

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

# PROSPECT AND CHALLENGES OF E- BANKING SERVICE IN COMMERCIAL BANK OF ETHIOPIA THE CASE OF WEST ADDIS ABABA DISTRICT

 $\mathbf{B}\mathbf{y}$ 

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May 2018 Addis Ababa, Ethiopia

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# A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDENTS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

**May 2018** 

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# By SELAMAWIT KEBEDE

#### APPROVED BY BOARD OF EXAMINERS

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## **DECLARATION**

I, the undersigned, declare that this thesis is my origi	nal work, prepared under the guidance of					
All sources of mater	rials used for the thesis have been duly					
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### **ENDORSEMENT**

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#### **ACKNOWLEDGEMENTS**

First, I would like to thank almighty God, the compassionate, the most merciful and source of knowledge and wisdom, who bestowed upon me the health, the power of communication and the courage to accomplish this thesis.

I would like to sincerely thank my advisor Dr. Temesgen Belayneh for his constructive comments, valuable suggestions, and good guidance. I would also like to thank to the customers and CSM of all the five selected branches of commercial bank of Ethiopia for their response to research questionnaire and interview.

Last but not the least, my appreciation also goes to some of my friends who has encouraged me to pursue my graduate study, including Tewodros Mekonnen and Lidia Tadesse.

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## **List of Acronyms and Abbreviations**

E-banking Electronic banking

CBE Commercial Bank of Ethiopia

ATM Automated teller machine

POS Point of sale

PC Personal computer

PDA Personal Digital Assistant

LAN Local Area Networks

WAN Wider Area Networks

CIF Client information filling

M-Banking Mobile banking

SMS Short message sending

ROI Return on investment

NBE National Bank of Ethiopia

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#### **Abstract of the Study**

Despite the growth of e-banking adoption worldwide, Ethiopian banks, continue to conduct most of their banking transactions using traditional methods. Recently commercial banks operating in the country have endorsed electronic banking service. In light of this, the study has aimed to study the prospect and challenges of E-Banking service from the customer perspective taking the case of selected branches of Commercial Bank of Ethiopia in West Addis Ababa District. Based on the general objective, the study has also formulated six specific objectives and examined each in depth. In conducting the study, descriptive research design was employed with cross-sectional data collection strategy. Both primary and secondary data were collected for the purpose of this study from customers of CBE in western Addis Ababa district. Data was collected from respondents using questionnaire and key informant interviews. The data collected through questionnaire was analyzed using descriptive analysis such as frequency distribution and percentages and presented in tables while the qualitative data collected through interviews is analyzed using content analysis and logical interpretation of idea. From the analysis of the collected data, the findings revealed that balance inquiry, cash withdrawal, utility payment, purchasing goods, and service are the major service options available to the customer once they have begun to use e banking. Besides, it is also confirmed in the study that the bank provides e banking to its customers using e-banking channels of ATM, internet banking, mobile banking, and point of sales. On the viewpoint of the customers: reduced costs, increased comfort and time saving, better cash management, faster way of conducting banking transactions are some of the benefits of using E banking and customers moderately understand the service of electronic banking provided by the bank. In the eyes of sampled customers, lack of suitable legal and regulatory framework, low level of internet penetration and poorly developed telecommunication infrastructure, high cost of internet, security concerns, and service provision languages are among the major challenges of e-banking service provided by CBE in the study area. However, the trainings given to the staffs, which increased their knowledge and technical skill in solving ebanking problems, continuous improvement in the quality of e-banking services given to customers and the efforts of the bank to expand e-banking infrastructures and services, are the major prospects of electronic banking services in CBE west Addis Ababa district. The bank should improve both the quality and type of services, the bank should promote public relation work, the bank needs focus on means to increase the quality of the service, the government should encouraged to expand the ICT infrastructure, the bank should encouraged the internet penetration telecommunication infrastructure, the bank should give continuous training to all employees who have direct relation with the customers are the recommendations.

Key words: E-Banking, prospect, challenges

#### **CHAPTER ONE**

#### Introduction

The focus of the study was to identify the challenges and prospects of E-banking service in Commercial Bank of Ethiopia the case of west Addis Ababa district. It aimed at determining the challenges, which hamper the proper provision of E-banking services and looking at the prospects, which the bank has in advancing its E-banking services to customers. The study has thus, formulated the background and statement of the study and the problem statement, and it has stated the general and specific objectives accordingly. In addition, the subsequent sections of the chapter discuss the significance of the study, and scope and organization of the study. The detail is presented as follows.

#### 1.1 Background of the Study

The banking industry around the world has been undergoing a rapid change. The deepening of information technology has facilitated better track and achievement of commitments, multiple delivery channels for on line consumers and faster resolution of issues has developed noticeable (Kaleem & Ahmad, 2008). Banks play a prominent role in improving economic efficiency by channelizing funds from resource surplus sectors to those sectors that are deficient, yet possessing better productive investment opportunities (Adriana, 2006). In addition, banks also play a vital role in trade and payment system by significantly reducing transaction costs and increasing convenience (Nordic Competition Authorities NCA, 2006).

The increasingly competitive environment in the financial service market has resulted in pressure to develop and utilize alternative delivery channels. A more developed service is one that provides customers with the opportunity to gain access to their accounts and execute transactions or to buy product online via the internet (Daniel, 1999). Most new channels of distribution to be used in the financial services organizations are electronic banking; this method was established in the mid- 1990s, thereafter steadily becoming more important.

According to Nyangosi, Arora, & Sing (2009), the improvement of technology is a basic factor for online banking services in developing countries including Ethiopia. Currently, customer expectations also forced banking industry to facilitate a convenient ways to traditional banking

services. To enhance customer service delivery, all the banks in Ethiopia facilitating online banking services to increase speed and accuracy in banking transactions (Mattewos, 2016). Industry competition is another factor that compels banks to provide more convince way of banking through online banking services.

The banking sector is undergoing rapid change from newly emerging developments, which expands economy and advances towards institutional and market completeness. Commercial banking is undergoing rapid change, as the international economy expands and advances towards institutional and market completeness. A major force behind these developments is technology, which is breaching geographical, industrial and regulatory barriers by creating new products, services and market opportunities, and developing more information and systems-oriented business (Liaoa & Cheung, 2002). The term electronic banking refers to "the provision of information or services by a bank to its customers, via a computer or television" (Allen, 2001).

As to the observation of the researcher, currently there are banks that provide service to customers by traditional systems, which might have caused dissatisfaction on the side of customers. In order to encourage further e-banking expansion in Ethiopia, a better understanding of the prospect, challenges affecting the services are thus critical. By gaining, an in-depth understanding of the factors and conditions that influence expansion and realize its benefits and its strategic implications can be important in addressing the basic problems observed in E-banking service delivery and exploit the potentials the E-banking presents both to the customers and to banks. This will also promote the growth of E-Banking services in Ethiopia. To this end, this research is conducted to examine the challenges and prospects of E-banking service in Commercial Bank of Ethiopia the case of west Addis Ababa district.

#### 1.2 Statement of the Problem

The banking sector is undergoing rapid change from newly emerging developments, which expands economy and advances towards institutional and market completeness. Commercial banking is undergoing rapid change, as the international economy expands and advances towards institutional and market completeness. A major force behind these developments is technology, which is breaching geographical, industrial and regulatory barriers by creating new products, services and market opportunities, and developing more information and systems-oriented

business (Liaoa & Cheung, 2002). One of the products of global technological changes is the advent of online banking (E-Banking). Online banking has become prevalent and employed by many financial institutions to reduce costs associated with having personnel serve customers physically, shorten processing periods, increase speed, improve flexibility of business transaction and provide better service in all. It has been identified as the fastest growing area for business and many banks are improving on use of their online banking facilities to move along with global trend (Aladwani, 2001).

These are the major technologies: automated teller machine (ATM), point of sale (POS), internet banking, and mobile banking (Okoro, 2014). One of the benefits of E-Banking products and services deliveries is improving efficiency and effectiveness of their operations so that more transactions can be processed faster and most conveniently, which will undoubtedly affect significantly on the overall performance of the banks. On the other hand the customer, stand to enjoy the benefit of quick service delivery that reduce the reduced frequency of going to banks physically and reduced cash handling (Mavri & Ioannou, 2006).

Pikkarainen (2004) stated that the number of customers engage in the use of E-banking services is low in developing countries. He explained the reason that firstly, customers need to have an access to the internet in order to utilize some E-banking facilities such as internet and mobile banking facilities. Furthermore, Karjaluoto has stated that most new online users need to learn how to use the service. Second, nonusers often complain that online banking is incomprehensible, difficult to use and has no social dimension, i.e. the lack of face-to-face situation at branches (Karjaluoto, 2001; Mattila, 2003). In addition, customers are afraid of security issues (Ezeoha, 2005).

Much documentation on online banking services has been carried out elsewhere (Daniel and Storey, 1997; Liaoa & Cheung, 2002; Claessens 2002). However, in developing countries like Ethiopia, there is little evidence concerning E-Banking service provision, prospects, and its challenges (Mattewos, 2016). As far as E-Banking is concerned, many researches on internet banking, mobile banking and modern service delivery channels have been done in different countries in the world. As per the knowledge of the researcher however, only a very limited number of researches have been done on E-Banking in Ethiopian Banking sector. For instance,

Ayana (2010), Sintayehu, (2015), (Mohammed (2014) and Wondwossen and Tsegai, (2005). Therefore, this study depends on mainly the above researches and other related studies.

From the limited researches that have been done, Assefa (2013) conducted a study on the impact of E-Banking on customer satisfaction in two branches of private banks in Gondar City. The researcher used qualitative approach in analyzing this study and it was limited to customers of two branches only. In addition to this, only ATM was considered as E-Banking service because there was no any other form of E-Banking in the study area. Bultum (2014) also studied factors that affect adoption of E-Banking in the Ethiopian banking industry. Still this study was entirely focused on factors that affect adoption of E-Banking. Satisfaction of customers towards E-Banking was not investigated. A study by Ayana (2014) stated that more studies are still required to understand the relevance of E-banking in Ethiopia to identify areas in which the country lags behind that inhibit the adoption and diffusion of E-banking services in the country. In addition, Alayu, (2015) has conducted a study on the assessment of the challenges and prospects of E-Banking service in case of Commercial Bank of Ethiopia; however, his study is solely concentrated on the assessment of the challenges and prospects taking a single e-banking service (ATM). Hence, the researchers' perspective in limited to a specific case and lacks an in-depth analysis of other e-banking services, provided by the bank their challenges and prospects. The above discussion on researches conducted on E-Banking service in the banking sector in Ethiopia shows that inadequate information concerning the type e-banking service, customers' understanding of e-banking service, the level of customers' satisfaction, the challenges and prospects of the services in the country in general and in Commercial bank of Ethiopia in particular.

Commercial banks in Ethiopia have launched e-banking services as part of ensuring service excellence by reducing waiting time, errors, costs, and improve customer satisfaction. In order to encourage further E-banking adoption in developing countries, a better understanding of the challenges and drivers influencing E-banking adoption is critical (Zhao, 2008). By gaining an indepth understanding of the factors and conditions that influence developing country's ability to fully adopt and realize its benefits, strategic implications can be generated for the researchers and practitioners regarding how to promote the growth of E-banking in the developing countries. However, despite the importance of these adoptions, limited studies in number and in scope are

currently available in developing countries, especially in Ethiopia. Therefore, more studies are still required to understand the relevance of E-banking.

As observation of the researcher, those who make agreement and registered for the service feel indifferent and still preferred to choose in line instead of E-Banking services. Therefore, this paper is to examine the challenges and prospect of E-Banking service in Commercial Bank of Ethiopia. It is believed that the findings of the research would enable the bank to render better E-banking service to its customers, adopt new strategies to cope with challenges and meet customer needs in the use of these E-banking facilities.

#### 1.4 Research Question

- 1. What are the e-banking services that are provided to customers at Commercial Bank of Ethiopia?
- 2. What is the level of customers' understanding about e-banking services provided by Commercial Bank of Ethiopia?
- 3. What benefits do customers gain from e-banking services provided by Commercial Bank of Ethiopia?
- 4. What is the satisfaction level of customers on E-Banking service provided by Commercial Bank of Ethiopia?
- 5. What are the major challenges of E-Banking service provided by Commercial Bank of Ethiopia?
- 6. What is the prospect of E-Banking service provided by Commercial Bank of Ethiopia?

#### 1.5 Objective of the Study

#### 1.5.1 General Objective of the Study

The general objective of the study is to examine the challenges and prospects of E-banking service in Commercial Bank of Ethiopia the case of west Addis Ababa district.

#### 1.5.2 Specific Objectives of the Study

- 1. To examine the e-banking services provided to customers in selected branches of Commercial Bank of Ethiopia west Addis Ababa.
- 2. To analyze the level of customers' understanding about e-banking services provided at selected branches of Commercial Bank of Ethiopia west Addis Ababa.
- 3. To investigate the benefits, which customers gain from e-banking services provided at selected branches of Commercial Bank of Ethiopia west Addis Ababa.
- 4. To determine the satisfaction level of customers on E-Banking service provided at selected branches of Commercial Bank of Ethiopia west Addis Ababa.
- 5. To identify the major challenges of E-Banking service provided at selected branches of Commercial Bank of Ethiopia west Addis Ababa.
- 6. To explore the prospect of E-Banking service provided at selected branches of Commercial Bank of Ethiopia west Addis Ababa.

#### 1.6 Significance of the Study

In the recent years there has been explosion of Internet based electronic banking applications. The emergence of new forms of technology has created highly competitive market conditions for bank service providers. It should also be note that E-Banking could bring about various benefits for banks and their customers as well. It is obvious that cost savings, efficiency, gaining new segments of customers, improvement of the bank's reputation and better customer services and satisfaction are primary benefits to banks.

The success in E-Banking is achieved with tailored financial products and services that fulfill customer' wants, preferences and quality expectations. Customer satisfaction is a key to success in E-Banking.

The outcomes and results of this research therefore, would be potential value to financial institutions, particularly banks to:

• Understand the challenges and prospects related with adoption of new technology and its advantages in providing service to their customers.

- Help banks to identify key challenges that inhibit expansion of E-Banking service and take measures towards provision of quality services.
- Helps management of Commercial Bank of Ethiopia bankers, bank managers and any
  relevant decision maker to be aware of customer perception on the prospects and
  challenges of electronic banking services facilities of the bank.
- Finally, the findings also help other researchers who will be interested to conduct further study on E-Banking banking system.

#### 1.7 Scope of the Study

The study was confined to examine the challenges and prospects of E-banking service in Commercial Bank of Ethiopia the case of west Addis Ababa. The researcher selected west Addis Ababa district of Kolfe area branches (Kolfe, Sefere Selam, and Lomi Meda. Atena Tera, and 18 Mazoriya). For the sake of uniformity and due to their more involvement in retail banking, only data is obtain from CBE in western Addis Ababa. The study involves customer service managers and customers who use the E-Banking services for consequently of two years.

#### 1.9 Organization of the paper

The study is organize in to five chapters in which chapter one deals with background of the study, background of the organization, statement of the problem, objective of the study, significance of the study and scope of the study. Chapter two is to the review of related literature consisting theoretical review and empirical review. A chapter three is covers the research approach and design, population, sample size, sampling procedures, data sources, and data collect method and the data analysis method. Chapter four is include finding and discussions part of the study. The last chapter is incorporating the conclusion and recommendation part of the study.

#### **CHAPTER TWO**

#### REVIEW OF RELATED LITERATURE

#### Introduction

The literature review presented in this chapter gives a synopsis on the theoretical, conceptual, and empirical issues that provide framework for conducting the study and achievement of the research objectives. This chapter contains both the theoretical and empirical review of the study. The theoretical framework will includes Evolution of E-Banking, Definition of E-Banking, Characteristics of E-Banking, Principles of E-Banking, Types of E-Banking, Role of E-Banking in the banking sector, E-Banking and customer satisfaction, Customer satisfaction on E-Banking service, Benefit of E-Banking, challenges of E-Banking service, Banking history in Ethiopia, E-Banking challenge in Ethiopia. In addition, it also includes empirical review of the study from different researchers in different countries.

#### 2.1 Theoretical Review of Literature

#### 2.1.1 Evolution of E-Banking

Since the late 1990s E-Banking has developed from virtual insignificance to tens of millions of users worldwide Organization for economic cooperation and development (OECD, 2001). However, E-Banking is the product of different generations of electronic transactions. The current web-based internet is the latest of several generations of systems: Automated Teller machine (ATMs), Phone Banking, PC or House Banking. Automated teller machines (ATMs) were the first well-known machines to provide electronic access to customers where as in phone banking, users call their bank's computer system on their ordinary phone and use the phone keypad to perform banking transactions. PC banking superseded phone banking and allowed users to interact with their bank by means of a computer with a dial-up modem connection to the phone network. Phone and PC banking entailed maintenance costs associated with keeping up to date with diverse modems and with avoiding prohibitively complex installation procedures.

After those generations Deutsche Bank launched the very first Internet banking project in Latin America in 1996 and Citibank has developed a special "e-toolkit" across all its branches

worldwide United Nations Conference on Trade and Development (UNCTAD, 2002). E-Banking uses the web browser for the user interface and the Internet for data transfer and download of software, and so has a potential for reducing maintenance costs. For users, E-Banking provides current information, 24-hours-a-day access to banking services. The primary services provided by e-banks are transferring money among one's own accounts, paying bills, and checking account balances. Loans, brokering, share trading, service bundling, and hosts of other financial services are being added to these primary services (Dewan & Seidmann, 2001).

#### 2.1.2 Definition of E-Banking

The concept of electronic banking defined in several ways; for instance, Daniel (1999), defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery plat forms that can be use with different terminal devices such as personal computers and mobile phone with browser or desktop software, telephone or digital television. On the other hand, the term "electronic banking" or "e-banking" covers both computer and telephone banking. It refers to the use of information and communication technology by banks to provide services and manage customer relationship more quickly and most satisfactorily (Charity-Commission, 2003).

According to Bhattacherjee (2001), for example, define it an integrated system that can provide customers flexible, convenient and inexpensive platform with integrated services of online personal banking product including online checking and saving account, money market accounts, certificate of deposit, credit cards, home equity loans investment service and other related financial services. Therefore using internet banking, bank customer can conduct the same banking transaction provided by brick and mortar branch at any time and any place through a simple and user-friendly browser (Polatoglu & Ekin, 2001).

According to Singh & Malhotra (2004), for instance, E-banking defined as the deployment of banking services and products over electronic and communication networks directly to customers. These electronic and communication networks include Automated Teller Machines (ATMs), direct dial-up connections, private and public networks, the Internet, televisions, mobile devices and telephones. Among these technologies, the increasing penetration of personal

computers, relatively easier access to the internet and particularly the wider diffusion of mobile phones has drawn the attention of most banks to E-banking. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet or mobile phone. Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant, automated teller machine (ATM), kiosk, or Touch Tone telephone. E-banking refers to the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit-taking, lending, account management, the provision of financial advice, electronic bill payment, and the provision of other electronic payment products and services such as electronic money.

According to Abid and Noreen (2006), such as electronic banking defined as any use of information and communication technology and electronic means by a bank to conduct transactions and interact with stakeholders.

#### 2.1.3 Characteristics of E-Banking

E -Banking includes the systems that enable bank customers to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. Customers' access E-banking services using an intelligent electronic device, such as a Personal Computer (PC), Personal Digital Assistant (PDA), Automated Teller Machine (ATM), telephone (Ibrahim, 2006).

#### Characteristics of Internet banking

Robinson (2000), believe that supply of internet banking services enable bank to establish and extend relationship with customers. Benefit for the users are numerous as well and include convenience of the services, lower cost of transaction and more frequent monitoring of accounts among others. The basic characteristics of internet banking are to help bank perspective to save costs, to save time and money, to minimize the likelihood committing errors, to fulfill undergraduate student's convenience, to lower the transaction costs.

#### Characteristics of Mobile banking:

Christopher (2017), for instance stated about the features of mobile banking.

Accessibility: Mobile banking ensures easy accessibility; it hardly matters whether you are present at that particular place where your bank is situated, you can make the transaction or easily access your account from any place, and only the banking apps offer this feature, not the banks.

24/7 availability: The banking apps ensure 24/7 availability, unlike the banks. If you want to transfer a certain amount beyond the banking hours, you can easily do that with the help of the mobile app, as the apps provide 24/7 availability. Usually the banks are closed on Saturdays and Sundays, and you are not able to transfer the money on these days even if it is urgent, you have to wait for the next working day, but with the mobile apps you can even transfer money on Saturdays and Sundays, as they are available and accessible 24/7.

Secure login: Secure login is one of the best features offered by the mobile banking. Security is generally the key factor in the banking sector, and mobile banking can be the best solution to it. The mobile banking allows you to login safely, as only you can access your account by entering the mail id and password each time, and if anyone else tries and fails to log in your account, you will receive a mail about the failed attempts of the login and also your account will be blocked after the third login failure, for the next 24 hours. With the help of these security advancements, not only you are able to login securely, but also your most sensitive financial data is highly secured.

#### Characteristics of Automated teller machine

Balance Inquiry: Need to know your current account balance? No problem, easily check by using an ATM. Deposit: Quickly and easily, deposit checks or cash using ATM. Withdraw Cash: Withdraw up to \$500 daily in cash. Fast Cash: Use this convenient feature to withdraw a quick \$40 from your Checking Account. (\$40 is the default amount on all ATMs, but this can be updated in the ATM preferences to whatever amount works for you.) Transfer Funds: Transfer funds between your Checking, Savings and even a Line of Credit if it has associated with your deposit account. Add funds to an Everyday Cash Card. Set ATM Preferences: customers can

change the default language, fast cash withdrawal amounts and receipt options if they select Set ATM Preferences.

#### 2.1.4 Types of E-Banking

There are many electronic banking delivery channels to provide banking service to customers ATMs, Local Area Networks (LAN), Wider Area Networks (WAN), credit cards, electronic point of sales (POS) systems, imaging systems, information filling systems, integrated banking system and client information filling (CIF) systems. Among this ATM, POS, Mobile banking and internet banking are the most widely used and discussed below.

#### Automated Teller Machine (ATM)

These are electronic terminals that let you bank almost virtually any time. For customers to withdraw cash, make deposits, or transfer funds between accounts, they generally insert an ATM card and enter their PINs. ATM has a positive response. Since the introduction of the first cash dispenser 30 years ago, ATM technology has gradually become the electronic face for most banks customers. They are 24 hours around the clock electronic cashiers that provides access into customer's accounts by use of ATM cards on the bank's ATM machine located on site in all branch offices and off site in strategic places in the main towns around the country (Wakefield, 2010).

#### Mobile banking

Mobile banking (also known as M-Banking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services offered over SMS, a service known as SMS banking. Mobile banking used in many parts of the world with little or no infrastructure, especially remote and rural areas. This aspect of mobile commerce is also popular in countries where banks can only be found in big cities, and customers have to travel several miles to the nearest bank. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information (Tiwari & Buse, 2007)

#### Internet banking

According to Booz, Allen & Hamilton (1999), "Internet banking" refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent device. Internet banking products and services can include wholesale products for corporate customers as well as retail and fiduciary products for consumers. Ultimately, the products and services obtained through Internet banking may mirror products and services offered through other bank delivery channels. Some examples of wholesale products and services include Cash management, wire transfer, automated clearinghouse transactions, Bill presentment and payment.

Some of the market factors that may drive a bank's strategy to use internet banking include the following: Competition - competitive pressure is the chief driving force behind increasing use of internet banking technology, cost reduction and revenue enhancement, Banks see internet banking as a way to keep existing customers and attract new ones to the bank. Cost Efficiencies - banks can deliver banking services on the internet at transaction costs far lower than traditional brick-and-mortar branches. The actual costs to execute a transaction will vary depending on the delivery channel used. According to Booz, et.al, as of mid- 1999, the cost to deliver manual transactions at a branch was typically more than a dollar, ATM and call center transactions cost about 25 cents, and internet transactions cost about a penny. These costs expected to continue to decline. Banks have significant reasons to develop the technologies that will help them deliver banking products and services by the most cost-effective channels .Geographical Reach - Internet banking allows expanded customer contact through increased geographical reach and lower cost delivery channels.

#### Point of sale

Point of sale (POS) also sometimes referred to as point of purchase (POP) or checkout is the location where a transaction occurs. A 'checkout' refers to a POS terminal or more generally to the hard ware and software used for checkouts, the equivalent of an electronic cash register. A POS terminal manages the selling process by a salesperson accessible interface (Olorunsegun, 2010) .An advanced payment system, which enables customers to use an ATM card to pay for

goods and services, electronically debiting the cardholders account and crediting the account of the merchant (Rahman, 2006).

#### 2.1.5 Role of E-Banking in the Banking Sector

Electronic banking is the latest delivery channel of banking services. The definition of electronic banking vary amongst researches partially because electronic banking refers to different types of services through which a bank's customers can request information and carry out most retail banking services via computer, television or mobile phone (Daniel, 1999; Mols, 1998; Sathye, 1999). Burr (1996), explains electronic banking it as an electronic connection between the bank and customer in order to prepare, manage and control financial transactions.

Electronic banking can also be defined as a variety of the following platforms: Internet banking (or online banking), telephone banks, TV-based banking, mobile phone banking, and PC bank (or offline banks). The channels comprise two major groups: the traditional channels and electronic channels. (1) The traditional channels defined based on the type of human assistance: teller, retail or corporate manager. (2) Electronic channels are divided into 4 sub-groups on the basis of how the channel is seen by clients, with some exceptions based on the technological processes of transaction execution: Internet based (online bank for corporate clients Telehansa.net, online bank for private clients Hanza.net, offline bank for large corporate clients Telehansa), card-related (ATM – Automated Teller's Machine and POS –payment terminal), Phone channels (call center, IVR, mobile bank) and Automated channels ("virtual" bank core channels where direct debit and incoming payments are effected).

Services are one of the primary benefits, which a customer looks for while adopting a new channel. The consumers consider the benefits and weigh them against the costs associated. The Internet offers many benefits to consumers, like any time anywhere banking, updated information, convenience, faster transaction, etc. E-Banking services are replacing traditional services and creating a new scale in transformation. In the initial stage, e- channels introduced in metropolitan cities and urban areas, but recently some banks have started focusing on rural and semi urban areas. Most banks in Ethiopia are attracting customers in a big way. The potential customers and big companies are shifting their accounts from traditional banks (not fully computerized) to E - banks (fully computerized and provide different e – channels).

#### 2.1.6 Electronic Banking and Customer Satisfaction

Electronic banking is associated to customer satisfaction through globalization. This has not only brought the world loser together, but it has allowed the world's economy to become a single interdependent system so the local and international business can easily share information rapidly and well.

Electronic banking has drawn attention of many banks to application of different technology devices in promoting or achieving better customer services delivery that guaranteed customer satisfaction that translates into increased profitability and higher return on investment. Electronic banking services and customer satisfaction have a positive relationship, which has afforded banks the opportunities to impress customers, which eventually encourage them to keep coming back. Today it would be difficult to see any bank in the country that does not render one form of electronic banking services or the other, even banks in the most remote parts of the world.

Vaidya (2011), argue that emerging technology would enable to create new ways of lead generation, prospecting as well as developing deep customer relationship and electronic banking would achieve superior customer experience with bi-directional communications. In his view ascertains that access to basic financial services, ability to save, transfer and also invest small amounts of money can make a huge difference to people around the world. Lenart (2012), customers' satisfaction for financial instructions and banking website display growth and nearly two thirds of online financial customers now use bill pay across, credit cards and third party website.

The other linkage between electronic banking and customer satisfaction is cost effective. Electronic banking service open 24/7 all over the globe so the business can be opened anywhere, anytime, making purchase from different countries easier and more convenient (Barney 2006).

#### 2.1.7 Customer Satisfaction on E-Banking Service

Strategic Direction (2007), both customers and banks attach much importance to satisfaction. Frantic efforts are being made by banks to offer high quality products and services to their customers. Customers also want the best value for their money and are sparing no efforts in selecting the best products and services.

According to Solomon (1999), there are different types of customers. They may be individuals, groups, organizations, communities or nations. The banking Industry as any other industry has intensify its efforts to satisfy consumers through the provision of quality services. This stem from that fact that competition has been stiff and every bank is trying to retain old customers and woo new ones.

Carse (1999), suggested that bank customer's desire and taste have begun to raise the stakes of expectation of exceptional services. Customers want to transact their banking transaction at any place and time.

Kumbhar (2011), indicates that cost effectiveness, easy to use, security, and responsiveness were influence customer satisfaction therefore banks should focus on concentrate their efforts on these dimensions for better service to satisfy their customers. Zeinthaml (2000), expressed that customer satisfaction is an ambiguous and abstract concept. Actual manifestation of the state of customer satisfaction is different from person to person, product to product and service to service. The states on satisfaction depend on psychological, economical, physical factors. One of the customer satisfaction major determinates is quality of service. Many researchers mentioned that, service quality could be enhanced by using advanced information and communication technology. According to Nupur (2010), electronic banking can offer to customers quicker, speedier and a dependable service for which they may be relatively satisfied than that of manual system of banking.

Mohammad (2012), noted that banks' customers' are not confident in electronic banking services. Customers are safety seeker, and they want to keep away from risks. This is because electronic banking services are in inherently risky environment due to the absence of personal contact, physical product evaluation, warranties, or contracts and the customers usually have difficulties in asking for compensation when transaction error occurs. In addition, this indicates that customers might be concerned about the length of time involved in waiting for transaction or learning how to operate it. Thus, this may explain why many customers refuse to using e-banking services. Similarly the interview finding confirmed that customer are not satisfied as expected because their trust on the technology, uneasiness to use the service because of language problem, their demographical problem and also the customers who are using the service their

first choice is the traditional banking if the waiting line is too long they go to use the ATM machine and also they talk each other when face a problem how bad the service and stop using the service is instead of asking the bank for a solution.

#### 2.1.8 Benefit of E- Banking service

According to Sergeant (2000), the benefits of E-banking are manifold and are to be seen from the point view of the banks themselves, customers and even the regulators: for banks, E-banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater opportunities to sell cross border. For customers, the potential benefits are more choice; greater competition and better value for money; more information; better tools to manage and compare information; and faster service.

From customers point of view: Bank Away (2001); Gurău (2002), explained about the main advantages of E-Banking for customers as follows: Reduced costs in accessing and using the banking services. Increased comfort and timesaving: the transactions can be made 24 hours a day, without requiring the physical interaction with the bank. Quick and continuous access to information: Corporations will have easier access to information as, they can check on multiple accounts at the click of a button. Better cash management: E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments are available on internet sites. Convenience: All the banking transactions can be performed from the comfort of the home or office or from the place, a customer wants to.

From banks, point of views the main advantage of e- banking for banks as follows Attracting High Value Customers: E-Banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of revenue streams. For a retail bank, e-banking customers are therefore of particular interest, and such customers are likely to have a higher demand for banking products. Most of them are using online channels regularly for a variety of purposes, and for some there is no need for regular personal contacts with the bank's branch network, which is an expensive channel for banks to run (Berger &Gensler, 2007).

Easier Expansion: Traditionally, when a bank wanted to expand geographically it had to open new branches, thereby incurring high start up and maintenance costs. E-channels, such as the Internet, have made this unnecessary in many circumstances. Now banks with a traditional customer base in one part of the country or world can attract customers from other parts, as most of the financial transactions do not require a physical presence near customers living/working place.

Increased Revenues: Increased revenues because of offering e-channels are often reported, because of possible increases in the number of customers, retention of existing customers, and cross-selling opportunities. Whether these revenues are enough for reasonable return on investment (ROI) from these channels is an ongoing debate. It has also allowed banks to diversify their value creation activities. E-banking has changed the traditional retail banking business model in many ways, for example by making it possible for banks to allow the production and delivery of financial services to be separated into different businesses. This means that banks can sell and manage services offered by other banks (often-foreign banks) to increase their revenues. This is an especially attractive possibility for smaller banks with a limited product range. E-banking has also resulted in increased credit card lending, as it is a sort of transactional loan that is most easily deliverable over the internet. Electronic bill payment is also on rapid rise Young (2007), which suggests that electronic bill payment and other related capabilities of e-banking have a real impact on retail banking practices and rapidly expanded revenue streams.

Cost Reduction: The main economic argument of e-banking so far has been reduction of overhead costs of other channels such as branches, which require expensive buildings and a staff presence. It also seems that the cost per transaction of e-banking often falls more rapidly than that of traditional banks once a critical mass of customers is achieved.

Enhanced Image: E-banking helps to enhance the image of the organization as a customer focused innovative organization. This was especially true in early days when only the most innovative organizations were implementing this channel. Despite its common availability today, an attractive banking website with a large portfolio of innovative products still enhances a bank's

image. This image also helps in becoming effective at e-marketing and attracting young/professional customer base (Kazmi & Hashim, 2015).

In addition, e- banking has benefits to economy: Electronic Banking as already stated has greatly serviced both the community and the banking industry. This has resulted in creation of a better enabling environment that supports growth, productivity and prosperity. Besides many tangible benefits in the form of reduction of cost, reduced delivery time, increased efficiency, reduced wastage, banking electronically controlled and thoroughly monitored environment and discourage many illegal and illegitimate practices associated with banking industry like money laundering, frauds and embezzlements. Further E-banking has helped banks in better monitoring of their customer base. This is a useful tool in the hand of the bank to device suitable commercial packages that are in conformity with customer needs. As e- banking provide opportunity to banking sector to enlarge their customer base, a consequence to increase the volume of credit creation which results in better economic condition. Besides, E-banking has also helped in documentation of the economic activity of the masses (Mahdi, 2004).

#### 2.1.9 Challenges of E- Banking Service

Implementation of global technology: There is a necessity to have a quite level of infrastructure and good human capacity building prior the developing countries may adopt global technology for their local needs. In developing countries, many clients either do not trust or do not access to the needful infrastructure that is to be able to process electronic payments (Kaur & Rajneesh, 2014).

Security Issue: is one of the important issues for E-banking. In the case of any monetary damages to the clients, the bank's reputation is spoiled. The security risk is the main threat from the hackers, who can use several types of information of public peoples for reason of criminal activity. While sometimes hackers hike, the passwords of the clients cause to theft their money or some hidden or secret information (Kazmi & Hashim, 2015).

Strengthening the public support: In developing countries, in the previous year's most e-finance initiatives have been the result of joint efforts between the non-public and public sectors. If the public sector does not have the necessary resources to implement the projects it is important that

joint efforts between public and non-public sectors along with the multilateral agencies like the World Bank, be developed to enable public support for e-finance related initiatives(Kaur & Rajneesh, 2014).

Trust Issue: Trust plays a key role for E-Banking, but the lack of trust is the main issue in the growth and development of electronic banking (Chauhan & Choudhary, 2015).

Other Disadvantages in general: Nowadays, E-Banking became a fact of the existence or even a survival trouble for banks with their customers trusting and demanding it as a handy, safe, and honest manner of conducting banking transactions. Moreover, bankers use it as an aggressive facet and a way to efficiently and correctly extend their business past the geographical obstacles the following disadvantage in step with (Shannak, 2013).

- 1. Poorly introduced electronic banking services may be sluggish & time consuming.
- 2. A few identification authentication necessities can be disturbing & overwhelming for customers.
- 3. Would possibly require lots of paperwork & approaches for registration & set-up, such as documentations & power of attorney to spouses past what has required for traditional paper-primarily based dealings.
- 4. May is difficult for customers to be familiarized with the financial institution's website & e-banking channel each financial institution has its own specific internet site & methods!
- 5. Frequent changes & modifications to the bank's internet site & delivery channels that require re-familiarization & in a few cases re-registration & documentation.
- 6. Distrust by way of some clients in a few countries with the primitive legal system and unreliable technological infrastructure could face security & legal challenges.
- 7. Some customers still prefer personalized attention and human interaction.

#### 2.1.10 Banking History in Ethiopia

A reference to the Ethiopian history reveals that the first bank in the country, Bank of Abyssinia founded during the reign of Emperor Menelik II in February 1905. Due to a foreign domination of its management (mainly the British), then Bank of Abyssinia was forced to dissolve and in its place was established the Bank of Ethiopia in 1931 whose management was still left to foreigners due to the then lack of skilled manpower in the country.

The State Bank of Ethiopia later replaced the Bank of Ethiopia soon after the war with Italy. The latter was the first bank in the country fully controlled and owned by the Ethiopian government. In the mean time, however, a number of foreign banks had opened their branches in the country, most of them with an interest to have control over the nation's economy. It was the State Bank of Ethiopia that gave rise to the present Commercial Bank of 23 Ethiopia (CBE) and National Bank of Ethiopia (NBE).

During the Dergue reign, CBE had remained as the only participant in the country's commercial banking sector. However, following the 1991 takeover by the present government and accompanying encouragement of private investment, a number of private banks have emerged in the country's financial sector.

Accordingly, Monetary and Banking proclamation No.83/1994 and the Licensing and Supervision of Banking Business No.84/1994 laid down the legal basis for investment in the banking sector. Consequently, shortly after the proclamation the first private bank, Awash International Bank established in 1994 by 486 shareholders and by 1998, the authorized capital of the Bank reached Birr 50.0 million.

Dashen Bank established on September 20, 1995 as a share company with an authorized and subscribed capital of Birr 50.0 million. 131 shareholders with subscribed and authorized capital of 25.0 million and 50 million founded bank of Abyssinia. Wegagen Bank with an authorized capital of Birr 60.0 million started operation in 1997. The fifth private bank, United Bank established on 10 September 1998 by 335 shareholders.

Nib International Bank that started operation on May 26, 1999 with an authorized capital of Birr 150.0 million. Cooperative Bank of Oromia established on October 29, 2004 with an authorized

capital of Birr 22.0 million. Lion International Bank with an authorized capital of Birr 108 million started operation in October 02, 2006. Zemen Bank that started operation on June 17, 2008 with an authorized capital of Birr 87.0 million. Oromo International Bank that started operation on September 18, 2008 with an authorized capital of Birr 91 million. In addition, recently Buna international bank and Birhan international bank are started operation in the country National Bank of Ethiopia (NBE, 2009).

#### 2.2 Review of Empirical Literature

Different researchers in different parts of the world conduct some related studies. However, in Ethiopia there are limited numbers of studies conducted in Ethiopia on e-banking technology. Gardachew (2010), conduct a research on the opportunities and challenges of e- banking in Ethiopia. The study focused on analyzing the status of electronic banking in Ethiopia and investigates the main challenges and opportunities of implementing e-banking system. The researcher conducted a survey on the existing style of banks and identifies some challenges of using electronic banking system like, for electronic commerce and electronic payment lack of suitable legal and regulatory framework, political instability in neighboring countries and high rate of literacy.

Wondwossen and Tsegai (2005), also studied the challenges and opportunities of e-payments in Ethiopia; the objective of the study was e-payment practices in developing countries. The authors employed interview and on site observation to investigate challenges to e-payment in Ethiopia and found that, the main obstacles to the development of e-payments are, lack of customers trust in the initiatives, unavailability of payment laws and regulations particularly for e- payment, lack of skilled workers and frequent power disruption. According to Wondwossen and Tsegai (2005), an adequate legal structure and security framework could foster the use of E-payments, which is contradicting with the finding of the previous study.

The study conducted by Daghfous and Toufaily (2007), on the success of and critical factors in adoption of electronic banking by Lebanese banks. The research was conducted on the factors that can lead to success the adoption of electronic banking and the other factors that can constitute as barriers to its adoption, it focuses on the organization, structural and strategic factors which can accelerate or, on the contrary, slow the adoption of this electronic mode of

distribution and communication by the banks, through analyzing the case of the Lebanese banks. the result of this study shows that the organizational variable (bank size, functional divisions, technical staff, technical infrastructure, perceived risks) are variable which exert significant exert on the adoption of electronic banking, also the result shows bank which are developing in the international scale are more likely to adopt electronic banking innovation. Finally the result of the study indicated that extent of penetration of electronic banking in the growth phase of an emerging market has an important correlation with the improvement of commercial performance.

Nupur (2010) conducted a study focusing on e- banking and customer satisfaction in Bangladesh. The main objective of the study was to measure customer satisfaction on e-banking service delivery. He adopted SERVQUAL method to collect necessary data. The finding of the research indicated that, the measured variables; reliability, empathy, responsiveness, assurance and tangibility have relationship with e-banking customer service.

In addition, as investigated by Alhaji (2009) using exploratory study, the following are among the critical challenges for the adoption of e-banking in Nigeria: Lack of Technological Infrastructure – the implementation of e-payment is been impeded by unavailability of ICT infrastructure. Most rural areas where majority of small and medium scale industries are concentrated have no access to internet facilities. ICT Equipment Costs – where available, the cost of ICT is a critical factor relative toper capital income. This makes the cost of entry higher compared to developed countries. Regulatory and Legal Issues – inexistence of proper legal and regulatory framework, Non-readiness of banks and other stake holders (acceptability) – even though some have shown impressive willingness, some banks are still not fully ready to for this new payment regime. Resistance to changes in technology among customers and staff due to: Lack of awareness on the benefits of new technologies, Fear of risk among banks, Lack of trained personnel in key organizations and Tendency to be content with the existing structures, People are resistant to new payment mechanisms, Security – where disclosure of private information, counterfeiting and illegal alteration of payment data may be rampant, frequent connectivity failure in telephone lines, frequent power interruption.

Okibo and Wario (2014); conducted on a study on effects of e- banking on growth of customer base in keys banks. The study focused on the effects of electronic banking on customer base

expansion. The finding of the study indicated that electronic banking service of a bank has influences on the customer base of expansion on the other hand their study found that e-banking is less reliable and higher costs per transaction on top of that the finding indicated that, the service is not secured and there is possibility of fraud.

Bezawit (2017); conducted on a study on assessment on challenges and prospect of e-banking service in the case of awash bank using descriptive study. The finding of the research indicated that, customers mentioned elimination of time constraint and cost effective way of conducting banking transactions as benefits. Faster way of conducting transactions, better management of transactions and convenience in terms of 7 days and 24 hours were also stated as benefits that customers gained from use of E-Banking. Customers also mentioned several advantages for using E-banking services. The most dominant reasons were easy access to account, ability to process more financial transactions at ease and avoidance of branch queues associated with the traditional way of banking. Others advantages stated by the customers included access of account from abroad, 24/7 availability and easier financial management.

Beza (2017); conducted on a study on assessing the effect of E-banking Service in customer satisfaction using descriptive study: In CBE Selected City Branches. The study focused on the effect of e-banking service on customer satisfaction. The finding of the research indicated that, With regard to customer understanding of the service. Even though the bank applies the ebanking service; still customers' satisfaction is low because they are not using the service as they should and can't benefit from it. Also the researcher concluded on most customers respond they don't trust the services and also majority of the customers level of education is secondary school which makes it hard for them to understand and use the service because some of the service require the understand of English language. Most customers respond that they have good relation after starting the service with the employees' even if the skill & knowledge of the employees' when a problem arises is poor. Finally the researcher concluded that customers are not yet satisfied with the service ease of use and the none-existence of language option on mobile banking service, lack of trust on the technology, the service frequently being out of service because of power interruption, network failure and lastly the employees' lack of knowledge and skill to solve problems that happen when using e-banking service. In addition, the researcher stated that customer satisfaction is the critical problem related to support customers to effectively

use the service. Majority of the customers cannot access their account because of network failure, the lack of knowledge of using the machines and new technologies in the case of ATM, POS and Mobile banking services, the amount of money withdrawn within a day using ATM is limited, the analysis revealed that the customers don't have trust in E-banking service and unfriendliness of the system to be used which makes most of the customers want to use the ordinary banking service even if they are not satisfied about the long waiting line. Moreover, the one that are using the e-banking service faces errors in the service and don't get money out of business hours when they need the service the most due to the machine being out of cash. In addition the researcher mentioned about the main practice of e-banking among those banks that are providing the service have been for balance inquiry, cash withdrawal, statement printing, PIN change, purchase goods or services.

(Sintayehu, 2015) conducted the study on the impact of e-banking service on customer satisfaction the case of selected commercial bank in Addis Ababa. He stated that Customer satisfaction is the major factor contributing to the success of service sector. E-banking has become a major facility sought after by the existing and potential customers. All the service sectors depend on customer and their satisfaction and the banks are no exception. One of the ways for achieving high customer satisfaction and gaining the loyalty of customers is for banks to offer high quality services.

Abraham (2012) described about few electronic banking problem in Ethiopia Lack of banking services through the web or other electronic means such as using mobile phone, Data and network security and privacy, Lack and limitation of government policies, regulations and E-commerce laws, as well as legislation to protect workers and to make the Internet secure, Weak telecommunications, Broken and slow Internet connections, Lack of Internet awareness because of listed above banks in Ethiopia faces several challenges to fully use electronic banking services. Banking may exacerbate, some of the same risks particularly governance, legal, operational, and reputational inherent in traditional banking. In addition, it poses new challenges. In response, many national regulators have already modified their regulations to achieve their main objectives: ensuring the safety and soundness of the domestic banking system, promoting market discipline, and protecting customer rights and the public trust in the banking system.

Banking in Ethiopia faces numerous challenges to fully adopt and adapt E-Banking applications In addition, seize the opportunities presented by ICT applications in general. According to Garedew (2010), stated Key Challenges for E-Banking applications are:

Low level of internet penetration and poorly developed telecommunication infrastructure: Lack of infrastructure for telecommunications, Internet and online payments impede smooth development and improvements in E-Banking in Ethiopia. Most rural areas of the country, where the majority of small and medium businesses are concentrated, have no Internet facilities and thus are unable to engage in E-Banking activities.

Lack of suitable legal and regulatory framework for e-commerce and e-payment: Ethiopian current laws do not accommodate electronic contracts and signatures. Ethiopia has not yet enacted legislation that deals with e-commerce concerns including enforceability of the validity of electronic contracts, digital signatures and intellectual copyright and restrict the use of encryption technologies.

Political instabilities in neighboring countries: Political and economic instabilities in Somalia, Southern Sudan, and Eritrea are threatening traits that do not provide a very conducive environment for E-Banking in Ethiopia. Political instabilities inevitably disturb smooth operations of business and free flow of goods and services.

High rates of illiteracy: Low literacy rate is a serious impediment for the adoption of E-Banking in Ethiopia as it hinders the accessibility of banking services. For citizens to fully enjoy the benefits of E-Banking, they should not only know how to read and write but also possess basic ICT literacy.

High cost of Internet: The cost of Internet access relative to per capita income is a critical factor. Compared to the developed countries, there are higher costs of entry into the e-commerce market in Ethiopia. These include high start-up investment costs, high costs of computers and telecommunication and licensing requirements.

Absence of financial networks that link different banks (Banks are not yet automated): Most of the banking-transactions currently taking place use credit and debit cards supplied by Visa and MasterCard. For conducting E-Banking, the use of credit or debit cards is mandatory thus requiring the need for specialized systems, which are not currently available.

#### **CHAPTER THREE**

## RESEARCH DESIGN AND METHODOLOGY

#### Introduction

This chapter presents the methodology and research design, was adopted in conducting the research and data collection, and analysis methods employed to analyze, and interpret the data to reach at conclusion. The chapter defines the research design, target population of the study, the sampling size to be used; sampling procedure followed as well as the type of data collection instruments, which are used. The data collection procedures and data analysis techniques used in analyzing data are also discussed. The detail about the methodology and methods of the study was discussed below.

## 3.1 Research Design

Creswell (2003) defines a research design as the scheme, outline, or plan that is used to generate answers to research problems. Further Dooley (2007) notes that a research design is the structure of the research that serve as the glue that holds all elements of a research project together. This implies the fact that it gives direction and systematizes the research as it involves the process, which the investigator will follow from the inception to completion of the study.

Considering the purpose of this particular study, the researcher was used descriptive type of research design with cross-sectional research strategy. The primary aim of the study was to examine challenges and prospects of E-banking service in Commercial Bank of Ethiopia the case of west Addis Ababa district. The researcher hence, selected descriptive research design to better explore the current problems that this particular study addresses. Descriptive research design is casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible (Fox & Bayat, 2007). Hence, descriptive research design was found appropriate because it involves collecting data in order to answer important questions concerning the status of subjects under study.

#### 3.2 Population

The total population of this study constitutes all e-banking customers who have used e-banking services of Commercial Bank of Ethiopia for consequent of two years and all customer service managers found in the study district. The sampling frame is 8,304 active customers who have been using e banking for a consecutive of two years.

#### 3.3 Sampling Technique and Sample Size

Branches of Commercial Bank of Ethiopia found in Addis Ababa city are classified into four districts: North, East, South, and West districts. For the purpose of the study, the study was employed multi-stage purposive sampling techniques and convenient sampling techniques in order to identify representative samples respondents. Primarily, from four districts, the researcher was purposively selected West Addis Ababa district. In selecting this district, the researcher was considered the data gained from Commercial Bank of Ethiopia Website and identified the following justifications. Firstly, the district has the highest number of customers, and annual transactions in comparison with the remaining districts. Secondly, it has more than 118 branches making it the major district in number of branches. Finally, the district is in proxy to researcher's resident that helped in access information easily. In addition, from this district, the researcher was selected Kolfe area branches purposively. This is due to the reason that the branches found in this area has the highest number of e-banking users in comparison to others areas of the district. Although there are 11 CBE branches in Kolfe area, the researcher has selected five branches purposively. There are reasons that the researcher considered in selecting these five branches from Kolfe area. Firstly, these branches are classified as fourth grade branches implying that they have the highest daily and annual transaction. In second place, these branches host the highest number of e-banking users from the remaining branches found in Kolfe area. Finally, as these branches are close to the residents and work place of the researcher, it is important to focus on them to management financial and time resources efficiently. Besides, it provided advantage in accessing data easily. Finally, the researcher was employed convenient sampling technique to select the study participants.

Table 3.1.: Number of active E-banking customers in the selected branches of Kolfe area

No.	Branch Name	E-Banking Customers	2years active
1	Atena Tera	7,156	1,540
2	Lomi Meda	1,696	666
3	18 Mazoria	6,170	1,193
4	Sefereselam	4,973	3246
5	Kolfe	3,952	1,659
	Total	23,947	8,304

From the above data, the researcher was selected those customers who have actively using e-banking services for the last two years. Hence, customers who have used e-banking services of CBE for a consecutive of two and above years in the area constituted as part of the population of the study. Besides, the study was selected five customer service managers (selected due to their administrative and technical knowledge of the issue under the study) of those five branches purposively in order to conduct key informant interviews.

As it is stated in the above paragraphs, the study was considered e-banking customers and customer service manager of the Kolfe area branches (Kolfe, Sefere Selam, and Lomi Meda. Atena Tera, and 18 Mazoriya). Therefore, the sampling frame is 8,304 active customers who have been using e banking for a consecutive of two years. In determining the representative sample size for the study, the researcher used two category of sampling formulas.

The first formula, which is used in the study, is the one proposed by Krejcie and Morgan (1970:610) for determining needed sample size in research when the population is known. The formula is stated as:

Formula 1: 
$$S = \frac{X^2 NP(1-P)}{D^2(N-1)+X^2P(1-p)}$$

Where: S = required sample size; X2= the table value of chi-square for 1 degree of freedom at 0.05 confidence level (3.841); N = the population size; P = the population proportion (assumed to be 0.50 as this would provide the maximum sample size); and d = the degree of accuracy expressed as a proportion (.05).

The second formula considered in the study is the one proposed by Cochran (1977) as a finite population correction to determine the final sample that turns out to be 5% or more of the total population. The formula can be stated as:

Formula 2: 
$$n1 = \frac{S}{1 + \frac{S}{N}}$$

Where: S = is desired sample size; n1= is the new value for the sample size adjusted using Cochran's population correction formula; N = is the total number of the population from which 'n' is being drawn.

Finally, the sample size considered appropriate for this study is around 352 respondents drawn proportionally from those five branches of Kolfe area.

#### 3.4 Data Sources and Type

The data sources for the research were from both primary and secondary sources. The primary data was collected from the sampled e-banking customers of CBE around Kolfe area and customer service managers working within those five purposively selected branches of CBE around Kolfe area. Primary data was collected through key informant interviews and questionnaires

In utilizing secondary sources, different publications, previous studies, books, and internet sources were reviewed. In addition to this, both qualitative and quantitative data were collected through data collection instruments and were used for the research.

#### 3.5 Data Collection Tools

According to Creswell, (2003), there are many methods of data collection. The choice of a tool and instrument depends mainly on the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. This is because each tool and instrument collects specific data. To this end, the study was used questionnaire, interview, and document analysis techniques to collect both primary and secondary data. Primary data was collect from the respondents based on a structurally designed questionnaire, interview question. Secondary data are secured through the review of relevant articles, research works, books, and journals, and other pertinent sources.

#### A. Questionnaire

The first data collection technique used in the field survey was questionnaire to the study participants. The questionnaire had both open and close-ended questions. It was administered with the help of bank officials. The closed ended questions were prepared in Likert scale and respondents is asked to rate the issues under each headings.

#### **B.** Interview

The second data collection technique employed in this research was key informant interview. It was conducted with customer service managers This provided a chance to have face-to-face interaction and clarify any questions and gave chance to gather more information from the respondents. The response of the respondents was captured in Amharic language and translated into English language after the interview.

#### C. Document Analysis

Review and analysis of important documents related to the study are reviewed in order to get sufficient data that supports the findings of the study. In addition, secondary data are secured from relevant publications related to the study and analyzed accordingly.

#### 3.6 Methods of Data Analysis and Interpretation

The non-sequential collection and analyses of both primary and secondary qualitative and quantitative data is carried out with a view to enable substantiation of either qualitative by quantitative data or the vice versa. With this regards, both qualitative and quantitative analyses was employed using statistical methods and SPSS. With this regards, the study was employed descriptive analysis to make analysis and interpretation of the quantitative data. The descriptive analysis uses, percentage, and simple statistical measure like frequency distribution. Tables are also be used to present the study findings. Besides, the qualitative analysis and interpretation involves cautious undertaking of logical analysis of interview and content analyses of documents.

## 3.7 Reliability and validity

To measure the consistency of the questionnaire particularly the Likert-type scale the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha ( $\alpha$ ) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Field, 2009; Cohen and Sayag, 2010) and according to Cronbach's (1951), a reliability value ( $\alpha$ ) greater than 0.600 is also acceptable.

Table 3.7 test of reliability for all items

Variables	N of items	Cronbach's Alpha
Background information	7	0.76
e-banking Service	9	0.721
Customer understanding about e-banking	8	0.711
Benefits of e-banking	6	0.751
Customers satisfaction of e- banking	8	0.734
Challenges of e-banking	7	0.866
Prospects of e-banking	7	0.777

Source: Survey Result, April 2018

A Chronbach alpha is an important concept in the evaluation of assessments and questionnaires. The value of Chronbach alpha for this study is above 0.7 for all scale variables so the result is confirmed the reliability and consistency of the questionnaire. To estimate the reliability of the questionnaire a pilot sample of five people were selected.

#### **CHAPTER FOUR**

## DATA PRESENTATION ANALYSIS AND INTERPRETATION

#### Introduction

The research has a primary aim of studying challenges and prospects of E-banking service in CBE the case of west Addis Ababa district. In line with this, the chapter presents the analysis and interpretation of the data gathered from various sources. The analysis and interpretation of data was conducted in order to gain a better understanding of prospect and challenges of E-Banking service from customers' perspective. Data was collected through questionnaires, and key informant interviews. With this regards, semi-structured questionnaire was distributed to three-hundred fifty-two sampled customers of CBE. However, the researcher has received 280 properly filled questionnaires. Accordingly, out of the total number of sampled respondents 280 complete questionnaires were received, translating into nearly 80% response rate. The response rate is considered appropriate since Nulty, (2008) argues that any response rate above 75% is classified as appropriate. The rate of return of questionnaire was computed as follows: Rate of return = (R / (S-ND)) X 100

Where; R = number of questionnaires that were returned, S = total number of questionnaires sent out, and ND = number of questionnaires unable to be delivered ("returned to sender")

Rate of return=  $280 / (352-0) \times 100$ 

Rate of return = 80%

The raw data gathered through questionnaire was analyzed based on descriptive analysis and conducted through SPSS software, version 20. The results, thus presented descriptively. Besides, the researcher has conducted key informant interviews with three purposively selected key informants (customer service manager) of Kolfe area branches including Kolfe branch customer service manager (respondent 1), Atena Tera branch (respondent 2), Lomi Meda (respondent 3). The key informants were selected as it was considered in the study that they had detail knowledge, and experience of E-Banking practices, challenges and its prospects. This has also given the study a better insight about the issue under consideration. The analysis of the key informant interviews was conduced using content analysis of ideas and used to substantiate the findings of the quantitative aspect of the study.

# 4.1. Background Information of Respondents

Table 4.1 the general characteristics of respondents.

	Demographic Questions		nses of omers
		Freq.	%age
	Male	137	48.9
Gender	Female	142	50.7
	Total	280	100.0
	Less than 20	23	8.2
	From 20 to 30	109	38.9
Age of respondents	From 31 to 40	85	30.4
Age of respondents	From 41 to 50	40	14.3
	From 51 to 60	22	7.9
	Total	280	100.0
	No formal education	12	4.3
	High school	37	13.2
	Certificate	39	13.9
Education	Diploma	69	24.6
background	First degree	94	33.6
	Masters and above	29	10.4
	Total	280	100.0
	Government employee	72	25.7
	Private employee	78	27.9
	Self employee	75	26.8
Employment status	Students	37	13.2
	Retired	12	4.3
	Not employed	6	2.1
	Total	280	100.0
	Less than 1 year	45	16.1
Experience of	From 1 to 3 years	83	29.6
respondents in using	From 4 to 6 years	89	31.8
e-banking services	More than 6 years	60	21.4
	Total	280	100.0
	Advertising	42	15.0
	Bank employee	112	40.0
M C' C	Social media	56	20.0
Means of information	Colleagues and friends	67	23.9
	Other means	1	4
	Total	280	100.0

Source: Survey Result, April 2018

The table shows that 142 (50.7%) respondents were female and 137 (48.9%) respondents were male. This implies that from the total participants, the number of female was greater than the number of male.

The table above shows the age of the respondents in which, 23 (8.2%) respondents were less than 20 years, while 109 (38.9 %) respondents were between the ages of 20 to 30 years. On the other hand 85 (30.4 %) respondents were between the ages of 31 to 40 years and 40 (14.3% respondents) were between the ages of 41 to 50 years. Finally, 22 (7.9%) respondents were between ages 51 to 60. Therefore this implies that in the above table, the data age proportions of the respondents show that most of the e-banking customers during the study time were young people.

Based on their educational level majority of the respondent educational level was first-degree, which constituted 94 (33.6%). On the other hand, respondents with high school graduation constituted 37 (13.2%) and those with diploma were indicated to cover 69 (24.6%). Respondents with no formal education were indicated 12 (4.3%) while the ones with masters and above degree were indicated to constitute 29 (10.4%). Finally, those who have certificate are nine (13.9%). This implies that, the largest parts of the respondents are first-degree holders.

The above table shows the employment status of the respondents in which, 72 (25.7%) of respondents were found to be government employees, while 78 (27.9%) respondents were found to be employees of the private sector. On the other hand, customers who have personal business constituted 75(26.8%) and 37 (13.2%) of respondents were students. A small minority of six (2.1%) of respondents were not employed. Finally, 12 customers (4.3%) of respondents were retired. This implies that the largest parts of the respondents are privately employed.

According to the result, it is found that (45) of the respondents, representing (16.1%) have been using e-banking for less than one year. On the other hand, 83(29.6%) of the respondents that stated that they have been using e-banking from 1 to 3 years. In addition, the respondents states that 89 (31.8%) of the respondents have agreed that they have been using e-banking services from 4 to 6 years duration. Finally, a majority of the respondents, which constitute 60 (21.4%), have agreed that they have been using e-banking services for more than 6 years. This implies that

majorities of the customers that have been using e-banking were those who had used e-banking services for more than 6 years.

#### 4.2 Service of E-Banking used by the Customers

Table 4.2 Service of E-Banking used by the Customers

	Frequency	Percent
ATM/debit card	88	31.4
Internet banking	31	11.1
Mobile banking	32	11.4
Point of sale	16	5.7
ATM and Internet Banking	6	2.1
ATM and mobile Banking	24	8.6
ATM and Pos	14	5.0
Internet Banking and mobile banking	15	5.4
Internet banking and POS	4	1.4
Mobile banking and POS	8	2.9
ATM, Internet Banking and Mobile Banking	12	4.3
Internet banking, Mobile banking and POS	4	1.4
ATM, mobile banking and POS	7	2.5
ATM, Internet banking, Mobile Banking and POS	19	6.8
Total	280	100.0

Source: Survey Result, April 2018

Table 4.2 implies that majority of the respondents 88 (31.4%) were users of ATM/ Debit card while 31 respondents which represented (11.1%) used internet Banking and 32 respondents (11.4%) have agreed that they use mobile baking. On the other hand, 16 respondents, which contributed (5.7%) use pos (point of sale). In addition, there were 6 respondents (2.1%) who used ATM, and internet banking simultaneously; while 24 respondents (8.6%) used ATM and mobile banking. Fourteen respondents (5.0%) have used ATM and POS; while 15 respondents (5.4%) have used internet banking and mobile banking. Moreover, 4 respondents (1.4%) use internet banking and POS; 8 respondents (2.9%) used mobile banking and POS, 12 respondents (4.3%) used ATM, internet banking, mobile banking and 4 respondents (1.4%) used internet banking, mobile banking, POS. Finally, seven respondents (2.5%) have used ATM, mobile banking, POS; while 19 respondents (6.8%) have used ATM, internet banking, mobile banking, POS. This implies that most of the customers involved in the survey have used ATM services more than any other e-banking service that CBE provides. Thus, Mathews (2016) similarly

confirm result in the study conducted on the challenges and opportunities of electronic banking in Ethiopia. Besides, Beza (2010) has also attested that most e-banking customers use ATM service than other services in Ethiopia. Concerning e-banking services provided at Commercial bank of Ethiopia, however, all of the key informants (Customer Service Managers) of the study stated that the bank provides automated teller machine (ATM), mobile banking (MB), point of sales (POS) terminals, and internet banking (IB), CBE Birr. This implies that although the bank offers different types of e-banking services, customers of the bank did not sufficiently information regarding the services and did not use the services provided at the bank.

Table 4.8 implies that majority of 112 respondents (40%) have started using e-banking by hearing about it from a bank employees. On the other hand, a minority of 42 respondents that represented (15.0%) heard about service from advertisements. In addition, 67 respondents that contributed (23.9%) heard about e-banking services from colleague/friends while 56 respondents (20.0%) learned about e-banking from social medias. This indicates that most of the customers have started using e-banking services from hearing about it from a bank employee or colleague/friends.

## 4.3 E-Banking Service Options Available to the Customer

Beza (2010) conducted study on the opportunities and challenges of adopting e-banking service in Ethiopia. The researcher mentioned that the main e-banking services that customers gain from commercial banks in the country were balance inquiry, cash withdrawal, statement printing, PIN change, and conduct purchase of goods or services. Similar to Beza's research findings, this study has found out that e-banking customers of the sampled branches of Commercial bank of Ethiopia usually use e-banking services to conduct balance inquiry, cash withdrawal, conduct purchase of goods or services and make payment for utility services. The summary on the frequency distribution of respondents' opinion is presented in the following table number 4.9.

Table 4.3: E-Banking Service Options Available to Customer

		Measure	Strongly	Disagree	Neutral	Agree	Strongly
S/NO	Description		Disagree				Agree
1	I transfer fund	Frequency	72	73	29	62	44
		Percent	25.7%	26.1%	10.4%	22.1%	15.7%
2	I can set up new account	Frequency	61	88	39	52	40
		Percent	21.8%	31.4%	13.9%	18.6%	14.3%
3	I make insurance premium	Frequency	80	115	41	35	9

	payment	Percent	28.6%	41.1%	14.6%	12.5%	3.2%
4	I present credit application	Frequency	89	108	44	28	11
		Percent	31.8%	38.6%	15.7%	10.0%	3.9%
5	I can inquire balance	Frequency	19	27	49	88	97
		Percent	6.8%	9.6%	17.5%	31.4%	34.6%
6	I can present bill and	Frequency	56	73	53	55	43
	Payment	Percent	20.0%	26.1%	18.9%	19.6%	15.4%
7	I withdraw cash	Frequency	27	28	48	75	102
		Percent	9.6%	10.0%	17.1%	26.8%	36.4%
8	I can purchase goods and	Frequency	25	46	66	80	63
	service	Percent	8.9%	16.4%	23.6%	28.6%	22.5%
9	I can conduct utility payment	Frequency	27	38	69	75	71
		Percent	9.6%	13.6%	24.6%	26.8%	25.4%

Source: Survey Result, April 2018

The above table number 4.9 indicates that majority of the respondents constituting 51.8% indicates that they do not use e-banking service to transfer fund while 37.8% of the respondents indicates that they use e-banking services to transfer funds. The remaining respondents (10.4%) maintained that they could not decide on the matter. Therefore, this implies that customers do not use electronic banking services to transfer funds. Similarly, majority of the respondents agreed and strongly disagree (53.2%) have not used e-banking services to set-up new accounts while 18.% and 14.3% agree and strongly agree that they have used e-banking to set-up new accounts. The rest 13.9% of the respondents were indifference about the concern of the study. So this implies that customers have not used e-banking services to set-up new accounts

Besides, overwhelming of the respondents 69.7% (28.6% and 41.1% strongly disagree and disagree respectively) stated that they have not used e-banking technologies to make insurance premium payment. On the contrary, smaller portion of the respondents (12.5% and 3.2%) agree and strongly agree that they have used e-banking means to pay their insurance premium. This implies that customers have not used e-banking technologies to make insurance premium payment

Regarding presentation of credit application through e-banking, significant amount of the respondents (70.4%) indicated that they did not use e-banking to present credit application through e-banking while only 13.9% of the participants confirmed that they used the service to submit credit application through e-banking services. The remaining 15.7% of the respondents

were undecided about the issue. This implies that customers did not use e-banking to present credit application through e-banking

Majority of the respondents (66%; 63.2%, 51.1%, and 53.2%) stated that they have used e-banking services to inquire balance, withdraw cash, purchase goods and services; and make utility payments respectively. While less numbers of respondents (16.4%, 19.6%, 25.3% and 23.2%) indicated on the contrary, strongly disagree, and disagree that they did not use e-banking services to inquire balance, withdraw cash purchase goods and services; and make payments for utilities. The remaining numbers of respondents were not in a position to decide. This implies that customers have used e-banking services to inquire balance, withdraw cash, purchase goods and services and make utility payments respectively. In addition, 35% of the respondents agree and strongly agree that they have presented bills and make payments through e-banking while significant number of respondents (46.1%) did not use the service to present and make bill payment. This implies that customers do not use e-banking to present bills and make payments through e-banking

In summary, the above descriptive analysis demonstrates that significant number of respondents have used to inquire balance, withdrawal cash, purchase goods and services and make utility payments than other e-banking services. Less importantly, respondents of the study have used other e-banking services rarely. These descriptive findings of the study are similar with others researchers. For instance the findings of a study conducted by Beza (2017) and Mathous (2016) revealed that main services that customers usually used through e-banking were balance inquiry, cash withdrawal, statement printing, PIN change, purchase goods or services. This implies that although the bank offers variety of e-banking services to customers, due to various reasons customers use limited e-banking services. Therefore, it is imperative for the bank to examine the reasons why customers do not use the services provided through e-banking technologies properly.

#### 4.4 Level of Customers' Understanding about E-Banking Service at CBE

It is stated in literature that the level of customers' understanding about electronic banking has higher possibility of determining the success of the e-banking service provision. Accordingly, Beza (2017) stated that stated that higher customers; understanding about e-banking increase customer satisfaction, enhance service to constituents, and improve operational efficiency and

profitability of the issuing banks. The following table number 4.10 presents the summary percentage distribution of respondents' opinion.

Table 4.4: Level of Customers Understanding about E-Banking service

No.	Description		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I can access e- banking in	Frequency	26	45	78	72	59
	multiple languages.	Percent	9.3%	16.1%	27.9%	25.7%	21.1%
2	I understand the e-banking	Frequency	13	46	89	79	52
	service very well.	Percent	4.6%	16.4%	31.8%	28.2%	18.6%
3	The bank provides security for e-	Frequency	22	52	94	60	52
	banking transaction data and privacy.	Percent	7.9%	18.6%	33.6%	21.4%	18.6%
4	I can able to see past transactions	Frequency	16	38	62	111	53
	through e-banking	Percent	5.7%	13.6%	22.1%	39.6%	18.6%
5	The bank provides	Frequency	26	58	90	66	40
	knowledgeable staff to solve problem of e-banking.	Percent	9.3%	20.7%	32.15	23.6%	14.3%
6	If I face a problem, I can ask	Frequency	39	77	68	57	39
	immediate help from the bank at any time	Percent	13.9%	27.5%	24.3%	20.4%	13.9%
7	Information and texts sent	Frequency	29	48	94	60	49
	through electronic media are clear and easy to understand	Percent	10.4%	17.15	33.6%	21.4%	17.5%
8	I understand the description	Frequency	17	49	96	80	38
	given by bank staff on the steps of using e-banking service	Percent	6.1%	17.5%	34.3%	28.6%	13.6%

Source: Survey Result, April 2018

It is indicated in the above table number 4.10, nearly half of the respondents (25.7% and 21.1%) stated that they could access e- banking services in multiple languages while minor number of them (25.4%) indicated that they did not access e-banking services in multiple languages. The remaining respondents were undecided about the issues. This implies that customers could access e- banking services in multiple languages. Concerning the level of understanding about e-banking services, almost 50% of the respondents agreed and strongly agreed that they have good understanding about e-banking while 21% of the participants declared that they did not have a very well understanding. This implies that customers have good understanding about e-banking

In the mean time, the interview result conducted with the first key informant indicates that customers understand the e-banking services provided by the bank. He added that there were professional staff responsible to handle the services provision and provided technical as well as

professional helps to customers when problem occurs. The services provided through e-banking services. Similarly, the second key informant confirmed that majority of the customers understand the services provided through e banking. He added that there were customers not clear with the ideals of the services and he further stated that all customer of the bank should understand the services that are provided by the bank and the bank needs to work more in improving the understanding of the customers on the services provided through e-banking. On the contrary to the above two key informants, the third key informant revealed that e-banking customers had low understanding about e-banking services and even the bank did not provide the technical assistance even if the it announced that gives complete e-banking service. In addition, he stated that customers had few means to learn how to use e-banking and troubleshooting when they face problems. This causes the customers to feel that they were not getting proper e-banking service assistance.

Besides, 21.4% and 18.6% of the respondents agreed and strongly agreed that the bank provides security for e-banking transaction data and privacy they concluded while 18.6% and 7.95 disagree and strongly disagree with the idea. The remaining significant numbers of respondents (33.6%) were undecided on the concern. This implies that the bank provides security for e-banking transaction data and privacy In addition; majority of the respondents (58.2%) affirmed that they could see their past transactions through e-banking while 19.3% of them argued on the contrary. This implies that customers could see their past transactions through e-banking

Regarding the availability of professional and skilled staff who could solve e-banking problems that encounter customers, significant number of respondents (38%) confirmed that there were professional staff to solve problem of e-banking services while 30% of them argued on the opposite and stated that the bank weakly staffed. This implies that there were professional staff to solve problem of e-banking services

Moreover, respondents were asked to rate whether they could ask immediate help from the bank at any time if they face a problem and 34.9% of them declared that they asked for an immediate help while more than 41% said that they did not ask for an immediate help if problems occur while using e-banking services. The remaining respondents were undecided about the issues. This implies that customers did not ask for an immediate help if problems occur while using e-banking services. Similarly, in the key informant interviews, it is stated that the bank had

professionals who supported customers in case customers faced problems in using e-banking services. However, all the key informants declared that there were limitations in responding to all requests of customers made regarding e- banking services and problems as the banks faced shortage of skilled work forces and inadequate training programs provided to the staff.

Besides, significant numbers of respondents agreed and strongly agree that the information and texts sent through electronic media were clear and easy to understand while 27.55% of them declared that the information and texts were not clear and easy to understand. The remaining considerable numbers of respondents (33.6%) were not having ideas of the concern of the study. This implies that the information and texts sent through electronic media were clear and easy to understand. Finally, respondents were asked to rate whether they could understand the description given by bank staff on the steps of using e-banking service and 42.2% of the respondents agrees and the information and texts sent through electronic media were clear and easy to understand strongly agree that they could understand however, 23.6% of the respondents argued on the contrary while 34.3% of them were undecided. This implies that customers could understand the description given by bank staff on the steps of using e-banking service

In summary, the above analysis demonstrates that significant number of respondents stated that they could access e- banking in multiple languages; understand the e-banking service very well and could retrieve past transactions through e-banking services. However, according to the respondents there were observed gaps concerning the provision of security for e-banking transaction data and privacy, professionalism staff to solve problem of e-banking, customers' immediate request for help from the bank at any time, and the clarity and easiness of information and texts sent through electronic media. There were observed gaps This is also attested by the interview results conducted with customer service managers of three braches considered in the study. These findings of the study are also seen in the studies conducted by Beza (2017) and Islam et. al. (2007). They revealed that customers had a better understanding of the services of e-banking. However, they confirmed that customers were insecure when using ebanking services and the bank had staff to solve when problems exist although there were inadequate staffs, and technical and professional gaps observed to solve technical problems easily. In addition, they stressed that customers got an immediate help from the banks' staff only at working hours. In general, it is learnt from the study that majority of the customers had the understanding of using e-banking services clearly. However, there were problems of insecurity

when using the e-banking services, and also the bank provide staff to solve problems when they exist, getting immediate help from the staff at any time when face a problem is not viable but at working hours the staff shows willingness to cooperate and to tell about the service to customers.

#### 4.5 Benefits of E-Banking Services for Customers at CBE

It is stated in literature (Bezawit, 2017; and Matheows, 2016) that faster way of conducting transactions, better management of transactions and convenience in terms of 7 days and 24 hours are stated as benefits that customers gain from using of e-banking. In addition, they have declared that e-banking provides easy access to account, ability to process more financial transactions at ease and avoidance of branch queues associated with the traditional way of banking. Others advantages included access of account from abroad, 24/7 availability and easier financial management. In addition, according to Sergeant (2000), the potential benefits of e-banking are availability of more choice; greater competition and better value for money; more information; better tools to manage and compare information; and faster service. In light of this, the research has aimed to examine the benefits of e-banking in the study area. The following table number 4.11 presents the summary the responses of the respondents on the case.

Table 4.5: Respondents Opinion on Benefits of E-Banking Services for Customers at CBE

No	Description	Measures	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	E-Banking reduced costs in	Frequency	31	41	83	72	53
	accessing and using service.	Percent	11.1%	14.6%	29.6%	25.7%	18.9
2	E-Banking increased comfort	Frequency	15	32	69	82	82
	and time saving.	Percent	5.4%	11.4%	24.6%	29.3%	29.3%
3	E-Banking ensures quick and	Frequency	17	48	94	71	50
	continuous access to information about your account.	Percent	6.1%	17.1%	33.6%	25.4%	17.9%
4	E-Banking makes faster way of	Frequency	16	39	68	93	64
	conducting banking transaction.	Percent	5.7%	13.9%	24.3%	33.2%	22.9%
5	E-Banking is convenient in	Frequency	26	49	74	72	59
	terms of 7 days and 24 hours	Percent	9.3%	17.5%	20.4%	25.7%	27.1%
6	E-banking ensures me better	Frequency	22	35	74	96	53
	cash management	Percent	7.9%	12.5%	26.4%	34.3%	18.9%

Source: Survey Result, April 2018

In the above table, it is indicated that more than 44% of the respondents stated that the e-banking services provided at CBE reduced costs in accessing and using service while 25.6% of the respondents argued in the opposite. The remaining significant number of respondents (30%) remained undecided about the issues. This implies that electronic banking reduced costs in accessing and using service. Besides, around 60% of the respondents (29.3 agreed and 29.3% strongly agreed) stated that e-banking service increased comfort and save their time, while less than 17% of them strongly disagree and disagree with this assertion. This implies that e-banking service increased comfort and save their time. Regarding the roles of e-banking in ensuring quick and continuous access to information about once account, more than 43% of the respondents agreed that it ensures quick access to information to their account while 18% and 33.6% oppose the idea and remained neutral respectively. This implies that e-banking ensuring quick and continuous access to information about once account. Finally, majority of the respondents (52.8%, 53.1%, and 56.1%) stated that e-banking ensured better cash management, convenient in terms of 7 days and 24 hours and makes faster way of conducting banking transaction. The remaining 20.4%, 27.8%, and 19.6% of the respondents were in opposite to this view. This implies that that e-banking ensured better cash management, convenient in terms of 7 days and 24 hours and makes faster way of conducting banking transaction.

With regards, the key informant interviews confirmed that the e-banking services provided by CBE actually reduced cost of transaction, promotes comfort, and save customers' time and ensuring quick and continuous access to information. However, they believed that due to lack of suitable legal and regulatory framework, and absence of financial networks that links different banks, low level of internet penetration and poorly developed telecommunication infrastructure, high cost of internet and security issues, the bank was not able to provide the service for 24 hours/day and 7 days for a week.

In summary, the descriptive statistics and the key informant interview result show that customers acknowledged the benefits of e-banking in terms of reduced cost of transaction, promotes comfort, and save customers' time and ensuring quick and continuous access to information. Besides, they confirmed that e-banking ensured better cash management, convenient in terms of 7 days and 24 hours and makes faster way of conducting banking transaction. They have however, declared that there is a gap in providing the services at 7 days and 24 hours. These

findings are in line with the findings of Bezawit (2017). In her research, she concluded that e-banking eliminates time constraint and it is cost effective way of conducting banking transactions. Faster way of conducting transactions, better management of transactions and convenience in terms of 7 days and 24 hours were also stated as benefits that customers gained from use of E-Banking.

#### 4.6 Satisfaction Level of Customer about E-Banking at CBE

It is stated in Al-Smadi (2012) research that the satisfaction level of customers is an important element of the e-banking service provision. However, Al-Smadi's research finding states that customer are not satisfied on e-banking as expected because of their mistrust on the technology, uneasiness to use the service because of language problem, their demographical and also customers gives priority to traditional banking than e-banking services. In addition, Beza (2017) revealed that customer satisfaction is low regarding e-banking as there were critical problem related effectively using the service. She found out in her research that majority of the customers could not access their account because of network failure, lack of knowledge of using the new technologies in the case of ATM, POS, and Mobile banking services, and the amount of money withdrawn within a day using ATM is limited. Moreover, she stated that e-banking services face different errors in the provision process of the services and customers might not get money out of business hours when they need the service due to the reason that the machine gets out of cash. In light of these research scenarios, the study tried to investigate the satisfaction level of customers in case some branches of CBE. The following table number 4.12 presents the summary respondents' opinion regarding the satisfaction level of the respondents.

Table 4.6: Satisfaction Level of Customer about E-Banking at CBE

			Strongly	Disagree	Neutral	Agree	Strongly
No	Description		Disagree				Agree
1	The banks has information about	Frequency	20	54	103	75	28
	the level of customer	Percent	7.1%	19.3%	36.8%	26.8%	10.0%
	satisfaction on E-banking						
2	I am satisfied with E-Banking	Frequency	15	83	83	45	54
	service providing by the bank	Percent	5.4%	29.6%	29.6%	16.1%	19.3%
3	If I want cash out of working	Frequency	20	89	66	49	56
	hour, I can withdraw without any problem using ATM.	Percent	7.1%	31.8%	23.6%	17.5%	20.0%

4	I found no errors in E-banking	Frequency	104	82	49	29	15
	service	Percent	37.1%	29.3%	17.5%	10.4%	5.4%
5	E banking provides every bank	Frequency	38	79	85	57	21
	service for me.	Percent	13.6%	28.2%	30.4%	20.4%	7.5%
6	I feel secured on my bank	Frequency	12	102	46	85	35
	account after using	Percent	4.3%	36.4%	16.4%	30.4%	12.5%
	E banking						
7	I have trust on the E-banking	Frequency	16	92	36	84	52
	service	Percent	5.7%	32.9%	12.9%	30.0%	18.6%

Source: Survey Result, April 2018

According to table number 4.12, nearly, 37% of the respondents stated that the bank has information about the level of customer satisfaction on e-banking. However, 26.4% of the participants stated that the bank has not information regarding the satisfaction level of customers while 36.8% of the respondents were undecided about the matter. This implies that the bank has information about the level of customer satisfaction on e-banking. Besides, 35.3% of the respondents stated that they were satisfied with the services provided through e-banking while 35% of the respondents stated the opposite and stated that they were not satisfied. This implies that customers satisfied with the services provided through e-banking. However, 39% of the respondents stated that they could not withdraw cash without any problem using ATM, found errors in the e-banking services when they wanted cash out of working hour. Only 37.5% of the respondents affirmed that they could easily access e-banking and withdraw cash during off-work times. This implies that customers could not withdraw cash without any problem using ATM, found errors in the e-banking services when they wanted cash out of working hour.

Regarding presence of errors during service provision, majority of the respondents (66.4%) stated that there were errors in E-banking service while very few respondents stated that they use the service free of errors. This implies that there were errors in E-banking service. In addition, more than 40% of the respondents stated that e-banking services did not provided them adequate banking service while minor number of the respondents (27.9%) stated they got every service of bank through e-banking. This implies that e-banking services did not provided them adequate banking service. Concerning the sense of security on their bank account after using e-banking majority of the respondents stated that they feel secured while equal amount of respondents argued in opposite and stated that they did not feel secured after using e-banking services. This

implies that customers did not feel secured after using e-banking services. Finally, almost fifty percent of the respondents stated that they had trust on the E-banking service while 38.6% of them stated that they did not have trust on the service. This implies that customers did not have trust on the service.

Besides, the researcher conducted key informant interview with customer service managers of three branches and found out that the key informants had a view that customers were satisfied by the services provided through electronic banking. By facilitating to make payment through electronic banking services and products, they are consumed, in hotels, super markets, airlines and a like.

In summary, the above analysis demonstrates that there were informants that were satisfied with the services which were given through e-banking however, large number of respondents were also dissatisfied with the quality of services. Besides, the number of respondents, which stated about the low service quality in withdrawing cash in time of need, is significant. Regarding the presence of errors during service provision, majority of the respondents stated that there were errors in E-banking service. Moreover, large number of the respondents stated that e-banking services did not provided them adequate banking service. Finally, although majority of the respondents stated that they had trust on the E-banking service significant number of them have also stressed that they did not have trust on e-banking services. These findings of the study are also similar with others researchers' findings. Al-Smadi (2012); Wondwossen & Tsegai (2005) and Beza (2017) stated that customers were not satisfied with the e-banking services as there were errors in the service provision, lack of customers trust on electronic banking services; weak security frameworks and few banking provided by e-banking.

#### 4.7 Challenges of E-Banking Services at CBE

It is stated in Wondwossen and Tsegai (2005) that the e-banking in Sub-Saharan Africa is compounded by various challenges. According to this study, the main obstacles to the development of e-payments in Ethiopia are lack of customers trust in the initiatives, unavailability of payment laws and regulations particularly for e-payment, lack of skilled workers and frequent power disruption. In addition, they stated that adequate legal structure and security framework could foster the use of e-banking. In addition, in the context of developing countries, Alhaji (2009) stated that lack of technological infrastructure, higher cost of entry,

weak regulatory frameworks, lack of awareness on the benefits of new technologies, fear of risk among banks, lack of trained personnel, security problem, frequent connectivity failure in telephone lines, frequent power interruption are the major challenges of e-banking services. In light of this study tried to identify the challenges of e-banking services in CBE. The following table number 4.13 presents the summary of percentage distribution of respondents' opinion.

Table 4.7: Challenges of E-Banking Services

		Measure	Strongly	Disagree	Neutral	Agree	Strongly
No	Description		Disagree				Agree
1	Insecurity of E-banking	Frequency	44	67	68	57	44
	technology is an issue of concern	Percent	15.7%	23.9%	24.3%	20.4%	15.7%
2	Lack of suitable legal	Frequency	26	66	74	71	43
	framework for E-banking services.	Percent	9.3%	23.6%	26.4%	25.4%	15.4%
3	Electric power interruptions	Frequency	9	16	52	88	115
	cause problems to E-banking services	Percent	3.2%	5.7%	18.6%	31.4	41.1%
4	Network failures are serious problem to use E-Banking	Frequency	14	12	37	104	113
	services	Percent	5.0%	4.3%	13.2%	37.1%	40.4%
5	Inadequate skill of the staff of	Frequency	35	65	70	63	47
	the bank regarding E-Banking.	Percent	12.5%	23.2%	25.0%	22.5%	16.8%
6	Languages barriers are an	Frequency	38	60	50	80	52
	obstacle to use E-Banking.	Percent	13.6%	21.4%	17.9%	28.6%	18.6%
7	Cost of service charge is high for using E-Banking services	Frequency	56	50	71	63	40
	Tor using L Dunking services	Percent	20.0%	17.9%	25.4%	22.5%	14.3%

Source: Survey Result, April 2018

As shown in the above table, majority of the respondents think that security is an issue of concern. This is shown since, 44 (15.7%) of respondents strongly agreed, 57 (20.4%) of respondents agreed. Meanwhile 68 (24.3%) of respondents were neutral, 67 (23.9%) of respondents disagreed and 44 (15.7%) of respondents strongly disagreed on the matter. This implies that the security is a major concern for them while they are using e-banking. The results of the table above indicate that the respondents of 43 (15.4%) strongly agree, 71 (25.4%) agree, 74 (26.4%) are neutral, 66 respondents (23.6%) disagreed and 26 (9.3%) have responded that regarding the question of lack of suitable legal framework for e-banking services. Thus, lead that

the largest percent of the respondents neutral regarding with lack of suitable legal framework for e-banking services. This implies that there is lack of suitable legal framework for e-banking services.

The results of the table above also indicate that the respondents of 115 (41.1%) strongly agree, 88 (31.4%) agree, and 52 respondents (18.6%) are neutral, while 16 (5.7%) respondents disagree and only 9 respondents (3.2%) strongly disagree that Electric power interruptions causes problems to e-banking. The signpost that the largest percent of the respondents strongly agreed that electric power interruptions cause's problem to e-banking. This implies that an Electric power interruption causes problems to e-banking. The outcome of respondents in the table above mostly strongly agreed that network failures are a serious problem while using E-Banking. This conclusion was reached since a majority of 113 respondents (40.4%) strongly agreed while 104 respondents (37.1%) agreed with the statement. 37 respondents (13.2%) were neutral while 12 respondents (4.3%) disagreed and 14 respondents (5.0%)strongly disagreed with the statement. This implies that the network is a major problem regarding e-banking.

The above table number 4.13 also shows that respondents were neutral when they were asked if the banks staff had inadequate knowledge regarding e-banking. This inference was reached since only 47 respondents (16.8%) strongly agreed while another 63 respondents (22.5%) agreed with the statement. Respondents that had a number of 70 and 65 with a percentage of (25.0) and (23.2) were neutral and disagreed respectively. Another 35 respondents (12.5%) strongly disagreed with the statement. This implies that the banks staff had inadequate knowledge regarding e-banking. Regarding language being an obstacle regarding the usage of E-Banking, the respondents of 52 (18.6%) strongly agree, 80 (28.6%) agree, and 50 respondents (17.9%) are neutral, while 60 respondents (21.4%) disagreed and 38 (13.6%) strongly disagreed. This implies that the language barriers are an obstacles to use electronic banking.

The results of the table above indicate that the respondents of 40 (14.3%) strongly agree, 63 (22.5%) agree, 71 (25.4%) are neutral, 50 respondents (17.9%) disagreed and 56 (20.0%) strongly disagree responded that regarding the cost of E-Banking. Thus, lead that cost of service charge is high for using E-Banking services.

Besides, the key informants confirmed that security risk, lack of suitable legal and regulatory framework, and absence of financial networks that links different banks, low level of internet penetration and poorly developed telecommunication infrastructure, high cost of internet and security issues are the major challenges that the bank faces. In addition, customer's resistance to accept new technologies and being laggards /late adopters are other factors / challenges for the bank to create cashless society as the bank wants. They further explained that weak customers' awareness insufficient network connection and instability of electric power were putting challenges on the proper delivery of e-banking services at CBE.

In summary, the above analysis indicates that the majority of the respondents were agreed that insecurity of e-banking technology, lack of suitable legal framework for e-banking services, electric power interruptions, network failures are serious challenges of e-banking services Besides, inadequate skill of the staff of the bank, languages barriers, weak customers awareness, are also the obstacles e-banking in case of CBE. These findings are also similar with the findings of Alhaji (2009). He found out that the critical challenges of e-banking in developing countries are: lack of technological infrastructure, cost of entry higher compared to developed countries, regulatory and legal issues, lack of awareness on the benefits of new technologies, fear of risk among banks, lack of trained personnel in key organizations, and security problem. In addition, the same result is found in the study conducted by Wondwossen and Tsegai (2005). In general, it is concluded that the service provision o e-banking in CBE is hampered by technical, institutional and resources challenges.

## 4.8 Prospects of E-Banking Services

Table 4.8 Prospects of E-Banking Services at CBE

No	Description		Strongly Disagree "1"	Disagree "2"	Neutral "3"	Agree "4"	Strongly Agree "5"
1	The staffs have increased their knowledge and technical skill in	Frequency	15	32	82	100	51
	solving a problem related to E-banking through time.	Percent	5.4%	11.4%	29.3%	35.7%	18.2%
2	The bank provides continuous orientation for E-banking	Frequency	20	56	93	79	32
	customers	Percent	7.1%	20.0%	33.2%	28.2%	11.4%
	There is an increase in the number of E-banking service users	Frequency	18	29	76	84	73
		Percent	6.4%	10.4%	27.1%	30.0%	26.1%
4	improvement in the E-banking	Frequency	21	51	74	87	47
	services quality given to customers	Percent	7.5%	18.2%	26.4%	31.1%	16.8%
5	There is a good prospect for the expansion of E-banking services	Frequency	17	30	72	98	63
		Percent	6.1%	10.7%	25.7%	35.0%	22.5%
6	The bank provides incentives to E-	Frequency	31	59	84	64	42
	banking users	Percent	11.1%	21.1%	30.0%	22.9%	15.0%
7	The approaches of the employees	Frequency	16	49	82	67	66
	of the bank are attractive to retain E-banking customers	Percent	5.7%	17.5%	29.3%	23.9%	23.6%

Source: Survey Result, April 2018

As shown in the above table, majority of the respondents think that the staffs have increased their knowledge and technical skill in solving a problem related to e-banking through time. This is shown since, 51(18.2%) of respondents strongly agreed, 100 (35.7%) of respondents agreed. Meanwhile 82 (29.3%) of respondents were neutral, and 32 (11.4%) of respondents disagreed while 15 (5.4%) of respondents strongly disagreed on the matter. This implies that the staffs have increased their knowledge and technical skill in solving a problem related to e-banking through time. The results of the table above also indicate that the respondents of 32 (11.4%) strongly agree, 79 (28.2%) agree, 93 (33.2%) are neutral, 56 respondents (20.0%) disagreed and 20 (7.1%) have responded that regarding with the bank provides continuous orientation for e-

banking customers. Thus, lead that the bank provides continuous orientation for e-banking customers.

The above table also shows that respondents agreed when they asked if there is an increase in the number of e-banking service users. This inference was reached since 73 respondents (26.1%) strongly agreed while the majority of 84 respondents (30.0%) agreed with the statement. Respondents that had a number of 76 and 29 with a percentage of (27.1%) and (10.4%) were neutral and disagreed respectively. Another 18 respondents (6.4%) strongly disagreed with the statement. This implies that there is an increase in the number of e-banking service users.

The outcome of respondents in the table above agreed most of the customers about the continuous improvement in the e-banking service quality given to customers. This conclusion was reached since 47 respondents (87%) strongly agreed while another majority of 87 respondents (31.1%) agreed with the statement. Respondents that had a number of 74 and 51 with a percentage of (26.4%) and (18.2%) were neutral and disagreed respectively.21 respondents (7.5%) strongly disagreed with the statement. This implies that there is continuous improvement in the e-banking service quality given to customers

The results indicated in the above table also indicate that the respondents definitely think that there is a good prospect for the expansion of E-Banking services. This is drawn since 63 (22.5%) of the respondents strongly agree, 98 (35.0%) agree and 72 (25.7%) are neutral, while 30(10.7%) of the respondents disagreed on the other hand, 17 (6.1%) of the respondents were strongly disagree. This implies that there is a good prospect for the expansion of e-banking services. The outcome of respondents in the table above had different views regarding with the bank provides incentives to e-banking users. This conclusion was reached since 42 respondents (15.0%) strongly agreed while another 64 respondents (22.9%) agreed with the statement. Respondents that had a number of 84 and 59 with a percentage of (30.0%) and (21.1%) were neutral and disagreed respectively. Another 31 respondents (11.1%) strongly disagreed with the statement. This implies that the bank provides incentives to e-banking users.

The results of the table above also indicate that the respondents of 66 (23.6%) strongly agree, 67 (23.9%) agree, and 82 (29.3%) respondents are neutral, while 49 respondents (17.5%) disagree and 16 respondents (5.7%) strongly disagree that the approaches of the employees of the bank

are attractive to retain e-banking customers. This implies that employees of the bank are attractive to retain e-banking customers.

Besides, the key informant interview results show that there is good prospect regarding to electronic banking services such as level agreement of sign service with network service provider. Introducing various additional channels in order to make customers easily accesses the products and aware those about the benefits of electronic payment and its benefits in making their life easy. Besides, the key informants stated that the improvement in solving the problem through the commitment of the government to facilitate the expansion of ICT infrastructure, improvement in the banking habit of the society, sustainable economic growth in the country, the increment of tourist inflow to Ethiopia and willingness among banks to cooperate in building infrastructure are having the bright prospects of e-banking. The informants further stated that currently commercial bank of Ethiopia is working with Ethiopian Tele communication that is why the service / electronic banking service dissatisfied customers. Therefore, commercial bank of Ethiopia should build its own network system.

In addition, the commitment of the government to strengthen the banking industry is a good opportunity for the adoption of e-banking service in the country because currently the national bank of the country is developing a project in cooperation with the World Bank in order to modernize the payment system of the country (Abiy, 2008).

In summary, the above analysis indicates that the majority of the respondents were agreed and that e-banking at CBE has a good prospect. They stated that e-banking is at its infant ages in the country however, if government as well as CBE exerted efforts to solve existing problems, the future prospect of the service is higher. Finally, it is possible to conclude that the bank is conducting some improvement to solve problems that are related to electronic banking services and there are good prospects for e-banking service in Ethiopia.

# 4.9 Mean and Standard Deviation

Tables 4.9 mean and standard deviation

Dimensions	N	Mean	St.dev
Customer understanding about e-	8		
banking		3.2634	.73105
Benefits of e-banking	6	3.4226	.78806
Customers satisfaction of e-	8		
banking		3.0985	.64048
Challenges of e-banking	7	3.3337	.66372
Prospects of e-banking	7	3.3801	.75257

The mean values are concerned, customer understanding about e- banking service (mean of 3.26), Benefits of e-banking (mean of 3.42) and Customers satisfaction of e-banking (mean of 3.09), Challenges of e-banking (mean of 3.33), Prospects of e-banking (mean of 3.38).

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#### **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary of the major findings

The above-analyzed data told us that the following ideas are the major findings.

- The bank offers variety of e-banking services to customers for instance inquires balance, withdrawal cash, purchase goods and services and makes utility payments than other e-banking services but due to various reasons customers use limited e-banking services. Less importantly, customers have used other e-banking services rarely.
- Customers had the understanding of using e-banking services clearly. However, there were problems of insecurity when using the e-banking services, and also the bank provide staff to solve problems when they exist, getting immediate help from the staff at any time when face a problem is not viable but at working hours the staff shows willingness to cooperate and to tell about the service to customers.
- Customers acknowledged the benefits of e-banking in terms of reduced cost of transaction, promote comfort, and save customers' time and ensuring quick and continuous access to information. Besides, they confirmed that e-banking ensured better cash management, convenient in terms of 7 days and 24 hours and makes faster way of conducting banking transaction. They have however, declared that there is a gap in providing the services at 7 days and 24 hours.
- Customers were satisfied with the services which were given through e-banking however, customers were also dissatisfied with the quality of services. Besides, there are low service qualities in withdrawing cash in time of need. Regarding the presence of errors during service provision there were errors in E-banking service. Moreover, e-banking services did not provide them adequate banking service. Finally, customers had trust on the E-banking service and have stressed that they did not have trust on e-banking services.
- Regarding with challenges of e-banking services this are the major ones: insecurity of e-banking technology, lack of suitable legal framework for e-banking services, electric power interruptions, network failures are serious challenges of e-banking services Besides,

- inadequate skill of the staff of the bank, languages barriers, weak customers awareness, are also the obstacles e-banking in case of CBE
- The bank is conducting some improvement to solve problems that are related to electronic banking services and there are good prospects for e-banking service in Ethiopia.

#### **5.2 Conclusions**

In Ethiopia, electronic banking is in its infant stage. Although it has been available in the developed as well as developing countries since the early 1980s' and 1990s, in Ethiopia, it is recently that the infrastructure for e banking is under expansion while its services are also getting attention by commercial banks. In line with this, this paper, has attempted to examine the prospects and challenges of e-banking services in CBE the case western Addis Ababa district. In doing this, the study has collected primary data through questionnaire from conveniently sampled e-banking customers and key informant interviews conducted with purposively selected customer service manager. Besides, secondary data is collected from various sources and used to substantiate the findings of the primary data.

- ➤ CBE branches offers Automated Teller Machine (ATM), Mobile Banking (MB), Point of Sales (POS) terminals, and Internet banking (IB), and CBE Birr.
- ➤ With regard to service options available to the customer, once they have began to use e-banking services, they easily access services of balance inquiry, cash withdrawal, utility payment, purchase of goods and service.
- ➤ Besides, customers understand the service of electronic banking provided by CBE branches under the study. The bank provides security for e-banking transaction data and privacy of its customers. Besides, CBE has staff with the required professional competency and skills in solving the problem of e-banking services, which customers usually encounter in the service provision of the bank. Besides, the information and texts sent through electronic media to customers regarding e-banking services are clear and easy to understand.
- ➤ Regarding the benefits which customers secure from e-banking services, reduced costs of transaction, increased comfort and time saving, better cash management, faster way of conducting banking transactions are the major. In the study, it is indicted that although

there are benefits, which customers gain in using e-banking services, there are times the service becomes unavailable due to network problems, power disruptions, staff shortages and other technical problems reasons. Customers are dissatisfied due to the interruption of services provided by the bank.

- customers' satisfaction is low because the service provision is far below customers' expectation. Besides, customers did not have trust on the services, could not withdraw cash out of working hour due to fear that the system abuses their account balance. In addition, customers could not withdrawal cash as they expect using ATM or at times the ATM machines get out of cash, or error would be appeared while they are using e-banking services and they could not access and make transaction 24hr and 7days a week. This implies that customers feel unsecured on their bank account after using e-banking services.
- Moreover, the study revealed that lack of suitable legal and regulatory framework, low level of internet penetration and poorly developed telecommunication infrastructure, high cost of internet, security concerns, and service languages are among the major challenges of e-banking service provided by the study branches around Kolfe area.
- Finally, the staffs working in sampled branches have increased their knowledge and technical skill in solving a problem associated with e-banking services, continuous improvement in the e-banking services quality given to customers, a good prospect for the expansion of e-banking infrastructure and services are the major prospects of electronic banking services in the study branches. The bank is also conducting some improvement to solve problems that are related to electronic banking services and in general, if the study branches overcome the existing challenges of e banking, there are good prospects for e-banking service in the CBE in general and in the study branches in particular.

#### **5.3 Recommendation**

Based on the findings of the study, the following recommendations are forwarded in order to promote and develop viable e-banking service in CBE in general and in selected branches of CBE in particular.

- With regard to available e-banking service options to the customers, the bank should improve both the quality and type of services in order to attract more customers. Service qualities in money transfer, setting up new accounts, balance inquiry, conducting payments, withdrawal of money, requesting account balances and other routine services should be improved.
- 2. The bank should promote public relation work in order to raise public awareness on the use of e-banking service. Increasing the awareness on the advantages of e-banking services among customers is vital to improve the recognition and acceptance of the technology. Therefore, it will create better understanding of electronic banking service for the customers.
- 3. While creating awareness is important, it is not enough on its own. Besides the obvious ease of use, customers need to have incentives to take the additional step of actually using the technology. Examples of incentives that have been used in other countries include gift baskets, cash, or coupons in cooperation with other service providers such as restaurants, entertainment venues, etc. Ultimately, the goal is to create and improves awareness; it is also to provide customers with additional incentives to try the technology.
- 4. It is confirmed in the study that e-banking service did not satisfy customers the way it is currently delivered. Hence, the bank needs to focus on means to increase the quality of the service and thereby raise the satisfaction level of customers.
- 5. Ongoing efforts by the Ethiopia telecommunication corporation to expand ICT infrastructure should be encouraged by the government and gradually the corporation should try to reduce the service charge on internet services.
- 6. The lack of legal and regulatory framework for e-banking services has discouraged banks from introducing these innovative payment instruments or where they have introduced, has put them at legal risk. Electronic payments are not recognized in Ethiopia legal system. Thus, government should issue laws that govern electronic payment. This helps financial

- service providers introduce innovative products currently in use around the world which are cost effective, efficient and safe.
- 7. The bank should improve internet penetration and telecommunication infrastructure, cost of internet, security concerns, and the bank should prepare multiple language options for the customers to use e-banking services.
- 8. To increase the knowledge and skills of employees in e-banking service, the bank should give continuous trainings to all employees who have direct relation with the customers and create some kind of benefit for the employees to use all e-banking packages because when they practice it, they will have good understanding and develop their skills. Therefore, the bank should continue on improvement to solve problems that are related to electronic banking service. Finally, the bank should work more on prospects of e-banking service in Ethiopia.

## **5.4 Limitation of the Study**

Concerning the limitation of research, only CBE in Addis Ababa were address in this study due to financial and time limitations. Due to time and resource constraints, the study did not represent comprehensive analysis of al]l challenges hindering e- banking service. The findings of the research was presented in this paper assume that all responses of the respondents are rationally filled. However, it may not be free from the limitations of bias. Finally, shortage of secondary data like restrictions to access different internal data literatures was some of the limitations the author will face. Therefore, the outcome of this study understood considering this limitation.

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Appendix I: Questionnaire for customers of Commercial Bank of Ethiopia, Addis Ababa

St. Mary's University

**School of Graduate Studies** 

**Department of management** 

Questionnaire prepared for Customers of Commercial Bank of Ethiopia, Addis Ababa

**Dear respondents** 

I am Selamawit Kebede, MA student at St. Mary's University, School of Graduate Studies, and Department of Management. Currently, I am conducting a research entitled "Prospect and Challenges of E- Banking Service in Ethiopia: A Case of Selected Branches of west Addis Ababa district of Commercial Bank of Ethiopia in Addis Ababa. I am conducting the study as a partial requirement to complete my MA study in General Business Management. The objective of this questionnaire is therefore, to obtain the necessary and relevant first-hand information that may be useful for the accomplishment the aforementioned research project. In light of this, the quality of this paper is highly relies on information you would kindly provide.

Besides, I guarantee you that the information you give on the questionnaire will solely be used for academic purpose. Thus, your responses and ideas comments are highly honored. In addition, the information you provide is kept confidential. Hence, your frank response and valuable support in responding to the questions raised is very important to the success of the study. To this end, I kindly request you to fill the questionnaire carefully and at your best knowledge in all regards. You should choose the answer you think is correct and free of bias. I am grateful in advance for your cooperation in filling questionnaire.

You are not required to write your name.

**Selamawit Kebede** 

Tel -0922409386

Thank you in advance for your cooperation and kind response.

# **PART ONE**

# **Section A: - Personal Background Information**

# > Please, circle your alternatives

1	Branch Name	
1.	Dianen i vanic	

Sex	Age	Education	<b>Employment Status</b>
		Background	
A. Female	A. <20	A. No formal education	A. Government Employee
B. Male	B. 20-30	B. High school	B. Private Employee
	C. 31-40	C. Certificate	C. Personal Business
	D. 41-50	D. Diploma	D. Student
	E. 51-60	D. Bachelor's Degree	E. Retired
		E. Masters and above	F. Not Employed
		E. Masters and above	F. Not Employed

# **Section B: General Question**

How long have yo	ı Which E-Banking	How do you start
been using E	- service do you use	E-Banking
Banking service		
A. less than 1 Year	A. ATM/Debit card	A. Advertisement
B. 1-3 Years	B. Internet Banking	B. Bank Employee
C. 4-6 Years	C. Mobile banking	C. Social Media
D. > 6 Years	D. Point of sell (POS)	D. Colleague/Friends
		E. If other
		specify

# **PART TWO**

# **Section A: Rating Questions**

Please mark with  $(\sqrt)$  for your extent of agreement with the following statements. Strongly Agree= 5, Agree= 4, Neutral= 3, Disagree=2 and Strongly Disagree=1.

No.	Service options available to the customer once they have began to use e-banking service	1	2	3	4	5
1.	I transfer fund					
2.	I can set-up new account					
3.	I make insurance premium payment					
4.	I present credit application					
5.	I can inquire balance					
6.	I can present bill and payment					
7	I withdraw cash					
8	I can purchase of goods and services					
9	I can conduct utility payments					
No.	Level of customers understanding about E-Banking service	1	2	3	4	5
1.	I can access e-banking in multiple languages.					
2.	I understand the e-banking service very well.					
3.	The bank provides security for e-banking transaction data and privacy.					
4.	I can able to see past transactions through e-banking					
5.	The bank provides knowledgeable staff to solve problem of e-banking.					
6.	If I face a problem, I can ask immediate help from the bank at any time					
7.	Information and texts sent through electronic media are clear and easy to understand					
8.	I understand the description given by bank staff on the steps of using e-banking service					
No.	Benefits of E-Banking services for customers	1	2	3	4	5
1.	E-Banking reduced costs in accessing and using the banking service.					
2.	E-Banking increased comfort and time saving.					
3.	E-Banking ensures quick and continuous access to information about your account.					

4.	E-Banking makes faster way of conducting banking transactions.					
5.	E-Banking is convenient in terms of 7 days and 24 hours services.					
6.	E-banking ensures me better cash management					
No.	Satisfaction level of customer about E-Banking	1	2	3	4	5
1.	The banks have information about the level of customer satisfaction on E-banking services					
2.	I am satisfied with E-Banking service providing by the bank					
3.	Using E- banking, I can access and make transaction 24hr and 7days a week.					
4.	If I want cash out of working hour, I can withdraw without any problem using ATM.					
5.	I found no errors in E-banking service					
6.	E-banking provides every bank service for me.					
7.	I feel secured on my bank account after using E-banking.					
8.	I have trust on the E-banking service.					
No.	Challenges of E-Banking Services	1	2	3	4	5
1 10.	Change of L Damming Del vices	-		5	7	
1.	Insecurity of E-banking technology is an issue of concern					
1.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.					
<ol> <li>2.</li> <li>3.</li> </ol>	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services					
1. 2. 3. 4.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services  Network failures are serious problem to use E-Banking services					
1. 2. 3.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services  Network failures are serious problem to use E-Banking services  Inadequate skill of the staff of the bank regarding E-					
1. 2. 3. 4.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services  Network failures are serious problem to use E-Banking services  Inadequate skill of the staff of the bank regarding E-Banking.  Languages barriers are an obstacle to use E-Banking.					
1. 2. 3. 4. 5.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services  Network failures are serious problem to use E-Banking services  Inadequate skill of the staff of the bank regarding E-Banking.					
1. 2. 3. 4. 5. 6.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services  Network failures are serious problem to use E-Banking services  Inadequate skill of the staff of the bank regarding E-Banking.  Languages barriers are an obstacle to use E-Banking.  Cost of service charge is high for using E-Banking		2	3	4	5
1. 2. 3. 4. 5. 6. 7.	Insecurity of E-banking technology is an issue of concern  Lack of suitable legal framework for E-banking services.  Electric power interruptions cause problems to E-banking services  Network failures are serious problem to use E-Banking services  Inadequate skill of the staff of the bank regarding E-Banking.  Languages barriers are an obstacle to use E-Banking.  Cost of service charge is high for using E-Banking services					

There is an increase in the number of E-banking					
service users					
There is a continuous improvement in the E-banking					
services quality given to customers					
There is a good prospect for the expansion of E-					
banking services of the bank					
The bank provides incentives to E-banking users					
The approaches of the employees of the bank are					
attractive to retain E-banking customers					
	service users  There is a continuous improvement in the E-banking services quality given to customers  There is a good prospect for the expansion of E-banking services of the bank  The bank provides incentives to E-banking users  The approaches of the employees of the bank are	service users  There is a continuous improvement in the E-banking services quality given to customers  There is a good prospect for the expansion of E-banking services of the bank  The bank provides incentives to E-banking users  The approaches of the employees of the bank are	service users  There is a continuous improvement in the E-banking services quality given to customers  There is a good prospect for the expansion of E-banking services of the bank  The bank provides incentives to E-banking users  The approaches of the employees of the bank are	service users  There is a continuous improvement in the E-banking services quality given to customers  There is a good prospect for the expansion of E-banking services of the bank  The bank provides incentives to E-banking users  The approaches of the employees of the bank are	service users  There is a continuous improvement in the E-banking services quality given to customers  There is a good prospect for the expansion of E-banking services of the bank  The bank provides incentives to E-banking users  The approaches of the employees of the bank are

# **Appendix II: Interview Questions for Customer Service Managers Interview Guidelines for Key Informants (Customer Service Managers)**

Name of the interviewer	
Position of the interviewee	
Place of Interview	
Branch Name	
Date of Interview	

- 1) What types of e-banking services are provided to customers at Commercial Bank of Ethiopia in general and in your branch in particular?
- 2) Do the customers understand the services provided through E-Banking?
- **3)** Are your customers satisfied by the services provided through e-banking? If yes, how do you maximize the satisfaction level of your customers? If no, why?
- **4)** Do you think Commercial Bank of Ethiopia E-Banking is providing the service as expected and provides e-banking services for 24/ hours and 7 days for customer?
- 5) Do employees of the bank have adequate knowledge and skill in the e-banking services, which they provide? Does the bank give training to all employees to encourage their performance?
- **6)** What are the major challenges of E-Banking service that the bank faces?
- **7)** What improvements do the bank is conducting to solve the problems and build the prospect of e-banking services?