



**ST. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**ASSESSMENT OF THE E-BANKING SYSTEM AT COMMERCIAL BANK OF  
ETHIOPIA: EVIDENCES FROM SELECTED BRANCHES IN ADDIS ABABA**

**BY: GIZAW TESHOME**

**JUNE, 2018**

**ADDIS ABABA, ETHIOPIA**

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**A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY, SCHOOL OF GRADUATE  
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## DECLARATION

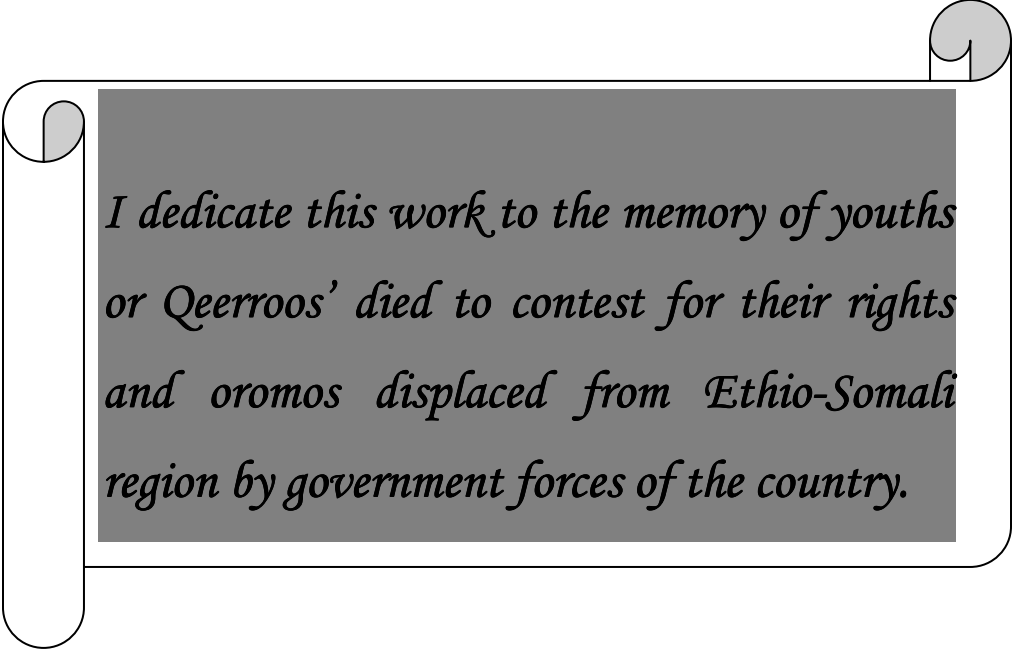
I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Dr. Temesgen Belayneh. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning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

Gizaw Teshome

Signature and date

\_\_\_\_\_

*Dedication*



*I dedicate this work to the memory of youths  
or Qeerroos' died to contest for their rights  
and oromos displaced from Ethio-Somali  
region by government forces of the country.*

## **ENDORSEMENT**

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

Dr. Temesgen Belayneh

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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## **LIST OF ACRONYMS/ABBREVIATION**

|            |                                      |
|------------|--------------------------------------|
| ATM        | Automated teller machine             |
| CBE        | Commercial bank of Ethiopia          |
| E-banking  | Electronic banking                   |
| E-commerce | Electronic commerce                  |
| EFT        | Electronic fund transfer             |
| E-payment  | Electronic payment                   |
| ICT        | Information Communication Technology |
| IT         | Information Technology               |
| M-banking  | Mobile banking                       |
| PC         | Personal computer                    |
| PIN        | Personal identification number       |
| POS        | Point of sale                        |
| WWW        | World Wide Web                       |

## **ABSTRACT**

*The research was descriptive study aimed at assessment of the electronic banking system in two selected branches of commercial bank of Ethiopia in Addis Ababa. Convenience sampling strategy which is a non-probability sampling technique was adopted to select 370 customers from the two selected branches. From the total 370 questionnaires distributed to the customers of commercial bank of Ethiopia, 320 usable questionnaires were returned which is about 86% response rate. Questionnaire was used as the principal tool for the data collection. With the aid of the statistical package for social sciences (SPSS) windows software version 20 the data was analyzed using basic statistical tools such as frequencies, mean, and percentages. The study among other things brought to the fore that customers of the selected branches were highly aware of the existence and usage of the various electronic banking products. Result of the study also indicated that customers prefer to transact business in the halls in spite of the long queues largely because of the difficulty associated with accessing e-banking products. The study also identified basic benefit of E-banking for the customers, such as it saves time and quick, minimizes risk of carrying cash, makes it easier for customers to do banking activities and the other was assessed. Lastly the study also revealed certain outcomes of electronic banking transaction failure such as affects customer's moral and also makes them not to patronize the product again.*

Key words: E-banking, ATM, POS, Mobile banking, internet banking

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Back ground of the Study

Banking has been one of the services that provide the opportunity to use the internet to enhance business transactions that engenders customer satisfaction. The term electronic banking was defined by *Allen et al (2001)* to mean the procurement of data or services by a bank to its clients by means of a computer. A more sophisticated service is the particular case that furnishes clients with the opportunity to get access to their accounts and execute transactions and to buy item online by means of the internet (Daniel, 1999). The rapid changes in business operations in contemporary times in the form of technological improvement require banks to serve their customers electronically. Traditionally, banks have been in the forefront of harnessing technology to improve their products and services. The banking industry and its environment in the 21<sup>st</sup> century is highly complex and competitive and therefore the need for information and communication technology to take centre stage in the operations of banks (Stevens, 2002).

Electronic banking (E-banking) is critical in the transformation drive of banks in areas such as products and services and how they are delivered to customers. Thus, it is seen as a valuable and powerful tool in the development, growth, promotion of innovation and enhancing competitiveness of banks (Gupta, 2008; Kamel, 2005). Given the significant role of e-banking in the developmental drive of banks, information technology has been found to lead to improvement in business efficiency and service quality and hence attract customers as well as retain them (Kannabiran& Narayan, 2005).

According to Chang, (2003) E-banking contributes significantly to the distribution channels of banks such as automated teller machine (ATM), Phone-banking, Telebanking, PC-banking and now internet banking. In addition, transfer of funds, viewing and checking

savings account balances, paying mortgages, paying bills and purchasing financial instruments and certificates of deposits processes have improved significantly as a result of internet banking (Mohammed et al., 2009). This implies that, e-banking has resulted in efficiency in service delivery in the banking sector because customers can transact business from one side of the country to another and from both long and short distance.

Other scholars argued that, e-banking has transformed traditional banking practices to the extent that it has been found to create a paradigm shift in marketing practices resulting in positive performance in the banking sector (Gonzalez, 2008; Maholtra& Singh, 2007). This shows that the delivery of efficient and quality service is facilitated by information technology. Similarly, Christopher et al. (2006) indicated that e-banking provides an important channel to sell products and services of banks and is perceived to be a necessity for banks to be successful. Therefore, service quality and efficiency in the banking industry has increased tremendously worldwide in the world due to the integration of information technology into banking operation. Banks just like other businesses are tuning to information technology to improve business efficiency, service quality and attract new customers (Nath et al, 2001). Today e-banking has experienced phenomenal growth and has become one of the main avenues for banks to deliver their products and services. The need to globalize the banking industry and the whole financial system is also a necessitating factor for the E-banking system. The E-banking also intend to ensure quality financial service delivery by the banks, the need to foster an efficient financial market and broad based cashless society is of value in the introduction of the E-banking, transparency and quick service rendition is equally intend by the E-banking. With the e-banking, the banks will be able to handle large volume of transactions. In recent decades, investment in information technology by commercial banks has served to streamline operations, improve competitiveness, and increase the variety and quality of services provided (Amato-McCoy, 2005).

The use of electronic banking products and services to banking operations has turned into a subject of key significance and concerns to all banks. In any case, it ought to be understood, that electronic banking service came out of Information and Communication Technology that made it feasible for service providers and their customers in developing economies to enjoy the services that is also enjoyed in the developed countries. Electronic banking



services have given banks the chances to inspire clients which urge them to continue banking with them. Today, it is hard to see a bank in the nation that does not offer one type of electronic banking service or the other, even banks in the most remote parts of the world. Information and communications technology has become a vital asset that has transformed many areas of life including business and commerce. Information systems are used in business to facilitate new products, and create market opportunities. Developed and developing areas of the world are now using internet banking services as a competitive strategy as noted by (Gurau, 2002).

Banks have realized that the banking of tomorrow requires more of electronic banking transactions rather than traditional banking systems. In other words, the paper based transaction is now being replaced by electronic-based transactions. Whether a bank would be successful or not rely on upon the degree to which it is putting resources into IT and utilizing it as a part of an inventive way. This territory has been noted to be a noteworthy competitive ground for banks that are working in the post-solidification time. Telephone banking, Automated Teller Machines (ATMs), internet banking, mobile banking, and network banking and many others are examples of how technology is changing traditional banking now (Gurau, 2002).

In Ethiopia, however, cash is still the most dominant of exchange, and electronic payment systems are at an embryonic stage. In the face of rapid expansion of electronic payment (E- payment) systems throughout the developed and the developing world, Ethiopian's financial sector cannot remain an exception in expanding the use of the system (Gardachew 2010, p.2). The development of E-commerce, the service delivery and efficiency of electronic banking system is not well developed in Ethiopia. Most banks operated in Ethiopia provide service to customers by using traditional systems that is why every bank customer is highly dissatisfied by the disappointing status of financial development in Ethiopia. As it is stated in different E-banking literature some of the problems related with customer service delivery of E-banking are: Low level of internet penetration and poorly developed telecommunication infrastructure. 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 and High rates of illiteracy. Low literacy rate is a serious impediment to deliver the service to

customers 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 (Gardachew, 2010). But risks related with security issues, lack of competition between local banks and foreign banks and social awareness on the E- banking system were not addressed.

Commercial Bank of Ethiopia was established in 1963 and it is the first bank in Ethiopia to introduce modern banking system to the country (ATM service for local users) in the country when it launched proprietary ATM system in 2002. Over all CBE Plays a catalytic role in the economic progress and development of the country with the wing of government. The Bank's deposit and total assets has reached to 374.8 billion birr and 495.4 billion birr respectively which the president asserted to be an outstanding achievement as of first quarter of 2017/18. To enhance accessibility, new branches were opened throughout the country which brought the bank's branch network to 1,233. Currently Commercial bank of Ethiopia has more than 16.5million account holders. Now a day's the number of ATM machines are growing quickly, with banks eager to ease access for their customers. On the other hand, the numbers of Mobile and Internet Banking users are reached more than 1.5 million and 29,483 as of 2017/18 first quarter report. The numbers of ATM card holders are also 4.1 million, and currently the total number of ATM 1,638, and 8000 POS (2017/18 first quarter meeting report and E-payment procedure). It has strong correspondent relationship with more than 50 renowned foreign banks like Commerz Bank A.G., Royal Bank of Canada, City Bank, HSBC Bank etc. Commercial bank of Ethiopia has a SWIFT bilateral arrangement with more than 700 others banks across the world and Pioneer to introduce Western Union Money Transfer Services in Ethiopia early 1990s and currently working with other 20 money transfer agents like Money Gram, Atlantic International (Bole), Xpress Money etc. Beside to this, CBE combines a wide capital base with more than 33,706 talented and committed employees and has opened branch in South Sudan since June 2009 (<http://www.combanketh.et.aspx>).

## 1.2 Statement of the problem

In the past, customers demand for banking services was driven basically by safety of their money as well as interest accruing from such savings. The application of computer technology to the complex internet banking technology known as the E-banking was expected to bring about efficient service delivery and improved performance of the banks, however, it is unprecedented to note that only little have been achieved by the banks despite the application of the E-banking, most banks still witness crowd and long queue on daily bases at the banking hall, the suppose cashless society has almost remain a mirage in many part of the nation since people still carry around volumes and large cash value (Kehinde, 2015).

With the advent of computer and its attendant revolution of information processing, electronic banking has become the order of the day. The resultant effect is the emergence of various automated devices. Electronic banking enhances the speed and quality of service delivery and has radically changed how banking is done worldwide. The volume and speed of banking transactions have tremendously improved, especially in the developed countries. In Ethiopia E-banking is at the infancy stage as many transactions are still being carried out manually. In line with its vision commercial bank of Ethiopia strives to create a cashless society by offering different e-banking products that provides a better avenue of accessing banking services without necessary visiting banking hall. The degrees to which the bank is strongly committed the functionality and performance of E-banking product is determined by the rate of complain or feedback received from customers. The customers of commercial bank of Ethiopia E-banking product users in Addis Ababa are extremely disappointed and complained the service delivery of the bank, especially while they are using ATM for cash withdrawal ([www.ethiopianreporter.com](http://www.ethiopianreporter.com)). In addition, complaints have also been raised on failures at point of sale terminals (POS) in store or installed at supermarkets whenever access to the central server fails. Moreover, electronic banking was adopted by banks so as to ease pressure at the banking hall and provide space yet this seem not to have been materialized. In spite of all these efforts little has it impacted on the behaviours of many customers and consequently the long queues and congestions exist at the banking hall in Commercial Bank of Ethiopia. The question that arises from the above argument is that why are customers still preferring being in queues and spending more hours in the banking transactions that being at their comfort zone

and banking electronically? It is against this background and other related issues that the researcher attempts to answer in this study by finding out why these problems occur.

### **1.3 Basic research questions**

Based on the above stated problem statement, the following research questions were answered:

1. Are customers aware of the existence and usage of the various electronic banking products?
2. What are the benefits of Electronic banking products from the viewpoint of the customer?
3. Why do customers prefer the banking halls to electronic banking service delivery?
4. What are the outcomes of electronic banking products transaction failure on customers in commercial bank of Ethiopia?

### **1.4 Objectives of the Study**

#### **1.4.1 General Objective of the Study**

The general objective of this study was to assess the electronic banking system in commercial bank of Ethiopia.

#### **1.4.2 Specific Objectives of the Study**

In addition to the general objective of the study specifically, the study were seeks to;

1. To investigate whether or not customers are aware of the electronic payment products and its usage in commercial bank of Ethiopia.
2. To find the benefits realized by customers from electronic banking products.
3. To assess customer's preference between banking in the halls and electronic banking service delivery channels.
4. To assess the outcomes of transaction failures on customers in usage of electronic banking products in Commercial bank of Ethiopia.

### **1.5 Scope of the Study**

The study was important in obtaining a lot of information if it covers all branches of commercial bank of Ethiopia. However, it is impractical or unmanageable to include all branches even in Addis Ababa because of resource limitations. Therefore the study was assessed commercial bank of Ethiopia GezahegnYilma branch and Paulo's branch that are found in Addis Ababa.

### **1.6 Limitation of the Study**

The study focused on the selected branches of commercial bank of Ethiopia. While conducting the study, the sample is taken only from two branches of the bank and it doesn't include the remaining branches of commercial bank of Ethiopia that are operating in the country. However if it involves more branches, the findings of the study would be generalized. This is not so the case due to time and money constraints, which are the major limitation of the study. It is also faced that respondents were not properly responded to the whole content of the questionnaire due to misunderstandings, lack of knowledge or commitment to the subject matter.

### **1.7 Significance of the Study**

The finding of the study were significant as it is expected to enhance the awareness of stakeholders with regard to the E-banking service delivery to customers in Ethiopia specifically in commercial bank of Ethiopia. In addition, this study expected to help other researchers who are interested to conduct further study regarding the issue under investigated by providing use full information. Finally based on the factors found to be influencing bankers' decision on E-banking system, the study may provide recommendations for banks about changes needed to accelerate the practice of the system to deliver service to customers through technological innovation.

### **1.8 Operational Definition of Basic terms**

Electronic banking: Refers to any transfer of funds initiated or processed using electronic techniques.

Commercial bank of Ethiopia: Refers to an organization which provides services such as accepting deposits, giving business loans and basic investment products and other financial services to their customers.

Automated teller machine (ATM): shall mean an Unattended Acceptance Terminal that has Electronic Capability, accepts PINs, and disburses money, and may provide balance information, fund transfers between accounts and other services.

Personal Identification Number (PIN): shall mean a personal identification code that identifies a cardholder in an authorization request that originates at a terminal like POS and ATM for authorization.

### **1.9 Organization of the Study**

The research paper have five chapters; the first chapter includes background of the study, statement of the problem, research questions, objectives, significance, scope of the study, limitation of the study and also definition of terms. The second chapter was about review of related literature which is related to the study area and it gives a detail description of the study phenomenon by relating other scholar papers on the area. The third chapter is all about methodology of the study in which research approach and method, sources of data, sampling techniques and procedure, method of data collection and analysis and the like were included. In the fourth chapter the collected data were analysed, discussed and interpreted. And the last chapter contains summary, conclusion, recommendation, references and annex.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Definition of Electronic Banking**

E-banking has a variety of definitions all refer to the same meaning, the following section show some of these definitions. E-banking is a form of banking service where funds are transferred through an exchange of electronic signal between financial institutions, rather than exchange of cash, checks, or other negotiable instruments (Kamrul, 2009). E-banking, also known as electronic funds transfer (EFT), is simply the use of electronic means to transfer funds directly from one account to another, rather than by check or cash (Malak, 2007). Electronic banking is one of the truly widespread avatars of E-commerce the world over.

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

## **2.2 Forms of Electronic Banking Service Delivery Channels**

### **2.2.1 Automated Teller Machines (ATMs)**

Rose (1999) as cited in Abor, describes ATMs as follows: “an ATM combines a computer terminal, database system and cash vault in one unit, permitting customers to enter the bank’s book keeping system with a plastic card containing a PIN or by punching a special code number into the computer terminal linked to the bank’s computerized records 24 hours a day”. It offers a great deal of banking services to clients. They are mostly situated outside the banks. They were introduced initially to serve as cash dispensing machines. However, as a result of the rapid increase in technology, ATMs go to the extent of given accounts balances and bill payments. Banks use this electronic banking device, to gain competitive advantage. The combination of automation and human tellers gives more productivity for the bank during banking hours.

It additionally spares time in customer service delivery as customers do not queue in banking halls, and along these lines can invest such time spared into other productive activities. ATMs are efficient method for yielding higher profitability as they accomplish higher efficiency per duration of time than human tellers. (a normal of around 6,400 exchanges for every month for ATMs contrasted with 4,300 for human teller (Rose, 1999). Furthermore, ATMs ability to work after banking hours provide continue productivity. Available services on Commercial Bank of Ethiopia ATMs (card-banking) are, 24 hours a day and 7 days a week; Cash withdrawals, Bill payments, Forex exchange, Fund transfer, Balance inquiry, mini statement, PIN change etc.

### **2.2.2 Point-of-Sale Transfer Terminals (POS)**

Point of sale which is computerized and telecommunication devise provide the customer with access financial transaction in public place. The system allows consumers to pay for retail purchase with a check card, a new name for debit card. This card looks like a credit card but with a significant difference. The money for the purchase is transferred immediately from account of debit card holder to the store's account (Malak, 2007). Using POS (Point of sale/Service); we can render the following services;

- ✓ Cash Advance service



- ✓ Sales of goods and services
- ✓ Preauthorization and completion service

### **2.2.3 Credit Cards**

A credit card is a small plastic card issued to users as a system of payment. It allows its holder to buy goods and services based on the holder's promise to pay for these goods and services. The issuer of the card creates a revolving account and grants a line of credit to the consumer (or the user) from which the user can borrow money for payment to a merchant or as a cash advance to the user (Mavri&Ioannou, 2006). A credit card is different from a debit card in that it does not withdraw money from the users account after every transaction. The issuer lends money to the consumer to be paid to the merchant. Holders of a valid credit card have the authorization to purchase goods and services up to a predetermined amount, called a credit limit. The vendor receives essential credit card information from the cardholder, the bank issuing the card actually reimburses the vendor, and eventually the cardholder repays the bank through regular monthly payments. If the entire balance is not paid in full, the credit card issuer can legally charge interest fees on the unpaid portion (Mavri&Ioannou, 2006).

### **2.2.4 Debit Cards**

A debit card (also known as a bank card or cheque card) is a plastic card that provides an alternative payment method to cash when making purchases. Functionally, it can be called an electronic cheque, as the funds are withdrawn directly from either the bank account or from the remaining balance on the card. In some cases, the cards are designed exclusively for use on the internet, and so there is no physical card. In many countries the use of debit cards has become so widespread that their volume of use has overtaken or entirely replaced the cheque and, in some instances, cash transactions. Like credit cards, debit cards are used widely for telephone and Internet purchases and, unlike credit cards, the funds are transferred immediately from the bearer's bank account instead of having the bearer pay back the money at a later date. Debit cards may also allow for instant withdrawal of cash, acting as the ATM card for withdrawing cash and as a check guarantee card (Mavri&Ioannou, 2006).

### **2.2.5 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 clearing house transactions, Bill presentment and payment. Examples of retail and fiduciary products and services include Balance inquiry, Funds transfer, Downloading transaction information, Bill presentment and payment, Loan applications, investment activity, other value-added services.

### **2.2.6 Mobile Banking**

Mobile banking (also known as M-banking or SMS banking) is a term used for performing balance checks, account transactions, payments etc. via a mobile device such as a mobile phone. Mobile banking is most often performed via SMS or the Mobile Internet but can also use special programs called clients downloaded to the mobile device. The standard package of activities that mobile banking covers are: mini-statements and checking of account history; alerts on account activity or passing of set thresholds; monitoring of term deposits; access to loan statements; access to card statements; mutual funds/equity statements; insurance policy management; pension plan management; status on cheque, stop payment on cheque; ordering check books; balance checking in the account; recent transactions; due date of payment (functionality for stop, change and deleting of payments); PIN provision, change of PIN and reminder over the internet; blocking of (lost/stolen) cards; domestic and international fund transfers; micro-payment handling; mobile recharging; commercial payment processing; bill payment processing; peer to peer payments; withdrawal at banking agent and deposit at banking agent (Rahman, 2006).

### **2.2.7 Tele Banking**

Tele banking refers to the services provided through phone that requires the customers to dial a particular telephone number to have access to an account, which provides several options of services (Rahman, 2006).

### **2.2.8 Home Banking**

Home banking frees customers from visiting branches and most transactions will be automated to enable them to check their account activities, transfer funds and to open letter of credit sitting in their desk with the help of a personal computer and a telephone (Rahman, 2006).

### **2.3 Benefits of E-Banking**

Understanding E-banking service is important for several stakeholders, since it helps them to derive benefits from it. Many banks and other organizations have already implemented or are planning to implement E-banking because of the numerous potential benefits associated with it. Some of these major benefits according to Shah & Clarke (1997) are briefly described below.

#### **2.3.1 Benefits from the Banks point of view**

- I. **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). Some research suggests that adding the internet delivery channel to an existing portfolio of service delivery channels results in nontrivial increases in bank profitability (Young, 2007). These extra revenues mainly come from increases in noninterest income from service charges on deposit/current accounts. These customers also tend to be of high-income earners with greater profit potential.
- II. **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 (Booz, Allen & Hamilton (1999).

- III. **Increased Revenues:** Increased revenues as a result 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 on-going 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.
- IV. **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 (Young, 2007).
- V. **Load Reduction on Other Channels:** E-Channels are largely automatic, and most of the routine activity such as account checking or bill payment may be carried out using these channels. This usually results in load reduction on other delivery channels, such as branches. This trend is likely to continue as more sophisticated services such as mortgages or asset finance are offered using e-banking channels. In some countries, routine branch transactions such as cash/cheque deposit related activities are also being automated, further reducing the workload of branch staff, and enabling

the time to be used for providing better quality customer services (Booz, Allen & Hamilton (1999).

- VI. **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 critical mass of customers is achieved. The research in this area is still inconclusive, and often-contradicting reports appear in different parts of the world. The general consensus is that fixed costs of e-banking are much greater than variable costs, so the larger the customer base of a bank, the lower the cost per transaction would be. Whilst this implies that cost per transaction for smaller banks would in most cases be greater than those of larger banks, even in small banks it is seen as likely that the cost per transaction will be below that of other banking channels (Gurau, 2002).
- VII. **Organizational Efficiency:** To implement e-banking, organizations often have to re-engineer their business processes, integrate systems and promote agile working practices. These steps, which are often pushed to the top of the agenda by the desire to achieve e-banking, often result in greater efficiency and agility in organizations. However, radical organizational changes are also often linked to risks such as low employee morale, or the collapse of traditional services or the customer base. In addition, Electronic banking has also helped banks in proper documentation of their records and transactions (Gurau, 2002).

### **2.3.2 Benefits from the Customers' Point of View**

The main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main advantages of e-banking for corporate customers as per (Gurau, 2002) are as follows:

- I. Reduced costs in accessing and using the banking services.
- II. Increased comfort and time saving- transactions can be made 24 hours a day, without requiring the physical interaction with the bank.
- III. 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.

IV. 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. For example, it is possible to manage company's short term cash via internet banks (investments in over-night, short- and long term deposits, in commercial papers, in bonds and equities, in money market funds). Private customers seek slightly different kind of benefits from e-banking. In the study on online banking drivers Aladwani (2001) has found, that providing faster, easier and more reliable services to customers were amongst the top drivers of e-banking development.

### **2.3.3 Benefits to the General Economy**

Electronic Banking as already stated has greatly serviced both the public and the banking industry. This has resulted in creation of a better enabling environment that supports growth, productivity and prosperity. 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 (MahdiSalehi, 2004).

Generally, banks have used electronic channels for years to communicate and transact business with both domestic and international corporate customers. 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. The emergence of e-banking had made many banks rethink their IT strategies in competitive markets. These findings suggest that the banks that fail to respond to the emergence of e-banking in the market are likely to lose customers and that the cost of offering e-banking services is less than the cost of keeping branch banking.

## **2.4 Barriers to the Use of Electronic Banking Channels**

The following factors demonstrate why e-banking channels may be difficult to use, or why a bank may not realize the full benefits from it.

### **2.4.1 Access to Internet**

Although the growth of the Internet has been very fast, there is still a large population not connected to the Internet. Lack of computer literacy, high cost of computer hardware, high call tariff rates, and various other social and economic factors are some of the reasons cited for this (Walczuch et al., 2000). The use of the internet as a new alternative channel for carrying out financial services has become inevitable rather than just a method of achieving viable gains with the advent of globalization and intense competition (Napur, 2010). In order to have right to use a financial institution's online banking facility, a customer must first be given personal Internet access which he gets by first registering with the financial institution and request for the internet service. A user name and password for access is then issued to the customer for verification to gain access into the institution's internet banking portal. Internet banking gives both bankers and customers the liberty to carry out online banking transactions (Ogunkoya et al., 2014).

### **2.4.2 Consumer Behaviour**

A large number of consumers of financial services are still reluctant to conduct their financial management online. A study of consumer habits in 10 countries found that two-thirds of consumers do not consider online services important and that almost 30 per cent do not know whether their bank offers Web-based services (Regan and Macaluso, 2000). Changing consumer behaviour takes many years, as was the case with the 10-year adoption cycle of the ATM. This process can be accelerated with aggressive marketing and high value-added features, two things that are lacking in today's online banking market (Franco and Klein, 1999). This can also be true for some businesses, which may be even slower than consumers in adopting new technologies. Factors such as security, perceived difficulties of use, perceived usefulness; functionality and lack of promotion (such as availability of cheaper products on new channels) are most commonly cited factors, which are hindering the widespread adoption of new technologies (Cheng et al., 2006).

### **2.4.3 Language and Culture Issues**

These play a major role in global e-Commerce. Although English is accepted as the primary language of the Internet worldwide, in some cases a website has to be designed specifically to suit the market that it is trying to reach (Shah et al., 2009). The main problems associated with this are speed and cost. It takes a human translator up to a week to translate a small website into just one language (Turban et al., 2000). Financial services related websites are usually very large and consume large resources in the translation process.

The problem does not end with the translation of a website; it also need be adapted to the local culture to attract visitors. Banks around the world would do well to learn from Swiss banks, which successfully offer their services in several different languages (Turban et al., 2000).

### **2.4.4 Fear of Competition**

Some banks have been hesitant to promote e-banking systems, fearing that their costs will become too high and that it will be difficult for them to match the prices of competing Internet only banks (Shah et al., 2009). These fears have proven to be significant in most developed markets. Mols(1999) also stresses this point but suggests that not offering-Services is not an option, instead, companies should focus on other means such as product differentiation to protect themselves from excessive competition. Traditional banks could also use their well-established brand names and product development expertise to manage competition from new entrants (Mols, 1999).

### **2.4.5 Security Issues**

Internet security is still one of the major issues hindering the growth of internet related trade. Since the internet is an open network, high security risks are involved with financial transactions, and that risk could either be inside the system or outside the system (Daramola, et al., 2014). Internet fraud is common and related stories of online fraud on bank accounts get immediate media attention, making people hesitant to bank online (Brian et al., 2011). Different security methods (including hardware and software) are being tested and employed currently but there is still some way to go to win the trust of a large majority of customers (Mols, 1999).



#### **2.4.6 Availability of Resources**

For some banks, lack of financial and human resources will be a problem because offering the sophisticated Internet based services is an expensive project requiring major changes in IT infrastructure (Mols, 1999). Walczuch et al. (2000) synonymously reported that the primary deterrents for businesses establishing a Web presence is start-up costs and the costs associated with major organizational changes required for such moves. Mols (1999) suggest strategic partnerships between banks to share such costs. These partnerships could combine to develop e-banking related systems. However, finding suitable partners in very competitive environments may prove difficult.

#### **2.4.7 Technical Issues in E-banking**

Banks rely heavily on ICT for their internal operations and their interaction with individual as well as business customers (OwusuAfriyie, 2012). To deliver services via the e-banking channel, a bank needs Internet technologies for universal connectivity, back end applications such as account systems, support applications such as Customer Relationship Management (CRM systems), and communication technologies to link e-banking to the payment systems. Backend systems required by banks include data processing systems, accounts management systems and management information systems. These systems constitute the pillar of e-banking. Most of these systems were developed before the arrival of e-banking (thus the term legacy systems used for them) so they often lack connectivity, meaning they are difficult to connect to each other or with new systems. Electronic banking often requires rapid modification in systems to respond to changes in the market, and because of lack of flexibility in these systems they are very difficult to modify swiftly. Lack of integration with other systems is one of the most common reasons for the failures of many e-banking projects (Shah et al., 2009).

In addition, e-banking becomes very feasible when there is a website with which customers can access. The main difference is that when customers login they do most of the work themselves without any assistance. Therefore developing a user friendly and functionality rich websites is critical for the adoption and utilization of banking (Walczuch et al., 2000). To create a positive experience, a great deal of planning, resources and expertise needs to be invested in the development and on-going maintenance of websites. Website development

related issues are growing in complexity giving rise to a debate about technical versus social approaches to the development. It requires a comprehensive approach to address integration and scalability, and dynamic responses to changes in requirements and technologies. Electronic banking, like other electronic business systems is multifaceted, large-scale, and mission-critical (Walczuch et al., 2000).

## **2.5 Consequences of E-banking Failure Transaction on Customers**

Macmillan School Dictionary defined dissatisfaction as the state of attitude of not being satisfied, discontent and displeasure or a particular cause of feeling of displeasure or disappointment. NCR Interactive Teller Posit that the retail banking customers environment is changing due to dissatisfaction with customer services. Analysts' surveys advice that over a third of global retail banking customers moved providers in 2011, losing this segment of customers reduces the opportunity to seal the ATM as an e-banking product at the branches there by negatively impacting profitability and growth of the financial institution. Bank customers feel disappointed upset because his demand at that particular time has not been achieved there by affecting him negatively. Experience shows that customers do break the card due to the failure of the ATM to dispense cash requested at a particular point of needs. These e-banking products service failure make customer to be dissatisfied which affect the banks customer base by losing the customer to the other competitors. Similarly by delivering high level of customer's satisfaction, it improves customer's loyalty to the organization. Transaction failures affect customer's patronage and acceptance/adoption as it erodes customer's confidence on the product.

## **2.6 Review of Similar Research Studies**

### **2.6.1 Factors that contribute and Enhance the Adoption of E-banking**

Ahmad et al. (2011) carried out a research study to examine the factors that contribute and enhance the adoption of e-banking in Jordan, and the impact of e-banking functionality on the satisfaction outcomes for Jordanian commercial banks customers. The researcher was able to find out that accessibility, security, convenience, privacy, content, design, speed, fees & charges were the main functionality factors that influenced customers to utilize e-banking products. They also found out that these functionality factors all had statistical significant impacts on customers' satisfaction, although security, privacy, and content appeared to have the greatest impacts on

satisfaction. The researchers also recommended that future research studies be carried out on the subject matter so as to be able to extend the findings of the research to other geographical areas and among managerial employees of the commercial banks.

### **2.6.2 Electronic Banking and the Challenges**

Attah-Botchwey et al. (2014) carried out a similar research titled 'Electronic Banking and the Challenges of the Ghanaian Business Environment'. The researchers focused their research on Ecobank Ghana. The aim of the research was to determine the adoption, challenges, and some critical drivers that lead to the adoption of e-banking in Ghana. The researchers utilized both primary and secondary data in the research. The main data collection instruments for the primary data were semi-structured interview and questionnaire, while the secondary data were collected from Ecobank Ghana, and other published reports and materials. The researchers utilized purposive and random sampling techniques in selecting sample members from two different populations-population of officials from the IT department of the bank, and population of customers of Ecobank who utilize one or more e-banking services. The researchers were able to identify five e-banking services available to customers of Ecobank Ghana, that is; ATM/card services, bank statement by e-mail, internet banking, SMS banking, and Ecobank mobile money.

### **2.6.3 The Impact of E-banking Services on Customer Satisfaction**

Bello (2005) also carried out a similar research to determine and assess the impact of e-banking services on customer satisfaction in the Nigerian commercial banking industry. From the analysis carried out, the researcher was able to find out that many customers in Nigeria were aware of the positive developments in ICT which has led to the introduction of new delivery channels for Nigerian commercial bank products and services. The researcher also discovered that customers who utilize e-banking services were still not satisfied with the quality and efficiency of the services. The researcher also recommended that creation of awareness about the availability of e-banking products and services, and how they operate as this would be beneficial to customers.

## **2.7 E-banking System Conceptual Framework**

Remote banking, considered representative for the new economy, consists of electronic transactions between customers and their bank. Electronic banking, more commonly known as e-

banking, is the newest delivery channel for banking services. The term had been defined in many ways by researchers mainly because electronic banking refers to several types of services through which customers can request information and execute transactions via telephone, digital television, computer or mobile phone. A common definition for electronic banking comes from the Basel Committee on Banking Supervision: “e-banking includes the provision of retail and small value banking products and services through electronic channels as well as large value electronic payments and other wholesale banking services delivered electronically”(BCBS, 1998). E-banking, a term used for new age banking system, represents an automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. It is a service that provides customers the opportunity to gain access to their accounts, execute transactions, and obtain information on financial products and services through a public or private network, including the Internet. In more recent years, modern e-banking services such as internet and mobile banking has revolutionized banking services. The evolution of the e-banking industry can be traced to the early 1970s when banks began to look at these types of services as an alternative to some of their traditional bank functions. First, such a choice was considered appropriate since it ensures reduced costs as branches were very expensive to set up and maintain. Second, E-banking products and services like ATMs and electronic fund transfer were an important qualitative element of differentiation for banks that used them (Mobarek,2007). Given that banks operate in a fiercely competitive industry, their ability to differentiate themselves on the basis of price is limited. Thus, in order to remain on the market it is imperative for banks to adjust their strategies in response to changing customers’ needs and developments in technology. The term e-banking became popular in the early 1980’s referring to using a computer to access banking service via a phone line. E-banking first appeared in New York in 1981, where it was offered by major banks in that city, such as Citibank, Chase Manhattan, Chemical and Manufactured Hanover. Banks from the United Kingdom started to adopt the concept in 1983 where the Bank of Scotland was the first to introduce it. The early electronic banking services were basic, covering services like viewing bank statements and paying bills online without being a full transaction banking service (Shannak, 2013). Electronic banking services have actually started to develop only since 1995, when the Maryland Presidential Bank, an American bank, allowed bank accounts to be opened online. In mid-2004, over 17% of Americans

were already using electronic banking services. The following conceptual framework is developed from the objectives of the study and literature review.

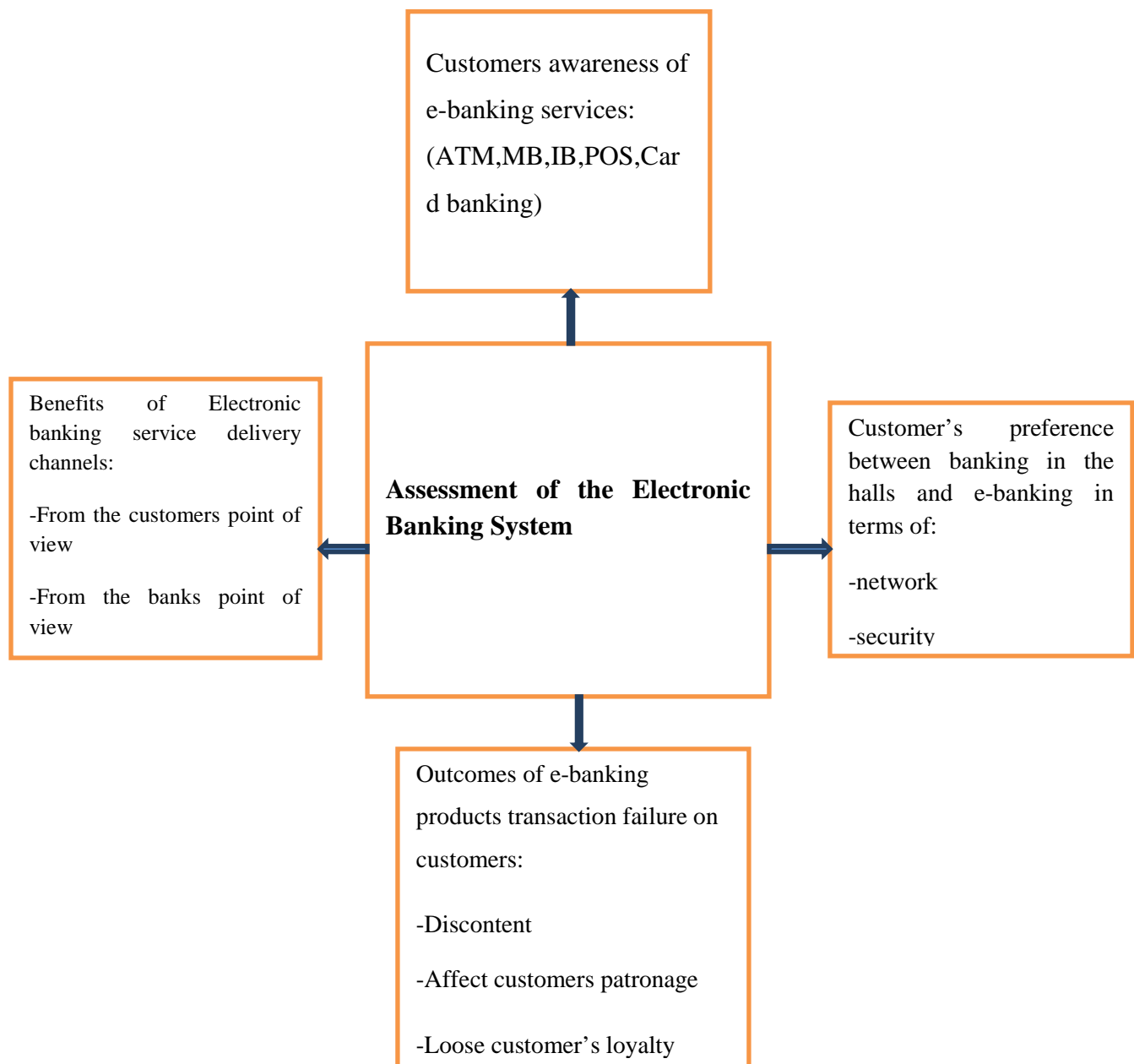


Figure 1: Conceptual framework

Source: From Literature Review

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research strategy of the present study. In this chapter information on population and sample of research participants, research design and sources of data, data collection instrument, procedure and data analysis technique were presented.

#### **3.2 Research Design and Approaches**

Research design refers to the logical structure of an investigation or inquiry at hand. It states what data is required, from whom, and how it is going to help answer the research questions posed (Jalil, 2013; Creswell, 2003). Stated differently, a research design is a detailed outline of how a research investigation would be implemented. It implies how the research data will be collected, the data collection instruments to be used, how the research instruments would be administered, and how the data collected would be analyzed (Jalil, 2013; Creswell, 2003). There are many research designs depending on the need of the researcher. The researcher in this research study has adopted the descriptive research design. According to Burns and Grove (2003), a descriptive design enables the researcher provide an image of a situation or circumstance as it happens. For this study the researcher combined quantitative and qualitative (mixed) approaches.

### **3.3 Data Sources**

In order to carry out any research activity information must be gathered from proper sources. Therefore, to achieve the objective of this study both primary and secondary sources of data were used. The primary sources of the data were serves as main sources of the study, it was collected from the customer of commercial bank of Ethiopia who are currently utilizing e-banking products. In addition, secondary data were also obtained from different sources like research paper, articles, magazines, published and unpublished materials, books, internet, web sites and different official reports.

### **3.4 Population of the Study**

The study population comprised customers of commercial bank of Ethiopia, Gezahegniyilma branch and Paulo's branch. The selected two branches are chosen because of the proximity and availability of data for the researcher. For this reasons customers in the two selected branches of Commercial bank of Ethiopia formed the study or target population. The branches have an average of about 5,000 customers of which 3,000 from Paulo's branch and 2,000 from Gezahegniyilma branch who are currently active users of E-payment products as verbally the researcher was given the number of customers' who operate different bank products.

### **3.5 Sample Size and Sampling Techniques**

The sample size is the number of respondents the researcher selects from the target population to constitute a sample that fulfils the requirements of representativeness of the target population (Kothari, 2008). A total of 370 individuals, who are customers' of Commercial Bank of Ethiopia, Gezahegniyilma and Paulo's branch, in which 222 participants were from paulos branch and 148, are from Gezahegniyilma branch; the reason to take more customers from Paulo's branch is that there is large number of customers of e-banking users compared to Gezahegniyilma branch and the researcher takes equal proportion. These customers were selected using convenience sampling technique, a non-probability sampling method. Non probability sampling is any sampling method where some elements of the population have no chance of selection, or where the probability of selection cannot be accurately determined. It involves the selection of subjects based on assumptions regarding the population of interest, which forms the criteria for selection. This strategy was chosen because sampling participants using the list of customers of

the bank was a challenge. The convenience sampling technique used is a type of non-probability sampling which involves the samples being drawn from that part of the population which is close to hand. That is, a participants were selected because it is readily available and it is convenient to be selected. In this study, the participants were approached as they enter the banking hall for business and as per they agreed to participate in answering the questions on the questionnaire.

To determine the sample size, the Yamane (1967) formula will be used thus:

$$n = \frac{N}{1 + Ne^2}$$

Where n= required responses

N= population size

e<sup>2</sup>= sampling error limit

N=5,000

e = 0.05

1= Designates the probability of the event occurring

$n = \frac{N}{1 + Ne^2}$

$n = \frac{5000}{1 + 5000 * 0.0025}$

$n = 370.37 \sim 370$

**n=370**

### **3.6 Methods of Data Collection**

To collect primary data from the respondent's the instrument applied was a structured self-administered questionnaire with predetermined questions prepared in English and converted to Amharic for the respondents who couldn't understand the foreign language and the researcher assist the respondents while filling. The questionnaires were structured in close-ended type and responses to the questions were measured on a five Likert rating scale where: Strongly Agree = 5; Agree = 4; Neutral =3, Disagree = 2; and Strongly Disagree = 1; The use of



Likertscale is to make it easier for respondents to answer question in a simple way. Personally administered questionnaires provide high response rate, questions can be more detailed, rapport with respondents and usually a convenience. The secondary sources of data collected were including the internal source and external source. Internal secondary source includes annual reports, newsletter, while external source include other research papers regarding customer service delivery through E-banking.

### **3.7 Pilot Testing and Scale Reduction**

Researchers strongly recommend pilot testing of the instrument. A sample of 30 customers is used, in the pilot testing, to validate the instrument. The respondents are found no difficulty in answering the questions except three. Therefore, the researcher obliged to avoid them because of irrelevancy to the topic under study and the number of items further reduced to 26 items. The resulted items were placed before a panel of two judges (a senior E-payment staff and senior E-payment reconciliation officer) who scrutinized them for clarity in meaning, repetition, and relevancy to the concept of E-banking and customer service delivery assessment. However, the researcher could only avoid one item due to redundancy. Therefore, the final items become 25. Finally, nominal scale were used to collect personal information about respondents and five point Likert scale ranging from five (strongly agree) to one (strongly disagree) were used to empirically measure the response of customers

### **3.8 Validity and Reliability**

#### **3.8.1 Validity of the Data**

Validity is concerned with whether the findings are really about what they appear to be about. Validity defined as the extent to which data collection method or methods accurately measure what they were intended to measure (Sounders et. al., 2003). Numbers of different steps were taken to ensure the validity of the study:

- Data were collected from the reliable sources, from respondent who has experiences in using the service of the bank.
- Survey question were made based on literature review and frame of reference to ensure result validity

- The participant's shall be brief early in advance by the researcher on the need and importance of the study and permission sought for their participation in order to have their full support.
- Guidance on how to answer the questionnaire was available from the researcher. This was ensured high completion rate and accuracy of the information provided.

### 3.8.2 Reliability of the Data

Reliability refers to the extent to which the items measure accurately and consistently what they intend to measure. The instrument for this study contains 25 items that are in a Likert scale type. The overall reliability of the instruments is measured. A cronbach's alpha of 0.726 is obtained which is well above what is considered acceptable by scholars which is 0.7 (D. L. R Van der Waldt, T. M. Rebello and W. J. Brown, 2009).

#### Reliability Statistics

| Cronbach's Alpha | No of Items |
|------------------|-------------|
| .726             | 25          |

Table1:Cronbach's alpha

### 3.9 Methods of Data Analysis

Once the data are collected it is edited, coded, cleaned and then entered in to the SPSS (Statistical Package for Social Sciences) version 20.0. It was used to compute and analyze the data.

### 3.10 Ethical Considerations

The study is ethically cleared from school of graduate studies St. Mary's university. The researcher was used the data from customers which were collected through questionnaire; as per the permission had obtained from the customers. To maintain the confidentiality of the information provided by the respondents, the respondents are instructed not to write their names

on the questionnaire and assured of that the responses would be used only for academic purpose and kept confidential. Brief description of the central objectives or purpose of the study and the potential benefit of the research outcome to respondents and commercial bank of Ethiopia was clearly give in the introductory part of the questionnaire so as to motivate them and participate in the study and provide pertinent information about the company under study. Finally, respondents were included in the study based on their free will.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

#### **4.1 Introduction**

In this chapter, the data collected through questionnaires were presented, analysed and interpreted. The data collected was analyzed using descriptive statistics that include the frequency, charts, tabular and percentages. It's presented logically as per the study objectives.

#### **4.2 Questionnaire Return Rate**

A total of 370 questionnaires were administered to customers of Commercial bank of Ethiopia E-banking product users in the selected two branches. Of these, 320 questionnaires were successfully completed and returned by respondents, giving a response rate of 86.26%. This was a significant number that would give reliable results.

| <b>Branch</b>        | <b>Distributed</b> | <b>Returned rate received</b> | <b>Percentage</b>    |
|----------------------|--------------------|-------------------------------|----------------------|
| Paulos Branch        | 222                | 194                           | 87.40%               |
| GezahegnYilma Branch | 148                | 126                           | 85.13%               |
| <b><i>Total</i></b>  | <b><i>370</i></b>  | <b><i>320</i></b>             | <b><i>86.26%</i></b> |

**Table 4.2.1: Questionnaire return rate**

#### **4.3 Demographic characteristics of the respondents**

The study sought to establish demographic characteristics of respondents based on sex, age, marital status, Educational level, Nationality, and monthly income of respondents.

**Table 4.3.1: Demographic characteristics of the respondents**

| <b>Variable</b>          | <b>Classification</b> | <b>Frequency</b> | <b>Percentage</b> |
|--------------------------|-----------------------|------------------|-------------------|
| <b>Sex</b>               | Male                  | 215              | 67.2              |
|                          | Female                | 105              | 32.8              |
|                          | <b>Total</b>          | <b>320</b>       | <b>100.0</b>      |
| <b>Age</b>               | Below 20              | 6                | 1.9               |
|                          | 20-30                 | 79               | 24.7              |
|                          | 31-40                 | 94               | 29.4              |
|                          | 41-50                 | 88               | 27.5              |
|                          | 51-60                 | 35               | 10.9              |
|                          | Above 60              | 18               | 5.6               |
|                          | <b>Total</b>          | <b>320</b>       | <b>100.0</b>      |
| <b>Marital Status</b>    | Single                | 125              | 39.1              |
|                          | Married               | 180              | 56.3              |
|                          | Divorced              | 10               | 3.1               |
|                          | Widowed               | 5                | 1.6               |
|                          | <b>Total</b>          | <b>320</b>       | <b>100.0</b>      |
| <b>Educational Level</b> | Only read and write   | 1                | .3                |
|                          | Basic J.H.S           | 9                | 2.8               |
|                          | Secondary School      | 45               | 14.1              |
|                          | Tertiary School       | 41               | 12.8              |
|                          | Diploma               | 64               | 20.0              |
|                          | First degree holder   | 132              | 41.3              |
|                          | Master degree         | 28               | 8.8               |
|                          | <b>Total</b>          | <b>320</b>       | <b>100.0</b>      |
| <b>Nationality</b>       | Ethiopian             | 317              | 99.1              |
|                          | Foreigner             | 3                | .9                |
|                          | <b>Total</b>          | <b>320</b>       | <b>100.0</b>      |
|                          | Below 1000            | 33               | 10.3              |
|                          | 1001-2000             | 16               | 5.0               |

|                       |              |            |              |
|-----------------------|--------------|------------|--------------|
| <b>Monthly income</b> | 2001-3000    | 11         | 3.4          |
|                       | 3001-4000    | 33         | 10.3         |
|                       | 4001-5000    | 49         | 15.3         |
|                       | 5001-6000    | 137        | 42.8         |
|                       | above 6000   | 41         | 12.8         |
|                       | <b>Total</b> | <b>320</b> | <b>100.0</b> |

**Source: Primary data, 2018**

Based on the above table respondents of sex classification, from the total 320 respondents 215 were males which represent 67.2%; on the other hand 105(32.8%) of respondents were females. This is indicated that from total participant's number of males were greater than number of females. Based on this indication, sex ratios of the respondent's proportion of males using E-payment products are greater than females. Though the number of males sampled is more than the females, it did not affect the result of the study. This is because the gender of the respondents did not have any direct bearing on the responses he or she provided.

Table 4.3.1 above also shows the age of respondents beginning from below 20 up to above 60 who engage themselves in utilizing E-banking products. Majority of respondents were between ages 31 to 40 which constituted 29.7% of the most customers selected to fill the questionnaires in the selected branches of the bank and followed by respondents of 27.5% (41-50), 24.7% (20-30), 10.9% (51-60) age in years respectively. Those below the age of 20 which represent 6 (1.9 %) were few in number as they are compared to others. This shows that younger adults are seen to be more interested in using new technologies, like the internet to conduct activities such as looking for new products and product information to compare and evaluate their options.

Moreover, Table 4.3.1 shows the marital status of respondents who engage themselves in accessing of electronic banking service channels. The table shows that 180(56.3%) of the respondents are married, 125(39.1%) are single, 10(3.1%) are separated (divorced), while 5(1.6%) are widowed. This implies that majority of the participants in the research survey were married. This is also an indication that majority of the customers of commercial bank of Ethiopia E-banking users in the selected branches are married.

Additionally, the above table 4.3.1 shows the distribution of respondents' educational qualification. The table shows that 132(41.3%) of the respondents had First degree holder,

64(20%) had Diploma degree, 45(Secondary school), 28(8.8%) had master's degree, while 9(2.8%) are junior school and 1(0.3%) was only read and write. This implies that majority of the respondents that participated in the research survey had First degree holder as their educational qualification. This could also imply that most people who operate E-banking Product accounts with commercial bank of Ethiopia in the selected branches are learned people who can access the new technology. This is an indication that majority of the respondents or participants in this study are people who are educated up to first degree level and as such expected to know about e-banking. This information is also shown using a tabular form.

Since the sampling follows convenience sampling method, the researcher tried to include foreigners who use CBE's E-banking products to access their bank accounts. As the above finding shows however, only 3(0.9%) foreigners could be found. The remaining 317 (99.1%) are Ethiopian citizens.

Finally, table 4.3.1 shows the monthly income distribution of the respondents who participated in the research survey. The table shows that 11(3.4%) of the respondents had monthly income between Birr 2001-3000; 16(5%) had monthly income between Birr 1001-2000; 33(10.3%) had monthly income between Birr less than 1000 and by the same amount between Birr 3001-4000; 41(12.8%) had monthly income above Birr 6000; 49(15.3%) had monthly income between Birr 4001-5000, while 137(42.8%) had monthly income between Birr 5001-6000. This implies that majority of the respondents that participated in the research survey had monthly income of Birr 5001-6000. This is an indication that majority of the respondents are people with good incomes.

#### **4.4 Customers' Awareness of E-banking Products/Services**

One of the objectives of the study was to examine the awareness level of customers when it comes to e-banking products. Customers can only patronize a service or product if they are aware of its existence and possible usage. Understanding the awareness level of customers regarding e-banking products will help banks in their e-banking management and policy. Respondents were asked a series of questions regarding their level of awareness and its usage. The responses to these questions are summarized as follows:

**Table 4.4.1 Customer's level of awareness of e-banking products/services in the bank**

| Statements  | Scales            | Frequency  | Percent      | Mean Score |
|---|-------------------|------------|--------------|------------|
| I am well informed that, the existence and usage of different type of payment card services in the bank | Strongly disagree | 7          | 2.2          | 3.95       |
|   | Disagree          | 23         | 7.2          |            |
|   | Neutral           | 46         | 14.4         |            |
|   | Agree             | 146        | 45.6         |            |
|   | Strongly agree    | 98         | 30.6         |            |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |            |
| I am well informed that the existence and use of ATM services in the bank                               | Strongly disagree | 3          | .9           | 4.49       |
|   | Neutral           | 8          | 2.5          |            |
|   | Agree             | 135        | 42.2         |            |
|   | Strongly agree    | 174        | 54.4         |            |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |            |
| I am well informed that the existence and use of Mobile banking services in the bank                    | Strongly disagree | 9          | 2.8          | 3.97       |
|   | Disagree          | 18         | 5.6          |            |
|   | Neutral           | 44         | 13.8         |            |
|   | Agree             | 152        | 47.5         |            |
|   | Strongly agree    | 97         | 30.3         |            |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |            |
| I am well informed that the existence and use of internet banking services in the bank                  | Strongly disagree | 26         | 8.1          | 3.32       |
|   | Disagree          | 60         | 18.8         |            |
|   | Neutral           | 98         | 30.6         |            |
|   | Agree             | 59         | 18.4         |            |
|   | Strongly agree    | 77         | 24.1         |            |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |            |
| I am well informed that the existence and use of POS machine services in the bank                       | Strongly disagree | 8          | 2.5          | 3.70       |
|   | Disagree          | 48         | 15.0         |            |
|   | Neutral           | 52         | 16.3         |            |
|   | Agree             | 135        | 42.2         |            |

|  |                |            |              |  |
|--|----------------|------------|--------------|--|
|  | Strongly agree | 77         | 24.1         |  |
|  | <b>Total</b>   | <b>320</b> | <b>100.0</b> |  |

**Source: Primary data, 2018**

Table 4.4.1 shows the distribution of responses on the frequency of awareness of customers on the existence of different card types and its generic features in the bank. The figure shows that 146(45.6%) of the respondents responded that they are “agree” about the existence of card banking services in the bank, and also 98(30.6%) of them were “strongly agree” on the statement of “I am well informed that the existence and usage of card banking services in the bank.” while 46(14.4%) and 23(7.2%) responded that as they are “Neutral” and “disagree” to the statement respectively. This implies that majority of the respondents (76.2%) in this research study are well aware about the existence of card banking and different card types and its service in the bank.

And also the above table 4.4.1 shows the distribution of responses on the frequency of awareness of customers on the existence of ATM machine in the bank. The table shows that 174(54.4%) of the respondents responded that they are “strongly agree” about the existence of ATM service in the bank, and also 135(42.5%) of them were agree on the statement of “I am well informed that the existence and usage of ATM services in the bank.” while 8(2.5%) and 3(0.9%) responded that as they are Neutral and Strongly disagree to the statement respectively. This implies that majority of the respondents (96.6%) in this research study are well aware about the existence of ATM machine service in the bank and its mean score was higher than the other payment product which is 4.49. This may be as a result of the fact that the ATM plays a very vital role in the banking process. This includes the fact that the machines work even when the banks close and especially on the weekends. The situation may be on the rise especially as some banks are taking giant step in implanting ATM machines that has been configured to accept cash deposits. This result is not surprising because among most of the innovative e-banking products/services introduced over the years, the use of ATM technology is highly convenient for customers and users. Bank customers can easily obtain cash from their banks without having to be physically present at the bank premises. Apart from benefit of convenience, the ATM innovation is one of the most secure means for customers to access their cash. The ATMs innovation gives banking customers greater access to their money by taking banking to their doorsteps. There are virtually no queues in banking halls, no time limit for cash withdrawals and customers can easily access their bank balances. It is also one of the simplest e-banking



products as customers do not go through difficulties in cash withdrawal. All these benefits have contributed to make the ATM innovation one of the most successful banking innovations.

Moreover, table 4.4.1 shows the distribution of responses on the frequency of awareness of customers on the existence of Mobile banking service in the bank. The table shows that 152(47.5%) of the respondents responded that they are “agree” about the existence of Mobile banking service in the bank, and also 97(30.3%) of them were strongly agree on the statement of “I am well informed that the existence of Mobile banking services in the bank”, 44(13.8%) of the respondents were neutral, while 18(5.6%) and 9(2.8%) responded that as they are disagree and Strongly disagree to the statement respectively. This implies that majority of the respondents (77.8%) in this research study are well aware about the existence of Mobile banking service in the bank.

Additionally the above table 4.4.1 shows the distribution of responses on the frequency of awareness of customers on the existence of Internet banking service in the bank. The table shows that 98(30.6%) of the respondents responded that they are “neutral” about the existence of internet banking service in the bank, and also 77(24.1%) of them were strongly agree on the statement of “I am well informed that the existence of internet banking services in the bank”, 60(18.8%) of the respondents were disagree, while 59(18.4%) and 26(8.1%) responded that as they are agree and Strongly disagree to the statement respectively. This implies that majority of the respondents in this research study are well aware about the existence of internet banking service in the bank, even though they are not much as ATM and mobile banking service and this affect the service delivery of the bank.

Lastly table 4.4.1 shows the distribution of responses on the frequency of awareness of customers on the existence of POS machine service in the bank. The table shows that 135(42.2%) of the respondents responded that they are “agree” about the existence of POS machine service in the bank, and also 77(24.1%) of them were “strongly agree” on the statement of “I am well informed that the existence of POS machine services in the bank”, 52(16.3%) of the respondents were “neutral”, while 48(15%) and 8(2.5%) responded that as they are “disagree” and “Strongly disagree” to the statement respectively. This implies that majority of the respondents in this research study are well aware about the existence of POS machine service in the bank and this has contributes to the service delivery of the bank.

Generally, from the above table 4.4.1 it is evident that customers are generally aware of e-banking products in their banks. These responses in favour of awareness indicate that the banks have done much to create awareness of their e-banking products. However it would have been more prudent for the researcher to know the number of customers using e-banking services with respect to the various bank branches. This information was not available because of confidentiality and also the cumbersome nature to gain these statistics.

**Table 4.4.2 Responses from customers regarding awareness created through different media platforms**

| Statements  |                   | Frequency  | Percent      | Valid Percent |
|---|-------------------|------------|--------------|---------------|
| Telephone calls make me to know electronic banking service channels very well             | Strongly disagree | 130        | 40.6         | 40.6          |
|   | Disagree          | 68         | 21.3         | 21.3          |
|   | Neutral           | 103        | 32.2         | 32.2          |
|   | Agree             | 16         | 5.0          | 5.0           |
|   | Strongly agree    | 3          | .9           | .9            |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> | <b>100.0</b>  |
| Advertisement on the media makes me to know electronic banking service channels very well | Strongly disagree | 4          | 1.3          | 1.3           |
|   | Disagree          | 7          | 2.2          | 2.2           |
|   | Neutral           | 10         | 3.1          | 3.1           |
|   | Agree             | 94         | 29.4         | 29.4          |
|   | Strongly agree    | 205        | 64.1         | 64.1          |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> | <b>100.0</b>  |
| Notice within the bank makes me to know electronic banking service channels very well     | Strongly disagree | 1          | .3           | .3            |
|   | Disagree          | 9          | 2.8          | 2.8           |
|   | Neutral           | 25         | 7.8          | 7.8           |
|   | Agree             | 168        | 52.5         | 52.5          |
|   | Strongly agree    | 117        | 36.6         | 36.6          |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> | <b>100.0</b>  |

**Source: Primary data, 2018**

Table 4.4.2 shows the distribution of respondents' level of awareness created through advertisement on the media about E-banking products of Commercial bank of Ethiopia. The table shows that 205(64.1%) of the respondents indicated that they were "strongly agree" with the statement of "advertisement on the media makes me to know electronic banking service channels very well". 94(29.4%) of the respondents indicated that they were "agree"; and 10(3.1%) were "neutral", while 11(3.5%) of them disagree with the issue. This implies that majority of the respondents who are utilizing E-payment products are well informed about the products through advertisement on the media.

Again the results on the above table 4.4.2 indicated that the respondents of 130(40.6%) were "strongly disagree", 103(32.2%) of respondents were "neutral", 68(40.6%) of respondents were "disagree", 16(5.0%) of respondents were "agree" and 3(0.9%) of respondents were "strongly agree" on the issues. Thus lead that the largest per cent of the respondents were disagreed that creation of awareness on customers about the usage of E-banking service technology by telephone calls was very minimal in the bank and this affects the service delivery of the bank through e-banking product delivery channels.

Lastly the results on the above table indicated that the respondents of 168(52.5%) were agree, 117(36.6%) of respondents were strongly agree, 25(7.8%) of respondents were neutral, 9(2.8%) of respondents were disagree and 1(0.3%) of respondents were strongly disagree on the issues. Thus lead that the largest per cent of the respondents were strongly agreed that creation of awareness on customers of using E-banking service technology by notice within the bank was very high and this positively affects the service delivery of the bank through e-banking product delivery channels.

Generally, from the above table 4.4.2 in response to the questions raised to the respondents through which their awareness was created, majority of the respondents were agreed that; advertisement on the various media platforms, and notice within the bank had greater contribution than telephone calls. Therefore these responses indicate that the banks through advertisement and notices within their premises are putting much effort in promoting awareness of e-banking services.

#### 4.5 Customers Preference between Banking in the Halls and E-banking

**Table 4.5.1 Customers Preference between Banking in the Halls and E-banking**

| <b>Statements</b>   | <b>Scales</b>     | <b>Frequency</b> | <b>Percent</b> | <b>Valid Percent</b> |
|---|-------------------|------------------|----------------|----------------------|
| I prefer to transact my business by electronic banking service delivery channels than on the face to face basis (banking in the hall) | Strongly disagree | 35               | 10.9           | 10.9                 |
|   | Disagree          | 163              | 50.9           | 50.9                 |
|   | Neutral           | 45               | 14.1           | 14.1                 |
|   | Agree             | 49               | 15.3           | 15.3                 |
|   | Strongly agree    | 28               | 8.8            | 8.8                  |
|   | <b>Total</b>      | <b>320</b>       | <b>100.0</b>   | <b>100.0</b>         |
| Difficulty in assessing the internet /network/ is the problems associated with banking with e-banking channels                        | Strongly disagree | 8                | 2.5            | 2.5                  |
|   | Disagree          | 9                | 2.8            | 2.8                  |
|   | Neutral           | 4                | 1.3            | 1.3                  |
|   | Agree             | 115              | 35.9           | 35.9                 |
|   | Strongly agree    | 184              | 57.5           | 57.5                 |
|   | <b>Total</b>      | <b>320</b>       | <b>100.0</b>   | <b>100.0</b>         |
| Insecurity associated with the system is the problems associated with banking with e-banking channels                                 | Strongly disagree | 4                | 1.3            | 1.3                  |
|   | Neutral           | 77               | 24.1           | 24.1                 |
|   | Agree             | 123              | 38.4           | 38.4                 |
|   | Strongly agree    | 116              | 36.3           | 36.3                 |
|   | Total             | 320              | 100.0          | 100.0                |
|   | <b>Total</b>      | <b>320</b>       | <b>100.0</b>   | <b>100.0</b>         |

**Source: Primary data, 2018**

The researcher in this section wants to find out the banking services provided by Commercial bank of Ethiopia; Electronic Banking or manual banking services and compared the customer's usage between E-banking and manual banking system. It was observed that the bank provides both manual and electronic banking services. Table 4.5.1 shows the distribution of responses on whether "They prefer banking in the hall and banking through e-banking service delivery channels". This was taken as a factor that influenced e-banking customer service delivery. The figure shows that 163(50.9%) of the respondents "disagree" with the statement, 45(14.1%) of the respondents were remain "neutral"; 49(15.3%) of the respondents "agree", while 35(10.9%) of the respondents "strongly agree". This implies that majority of the respondents (61.8%) in this research study were "disagree" that they prefer to transact their business by electronic banking service delivery channels than on the face to face basis. On the other hand customers prefer banking in the halls or face to face banking services than through electronic banking service delivery channels.

Table 4.5.1 also shows the distribution of responses on the issues related to the problems associated with the internet or network and banking with e-banking service delivery channels. The table shows that 184(57.5%) of the respondents "strongly agree" with the statement "Difficulty in assessing the internet /network/ is the problems associated with banking with e-banking service delivery channels", 115(35.9%) of the respondents were "agree"; and 4(1.3%) of the respondents were "neutral". This implies that majority of the respondents in this research study are "strongly agree" that; as there is difficulty in assessing the network is the problem associated with banking with electronic banking service delivery channels and affect their preference of E-banking products.

Lastly, table 4.5.1 shows the distribution of responses on the issues related to the insecurity associated with the E-banking service delivery channels. The table shows that 123(38.4%) of the respondents "agree" with the statement, 116(36.3%) of the respondents were "strongly agree"; and 77(24.1%) of the respondents were "neutral", while 4(1.3%) of them are strongly disagree to the issue. This implies that e-banking is prone to security breaches. Because those that agreed to the issue are ranked first and those that are strongly agreed had the second rank and followed

by those who are remain neutral and respondents that strongly disagreed were ranked last. This notwithstanding is not surprising since e- banking such as fraud by internet hackers, account debited without successful transaction and also most of the insecurities are caused by the customers. Some customers may have their password leaked as a result of carelessness and also not conforming to the operational regulations of the bank.

#### 4.6 Benefits of Electronic Banking System

**Table 4.6.1 Customers Perception of Benefits of Electronic Banking**

| <b>S.no</b> | <b>Statements</b>  | <b>Mean</b> | <b>Rank</b> |
|-------------|--|-------------|-------------|
| 1           | E-banking services are enables users to complete banking activities quickly and saves time                           | 4.49        | 1           |
| 2           | Electronic banking minimizes the risk of carrying cash   | 4.45        | 2           |
| 3           | E- Banking makes it easier for customers to do banking activities  | 4.35        | 3           |
| 4           | E-banking is highly convenient for customers than traditional banking  | 4.30        | 4           |
| 5           | E-banking increase information access to customers by providing real time information on the money in their accounts | 4.25        | 5           |
| 6           | It is easy to contact my bank whenever necessary   | 4.00        | 6           |
| 7           | E-banking products improve customer service  | 3.41        | 7           |
| 8           | My bank's services are reliable (i.e. service is available anytime).   | 3.32        | 8           |
| 9           | Electronic banking service is free of charge at my bank.   | 2.50        | 9           |

The study also investigated the benefits of electronic banking to customers. E-banking services have been found to contribute significantly to the service delivery of Commercial bank of Ethiopia. This is evident in the areas of its usefulness, convenience, minimizes risk of carrying cash, reliability, time saving and quick service among other benefits. Table 4.6.1 shows the mean scores of customer’s perceptions of the benefits of electronic banking products. It is observed that the statements, “*E-banking services are enables users to complete banking activities quickly and saves time*”, “*Electronic banking minimizes the risk of carrying cash*”, and “*E- Banking makes it easier for customers to do banking activities,*” have the highest mean scores of 4.49, 4.45 and 4.35 respectively. This implies that E-banking service delivery channels drastically reduce time that would have been spent in the banking hall to transact business. Network failure which is unpredictable could account for the few who mentioned that the Electronic Banking did not lead to quick service delivery. However, with increase investment in technology this could be addressed. The statements “*My bank’s services are reliable (i.e. service is available anytime)*” (3.32) and “*Electronic banking service is free of charge at my bank*” (2.50) had the lowest mean scores. This implies that Commercial bank of Ethiopia charge their customers while they used or got the services through electronic service delivery channels. But this affects the preference of customers to electronic banking and forces the customers to use banking in the halls or face to face banking.

#### 4.7 Outcomes of Transaction Failure in Usage of E-banking Products

**Table 4.7.1 Outcomes of Transaction Failure in Usage of E-banking Products**

| Statements   |                   | Frequency  | Percent      | Mean |
|--|-------------------|------------|--------------|------|
| I am disappointed following an ATM service failure | Strongly disagree | 2          | .6           | 4.42 |
|  | Disagree          | 7          | 2.2          |      |
|  | Neutral           | 6          | 1.9          |      |
|  | Agree             | 145        | 45.3         |      |
|  | Strongly agree    | 160        | 50.0         |      |
|  | <b>Total</b>      | <b>320</b> | <b>100.0</b> |      |
| E-banking products transaction                     | Strongly disagree | 5          | 1.6          |      |

|   |                   |            |              |      |
|---|-------------------|------------|--------------|------|
| service failure affect my willingness to patronize the bank again   | Disagree          | 22         | 6.9          | 4.17 |
|   | Neutral           | 15         | 4.7          |      |
|   | Agree             | 150        | 46.9         |      |
|   | Strongly agree    | 128        | 40.0         |      |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |      |
| E-banking products service failure made me think of switching to another bank                               | Strongly disagree | 10         | 3.1          | 3.99 |
|   | Disagree          | 17         | 5.3          |      |
|   | Neutral           | 32         | 10.0         |      |
|   | Agree             | 168        | 52.5         |      |
|   | Strongly agree    | 93         | 29.1         |      |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |      |
| E-banking service delivery channels transaction failure discourages one from recommending the bank to other | Strongly disagree | 3          | .9           | 4.15 |
|   | Disagree          | 17         | 5.3          |      |
|   | Neutral           | 18         | 5.6          |      |
|   | Agree             | 173        | 54.1         |      |
|   | Strongly agree    | 109        | 34.1         |      |
|   | <b>Total</b>      | <b>320</b> | <b>100.0</b> |      |

**Source: Primary data, 2018**

The effects of transaction failure in usage of e-banking products revealed above has further implications: namely, the customer willingness to patronize banks after service failure, customers switching from one bank to another, and refusal to recommend the services of the banks to others. It was shown (Table 4.7.1) that more than 86% of the respondents become unwilling to patronize a bank once they experience transaction service failure; and more than 81% E-banking products service failure made them to think of switching to another banks whose E-banking services delivery channels provide better services; and generally refuse to put in the good word on behalf of the bank whose E-banking product failed them in their hour of need. Move over Experience shows that customers do break the card due to the failure of the ATM to dispense cash requested at a particular point of needs. E-banking products transaction failure make customer to be dissatisfied which affect the banks customer base by losing the customer



to the other competitors. Similarly by delivering high level of customer's satisfaction, it improves customer's loyalty to the organization. Service failure affect customer's patronage and acceptance/adoption as it erode customer's confidence on the product.

Generally, E-banking service delivery channels transaction failure affect both the bank and the customer, because customers have always a choice of switching to another bank who provide better services to them and also they suffer from transaction failure when their accounts are debited without cash disbursement or other related problems which affect customers' accounts. The outcomes are in line with those of earlier studies made by Mohammed, AlhajiAudu and Alexander Solomon Oghoyone (2014).

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter deals with the summary of major findings, conclusions and recommendations for the research findings in line with objectives of the study. The recommendations part on the other hand suggests possible solutions to the major findings of the study.

#### 5.2 Summary of the Major Finding

The study was a descriptive study aimed at understanding the electronic banking system and customer service delivery in two selected branches of commercial bank of Ethiopia. Purposive sampling strategy was adopted to select 370 customers from the two selected branch of the bank. Questionnaire was used as the principal tool for the data collection. The data was analysed using basic statistical tools such as frequencies, mean, charts, tables and percentages. Most of the questions were framed in a closed ended manner. The SPSS version 20 windows software was used in analysing the data.

- The study revealed customers of the selected branches are generally aware of the Various e-banking platforms available at their respective bank. Analysis of the customer responses indicates that 77.2% of the respondents were much informed of e-banking products. Only 5.6% of the respondents stated that they are unaware of the e-banking products offered by the banks, while 17.2% remain neutral.
- The results further show that they are well aware about the existence of main e-banking products such as card banking, ATM, mobile banking, POS machine and Internet banking services. Among these e-banking products, the ATM appears to be highly well aware by customers which constituted 96.6% and followed by Mobile banking 77.8% of the respondents. The result from the analysis indicated that the bank created such awareness for customers through advertisement on the media and notice within the bank. Whereas awareness creation through telephone calls was relatively very low this counts 5.9% of the respondents' who agree with it.

- Next , the study provided further evidence to the fact that using electronic banking products saves time, makes banking services more convenient and quickens service delivery among others.
- The study also uncovered some findings. For example the study brought to the fore that customers prefer to transact business through face to face basis in the halls than e-banking service delivery channels, due to difficulty associated with network and insecurity of accessing e-banking products. When asked to rate their level of patronage of e-banking products 24.1% prefers banking with e-banking products than long queues in the banking hall and 61.8% prefer banking in the hall.
- Lastly, the study also reveal that majority of the customers that experience e-banking products transaction failure feel demoralized or disappointed and make them to think of switching to the other banks as well as discourages them from recommending the banks e-banking products to others.

### **5.3 Conclusions**

The following conclusions are made based on the review of the related literature and data obtained from respondents and secondary data. All conclusions and recommendations are presented as per the research objectives of this study.

- From the study, it is possible to conclude that customers were highly aware of the existence of electronic banking services and products.
- Among others it is also approved that basic benefits of E-banking for the customers are convenience, accessibility, saves time and quick, providing real time information, minimizes risk of carrying cash, and getting quality service.
- From the study, customers admitted they prefer banking halls to the electronic banking services in spite of the long time they waste in queues. They cited among other things the difficulty of the internet or networks in accessing the electronic banking services and products as well as the perceived insecurity associated with its usage.
- The study also revealed that E-banking transaction service failure affect customer moral there by affecting products acceptance E-banking products which will affect the acceptance of cash less policy drive in the country as one of the alternative channels.

- In general, the findings of this study offer additional insights into the current E-banking System situation and its implications for E-banking growth in commercial bank of Ethiopia as a leading government bank in Ethiopia. Furthermore, the understanding of the E-banking products and customer service delivery may help to identify the best course of actions to promote its implementation. It will also be valuable to all banking industries of the country to increase their awareness and understanding of E-banking benefits and its way of implementation.

#### **5.4 Recommendations**

E-banking system is a new financial evolution in Ethiopia, but it's an important issue, because it has a great impact on the whole banking system, at the same time it's difficult and need a lot of efforts to be implemented and practiced by the banking industry, so it need a lot of efforts to succeed. Based on the above conclusion, the researcher recommends the following points:

- ✓ The study indicated that majority of the customers were aware of the existence of varied electronic products in the banks. This was a positive phenomenon and as such the researcher recommends that giant step should be taken in sustaining the high awareness level. It should be however, stated that the awareness was not hundred per cent as such the banks should not be complacent as there is always more room for improvement. Moreover, making proper customers awareness about E-banking services and to establish a strong link with customers by focusing on advantages of E-banking which are convenience, minimizing of carrying cash risk, and time saving through different advertisement media platforms. Furthermore, since it is the duty of the concerned staff to provide all information to its customers, they should provide all materials to customers that demonstrate how to use electronic banking and the bank also need to arrange successive training programs for enhancing the awareness level of individuals of customers and staffs. These actions might aid to attract new customers to use electronic banking.
- ✓ Banks should give high priority to customer service delivery and should consider electronic banking as important key drivers towards successful implementation of

customer service delivery. It is therefore important that banks constantly improve and upgrade their e-banking system's security. In order to change the perception, the bank will be required to post security provisions on their websites so as to increase confidence and improve trustworthiness of the e-banking systems.

- ✓ The study established that ATM usage was high among customers. This was positive and encouraging. The researcher therefore recommends that more user friendly automated teller machines be put not only at the bank premises but also around vantage points to boost business transactions. In the occurrence of E-banking products service failure include proper maintenance of the channels to avoid fail transaction, faithfully implementation of refund guideline reduced lead time in the refund process, prompt and polite attention to customer's complains improve the customers positive feeling towards usage of e-banking service delivery channels

### **5.5 Recommendation for Future Research**

Electronic banking services have become one of the mainstream banking strategies globally. In spite of its numerous advantages there have been some challenges which hinders its optimum usage both to the public and the bank themselves. The complexities associated with e-banking patronage are so large that a single study could not discover all. Again, due to limited resources and time this study could only sample two branches of commercial bank of Ethiopia. In view of the above, the researcher recommends that funds be made available from the concerned source for the study to be replicated in the other banks since the findings of the current study indicated that there are varied challenges as well as advantages with electronic banking services. Recommendations from such a study would lead to a much better administration and patronage of electronic banking product for economic growth and development.

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**APPENDIX I**  
**ST.MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

I am GizawTeshome, a postgraduate student of St.mary's university, school of Graduate studies, Addis Ababa. I am conducting this research as part of preparation for a Master's Degree Programme. This survey is aimed at understanding the E-Banking system and Service delivery to customers. In meeting this objective, you have been duly selected as a member of the sample to provide relevant and objective data needed to satisfy the quest for this knowledge. Your bank has been chosen as one of several others to be studied. The study is for learning purposes and as such I would appreciate your voluntary cooperation to complete the questionnaire. Your responses will not be disclosed to any person. I do appreciate the least effort you make at enabling me complete my programme successfully.

**Electronic banking is defined as:** the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels such as internet, mobile, POS, ATM etc.

*Thank you for your cooperation!*

*Best regards,*

*GizawTeshome*

*Tel No: 0923295511*

*MBA student at St Mary's University*

**Part I: Demographic Information**

Please indicate the following by ticking (✓) on the spaces in front of the response options:

**1. Sex:**

1. Male       2. Female

**2. Age:**

1. Below 20     3. 31-40     5. 51-60

2. 20-30       4. 41-50       6. Above 60

**3. Marital status:**

1. Single  2. Married  3. Divorced  4. Widowed

**4. Educational level:**

1. Only read and write  2. Basic J.H.S  3. Secondary (SHS)  4. Tertiary   
 5. Diploma holder  6. First degree holder  7. Master Degree  8. PhD

**5. Nationality:**

1. Ethiopian  2. Foreigner

**6. Monthly income (in Eth. Birr):**

1. Below 1000  2. 1001-2000  3. 2001-3000  4. 3001-4000   
 5. 4001-5000  6. 5001-6000  7. Above 6000

| Part II. | Now please indicate the degree to which you agree or disagree with the following Statements regarding E-Banking services in your bank. Use the scales as a guide.<br><br>SD: strongly disagree, DA: Disagree, N:neutral, A:agree, SA: strongly agree | SD | DA | N | A | SA |
|----------|--|----|----|---|---|----|
|          |  | 1  | 2  | 3 | 4 | 5  |
|          | <b>Question Items Related to Customer Awareness of Electronic Banking Systems.</b>   |    |    |   |   |    |
| 7.       | I am well informed that, the existence and usage of different type of payment card services in the bank  |    |    |   |   |    |
| 8.       | I am well informed that the existence and usage of ATM services in the bank  |    |    |   |   |    |
| 9.       | I am well informed that the existence and usage of Mobile banking services in the bank   |    |    |   |   |    |
| 10.      | I am well informed that the existence and usage of internet banking services in the bank   |    |    |   |   |    |
| 11.      | I am well informed that the existence and usage of POS machine services in the bank  |    |    |   |   |    |
| 12.      | Advertisement on the media makes me to know electronic banking service channels very well  |    |    |   |   |    |

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| 13. | Telephone calls make me to know electronic banking service channels very well   |  |  |  |  |  |
| 14. | Notice within the bank makes me to know electronic banking service channels very well   |  |  |  |  |  |
| 15. | As a customer of this bank my awareness regarding electronic banking service is good  |  |  |  |  |  |
|     | <b>Question Items Related to Customers Preference between Banking in the Halls and E-banking.</b>                                     |  |  |  |  |  |
| 16. | I prefer to transact my business by electronic banking service delivery channels than on the face to face basis (banking in the hall) |  |  |  |  |  |
| 17. | Difficulty in assessing the internet (network) is the problems associated with banking with e-banking channels                        |  |  |  |  |  |
| 18. | Insecurity associated with the system is the problems associated with banking with e-banking channels                                 |  |  |  |  |  |
|     | <b>Question Items Related to Benefits of Electronic Banking Service Channels</b>  |  |  |  |  |  |
| 19. | E- Banking makes it easier for customers to do banking activities   |  |  |  |  |  |
| 20. | E-banking is highly convenient for customers than traditional banking   |  |  |  |  |  |
| 21. | E-banking increase information access to customers by providing real time information on the money in their accounts                  |  |  |  |  |  |
| 22. | Electronic banking minimizes the risk of carrying cash  |  |  |  |  |  |
| 23. | E-banking services are enables users to complete banking activities quickly and saves time  |  |  |  |  |  |

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| 24. | It is easy to contact my bank whenever necessary  |  |  |  |  |  |
| 25. | My bank's services are reliable (i.e. service is available anytime)                                 |  |  |  |  |  |
| 26. | E-banking products improve customer service   |  |  |  |  |  |
| 27. | Electronic banking service is free of charge at my bank.  |  |  |  |  |  |
|     | <b>Question items related to the Outcomes of Transaction Failure in usage of E-banking Products</b> |  |  |  |  |  |
| 28. | I am disappointed following an E-Banking service failure  |  |  |  |  |  |
| 29. | E-banking products transaction service failure affect my willingness to patronise the bank again    |  |  |  |  |  |
| 30. | E-banking products service failure made me think of switching to another bank                       |  |  |  |  |  |
| 31. | E-banking products transaction failure discourages one from recommending the bank to other          |  |  |  |  |  |

*Thank you for taking the time to fill in this survey!!!*



5. □□□□

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 5. 4001-5000 □      6. 5001-6000 □  
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