**4**	**5**
21. The use of POS gives me safety.					
22. Pin of all e-banking service is secure					
23. E-banking service provides security over my transaction.					
24. I am confident of the security of overall e-banking service.					
25. I feel safe when I using ATM service					
Service quality	**1**	**2**	**3**	**4**	**5**
26. I find E-Banking a convenient service					

27. The service I receive by ATM is excellent					
28. The level of service quality I got via mobile banking is high					
29. E-banking has impacted positively on service quality of the bank					
30. CBE is providing e-banking service more than I expect.					
Customer satisfaction	**1**	**2**	**3**	**4**	**5**
31. My expectations before the use of Internet banking have been met with this current experience					
32. I find the ATM banking instruction quite pleasant.					
33. I am completely satisfied with the usage of POS banking.					
34. Am satisfied the service delivery of E-banking via Mobile banking.					
35. Overall, I really satisfied the service quality of E-banking service provided by CBE.					

APPENDIX B: Time and Budget schedule

Time schedule

This section will be guiding the researcher to perform the details of the research within the time frame of the university. So, the researcher is presenting below the time schedule as soon as possible.

No.	**Activities**	**Duration in months (M)**									Remarks
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	
1.	Proposal writing	x	x	X	x	X					
2.	Review of related literature	x	x	X	x	X	x				
3.	Distributing questionnaires						x				
4.	Collecting data						X	X			
5.	Data analysis and interpretation							X	x		
6.	Research							X	X		

	report writing										
7.	Submission of draft reporting							X	x		
8.	Editing the report								x		
9.	Submission of final research report									x	
10.	Presentation of result (Defense)									x	

Budget schedule

In this section also presented the amount of money or budget that the researcher spent on the entire study.

No.	Material used	Quantity	Unit cost in Birr	Total cost in Birr
1.	**Stationary materials**			
1.1.	Pen	10	5	50
1.2.	Marker or highlighter	1	20	20
1.3.	Rubber	1	5	5
1.4.	Laptop	1	11580	11580
1.5.	Rough paper	1 packet	400	400
2.	Transportation cost of data collection	12 days	10	120
3.	Internet expense			200
4.	Secretarial service charge	120 pages	5	600
5.	Binding			30
6.	Reserve			500
	Total			13505

Declaration

I, the undersigned, declared that the thesis is my original work equipped under the guidance of Dr. Abebaw Kassie. All resource of materials used for this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or full to any other higher learning institutions for the purpose of possessing any Degree.

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Name **Signature**

St. Mary's University, Addis Ababa

June, 2017

Endorsement

This thesis entitled with “the effect of E-banking service quality on customer satisfaction: A case study of CBE on selected grade four branches in Addis Ababa” has been submitted to St. Mary’s University school of graduate studies for MBA in project management program with my approval as St. Mary’s university advisor.

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Name **Signature**

St. Mary’s University, Addis Ababa

June, 2017