



**WOLKITE UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF ACCOUNTING AND FINANCE**

**ASSESSMENT ON CHALLENGE AND OPPORTUNITY OF E-BANKING  
SERVICE IN COMMERCIAL BANK OF ETHIOPIA (THE CAUSE OF  
WOLKITE BRANCH)**

**THE SINEAR RESEARCH IS SUBMITTED TO DEPARTMENT OF  
ACCOUNTING AND FINANCE, IN PARTIAL FULFILMENT OF THE  
REQUIRMENTS FOR THE BACHELOR OF ART DEGREE IN  
ACCOUNTING AND FINANCE**

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**MAY, 2025**

**WOLKITE, ETHIOPIA**

**ADVISOR’S APPROVAL SHEETS**

**WOLKITE UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF ACCOUNTING AND FINANCE**

This is to certify that the thesis entitled “ **ASSESSMENT ON CHALLENGE AND OPPORTUNITY OF E-BANKING SERVICE IN COMMERCIAL BANK OF ETHIOPIA (THE CAUSE OF WOLKITE BRANCH)** ” submitted in partial fulfillment of the requirements for the Bachelor of Art in Accounting and Finance and has been carried out by TIRUKELEM BELSTI under our supervision. Therefore, I recommend that the student has fulfilled the requirements and hence hereby can submit the research paper to Department of Accounting and Finance.

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## **ACKNOWLEDGEMENT**

In performing our proposal paper, we had to take the help and guide lines of some respected persons, who deserve our greatest gratitude. The completion of this research gives us much pleasure. We would like to show our gratitude Mr ALEMAYEHU (MSc) for giving us good guide line for research proposal throughout numerous consultations. We would also like to expand our deepest gratitude to all those who have directly and indirectly guided us in writing this proposal paper. Many people, especially our classmates and team members itself, have made valuable comment suggestions on this proposal which gave us an inspiration to improve our research proposal. We thank all the people for their help directly and indirectly to complete our research proposal.

## **ABSTRACT**

E-banking is the most recent delivery channel of banking service in developing nations. The objective of the study will be to assess the development of e-banking service in commercial banks of Ethiopia and identify the determinants of the e-banking service and suggest recommendations based on study findings. To meet this objective, data were collected from both the bank employees and customers. Here, by the primary data collection method, the researchers will use questionnaires that contain open and close ended questions, and the data are analyzed by using qualitative and quantitative methods, using tables and percentages. The results of this research will be analyzed based on the data collected through questionnaires. Low level of internet penetration and poorly developed telecommunication infrastructure and lack of reliable power supply are among the key challenges for the development of e-banking in Ethiopia. Opportunities offered by ICT through e-learning programs and late adopter opportunities (i.e. using already developed and existing software applications) are the key prospects of e-banking. The study tries to recommend the possible and practical measures that the bank should take in order to achieve maximum customer satisfaction and to meet its targeted objectives. Among our important recommendations, one is that the bank should improve the low level internet penetration problem and lack of reliable power supply through cooperative work with Ethiopian Telecommunication Corporation and Ethiopian Electric Power Corporation.

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## ACRONYMS

ATM; Automated teller machine

POS: point of sales

EFT: Electronic fund transfer

UK: United Kingdom

USA: United States of America

SMES: Small and Medium Scale Enterprises

E-banking: Electronic banking

UNECA: United Nation Economies Commission for Africa

UNCTAD: United Nation Conference on Trade And Development

CBE: Commercial Bank of Ethiopia

# CHAPTER ONE

## 1. Introduction

### 1.1 Background of the Study

E-banking started in the early 1980 both in USA and UK. It really took off with the arrival of the World Wide Web. The evolution of e-banking started with the use on automatic teller machines (ATMs) and has online banking. ATMs represent a significant change in the banking industry because they offer a method of delivering bank services to customers without the need for contact between customers and staff. (Handerson1988).

The growing popularity of computers easy access to internet and World Wide Web (www) has increased the use of internet by banks of a channel for receiving instructional and also delivering their product service to the customers. This is generally referred to as “internet banking or I banking or net banking. (Ruby, Shukla2011).

The online banking facilities offered by various financial institution have many features and capabilities in common electronic banking system gives everybody the opportunity customer can perform non transactional talks through online banking viewing account balance, viewing recent transactions, down loading bank statements, ordering cheese, books, fare transfer, paying third parties, credit card application. (Sumani, tahiya, 2011).

Different types of e-banking technology (system) emerge, each bring new dimension to the interaction between users and bank they include automated teller machine (ATM), of bile and internet banking electronic funds transfer, direct bill payment of credit card, in Ethiopia internet banking service was introduced first by commercial bank of Ethiopia among these e-banking facilities, automated tiller machine is the first and well the concept of anywhere and anytime banking through the use of ATM cards one can operate not bank account to with draw money from any banks, ATM installed or available at the nearest site. Now a day, modern technology is being introduced in all fields and it is changing the world with full of innovations. For this reason, the traditional banking services are getting modernized by the use of electronic banking.

Banks are focusing on their electronic banking activities and are globally expanding e-banking activities exploring the use of wireless networks and venturing in to some new areas of electronic

commerce. Banks offer e-banking services to expand market share or as a cost saving strategy to reduce paper work and personnel (WWW.ehow.com).

E-banking is defined as the provision of retail and small value banking products and services through electronic channel. It implies a service that allows customers to use some form of computer to access account-banking includes varies banking activities conducted from sites other than a physical bank location. For instance, all over the world customer relay on ATMs to withdraw money from their demand deposit accounts at any hour (Mescon,2002).

The devices are making banking service very easy and convenient comparable to the traditional way. In this context, the study will attempt to trace the present status of e-banking service on commercial bank of Ethiopia in Wolkite town, visualize the opportunities and looks at the challenges faced in providing the service.

## **1.2. Statement of the Problem**

One of the benefit banks drive form electronic banking products and services delivery is improved officially and effectiveness of this operations. So that more transaction can be process faster and most conveniently, which will un duty impact significantly on the overall performance of the banks customer on the other hand stand to enjoy the benefit of quick service delivery, reduced frequency of going to banks physically and reduce cash handling, which will give to higher volume of turnover. (dogarawa Ahmed, 2005).

E-banking service of commercial bank of Ethiopia which shows moderate change when it comes to see of new forms of banking. Especially those that utilize technology like electronic banking system through local banks are equipping them serves necessary equipment fully networked their branches and lack of legislation to enable e-banking service. (sumani Yahlya, 2011).

Most of the peoples of Ethiopia are a customer of traditional banking which is characterized by physical decentralization, with branches scattered around populated areas to give customers easy geographical access (Aini et al., 2005).

Nowadays an electronic banking service is coming into existence. But, it is not clear whether all customers are comfortable with e-banking or not (Daniel &Story, 1997).

The researchers found that the problems are not limited on the required legal aspect but also there are a number of problems concerning infrastructure like telecommunication power supply, lack of

internet connection, high establishment cost, lack of properly trained man power in the field, customer illiteracy and lack of awareness about the new technology are also major challenges for the adoption of e banking service.

Even if there is insufficient internet facility and unclear level of customer's attitude towards on the use of e-banking, Ethiopian banks including Commercial banks of Ethiopia in wolkite town are used to provide e-banking services to their customers. So this research will attempt to assess the challenges and prospects of inhibiting acceptance of e-banking in commercial bank of Ethiopia in wolkite town

### **1.3 Research Questions**

The research was attempt to answer the following questions:

1. What are benefits of e-banking service?
2. What are the benefits of adopting e-banking service from the view points of banks?
3. What are the major challenges of e-banking in commercial bank of Ethiopia in wolkite town?
4. What are the accessible opportunities for the adoption of e-banking services in commercial banks of Ethiopia in wolkite town?
5. What is the competitive advantage of the market share of the banking by providing e- banking system?
6. How e-banking service contributes to increase customer satisfaction?

### **1.4 Objective of the Study**

#### **1.4.1. General Objective**

The main objective of the study is to assess the challenges and prospects of e- banking on commercial banks of Ethiopia particularly in wolkite town.

#### **1.4.2. Specific Objective**

The specific objectives of the study would be;

- ❖ To assess the benefit of e-banking service of commercial bank of Ethiopia.
- ❖ To identify the benefits realized by commercial banks in the adoption and practice of e-banking.

- ❖ To examine the major challenges of e-banking service in commercial bank of Ethiopia.
- ❖ To identify the accessible opportunities for the adoption of e-banking service in commercial bank of Ethiopia.
- ❖ To analyze the competitive advantage of market share of the bank by providing e-banking services in commercial bank of Ethiopia.
- ❖ To identify the contribution of e-banking system to increase customer satisfaction in commercial bank of Ethiopia.

### **1.5 Significance of the Study**

First of all, the study would be useful for Ethiopian commercial banks in order to see the prospects and challenges of e-banking on banks in comparison with the ordinary mortar and brick banking system. Also it helps to identify what actions should the banks take in order to benefit from the opportunities and how to overcome the challenges.

In addition, the study would have a significance to provide relevant information to public and private banks as well as to the concerned bodies in addressing the challenges and prospects of e-banking in commercial banks of Ethiopia. Furthermore, this research was alert bankers tomorrow's problems today in order to achieve the stated objectives. Moreover, it used to as an initiation for those who are interested to conduct a detailed and comprehensive study regarding with the challenges and prospects of e-banking in commercial banks of Ethiopia.

### **1.6 Scope of the Study**

Although there are different commercial banks in Ethiopia, this study targeted on CBE branches found in Wolkite city. I concerned with some employees and customers of those selected branches who are in the best position to disseminate the information. We select these one branches under consideration of cost, time, employee's experience, year of establishment amount of customer and under the assumption that they have better information access than other branches of commercial banks of Ethiopia in Wolkite city. The study primarily gives much emphasis to the challenges and prospects of e-banking service.

### **1.7 Limitation of the Study**

- There were some limitations to conduct the study, since the study did not cover all branches of CBE branch. There was also some metrology gaps were researcher use. The result of the study was not as what the researchers expected, because of:
- Financial source was not sufficient to gather all relevant information.
- The time allocated for data collections was not sufficient to gather all the relevant information.

### **1.8 Organization of the study**

The research is organized into five chapters: Chapter one focuses on the back ground of the study, problem statement, objectives, significance, scope of the study and limitation of the study. Chapter two, deals literature reviews capture here to gather with relevant information concerning online banking. Chapter three, detail of methodology follow to achieve result outline. It is including research design, source of data, target population, sample size and sampling technique, data collection instrument and data analysis. Chapter four contains data analysis, interpretation and presentation of the study. Chapter five focuses on conclusions and recommendations of the study.

## **CHAPTER TWO**

### **2. LITERATURE REVIEW**

Physical bank assure customer that their banks has substantial resource and guarantee the security of their saving. However technology is fast growing making it difficult for the traditional banking system to compete favorably with the advent of e-banking. The physical decentralization of the bank branches has been done away with customers not necessarily need to be physically present in the banking hall but can bank virtually or by other electronic means (puopiel felix 2014)

#### **2.1 Definition of E-Banking**

Different authors have defined e-banking in different ways based on their understanding of the application of electronic banking. According to Daniel (1999), electronic banking is electronic connection between the bank and customer in order to prepare, manage and control financial transactions and also it is online banking (or Internet banking) which allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society. This implies that E-banking is a service that allows an account holder to obtain account information and manage certain banking transactions through a personal computer via the financial institution web site on the internet. According to (Dava,2005) E-banking include the system that enables financial institution customer individual or business to access account transaction business or obtain transaction products and service can be accessed using intelligent electronic device such as personal computer (PC), personal digital assistance (PDA), automatic teller machine (ATM) or lunch tone telephone.

#### **2.2. Overview of E-banking**

The development of inexpensive computers and the spread of the internet make the market accessible and enable the customers to pay bills electronically. Most of developed countries bankers provide a web-site in which with one just log on and making a few clicks clients transmit payments electronically. Thus, for customers not only saving time, but withdrawing and paying bills become a pleasure, requiring little effort. Electronic payment systems are being provided even on marketing points and recurring bills can be automatically deducted from one's own bank account regularly right at transaction time. ([www.e-payment.com](http://www.e-payment.com) )

### **2.3. E-banking: Types**

Electronic banking (e-banking) is a range of banking services that utilizes electronic equipment and e-payment services around the world take different forms well which includes; Card Banking; like VISA card, debit card, online credit card payment system, Smart card based e-Payment system and Electronic Payment/Funds Transfer (EFT), Mobile Banking and Internet Banking

#### **Card Banking;**

##### **✓ Automated Teller Machine (ATM):**

It is a device that allows customers who have an ATM Card to perform routine banking transactions without interacting with the human teller. The ATM card holder can do most of the banking transactions like withdrawals, deposits of cash, balance enquiry, etc. Even Railway and Airway tickets can be blocked with the use of ATMs. Now a day, ATMs are offering a wide range of bank services with the technology of web-enabled ATMs. (Thulani et al, 2009)

##### **✓ Credit Card:**

It can be called as an equivalent of a loan sanctioned by the bank to its customers. Credit card facilitates and makes it possible to “Use First and Pay Later” the specified amount of credit as per the agreed terms of sanction. Before issuing the card, the bank would like to know and be sure the identification, age, level and source of income and repaying capacity. This card facilitates the cardholder to purchase goods and services from the merchant establishments and shops through the collaborating credit card companies like VISA, MasterCard, Maestro, and Cirrus. Interest will be charged by the bank on monthly basis for the credit provided through the card. And service charges also will be collected from the cardholder for the transaction and processing. (Stephen G.2006)

##### **✓ Debit Card:**

It provides for online electronic payment like Credit Card but from savings or current accounts of the cardholder for purchases. This card is a deposit access product where cardholder uses his own money in his bank account through the debit card on the principle of “Pay First and Use Later”. Debit card can be used to make purchase at retail shops and merchant establishments in the same way as the credit card is used. But in order to use the debit card, the cardholder must have sufficient

balance in his/her account. Debit cards are keys to modern retail banking. Without them, no bank can give the level of service that customers expect, cost-effectively, 24 hours a day, every day.

#### ✓ Smart Card:

It is an amazing piece of technology. It is the size of a regular ATM card but is capable of storing over 1000 times more data. The data can be encrypted and hence the card is completely temper-proof. The card can also be personalized to the holder by printing personal and other details on the card face. Smart card is issued to the formers to provide adequate and timely credit support for their cultivation needs including all purchases. The formers can use this card wherever they need. The loan amount sanctioned to the former will be recorded in the card. The merchants can sell the goods to the former based on the card and they can collect the amount from the local branch of the issued bank or any other bank. (Stephen G.2006)

#### Electronic Fund Transfer;

EFT system permits transfer of funds from any account at any branch of any member bank in any city to any other account at any branch of any member bank in any other city. This system utilizes the Service Branches of the member banks. It facilitates the transfer of funds from one place to another place within the country quickly and safely. Banks collect service charges from customers. Most of the time banks use Bank net system as a communication backbone connecting various centers of a country to facilitate the transfer of inter-bank or inter-branch messages. Most of the centers of a country are being brought on the network. The main objective of the Bank net is to speed up the process of transfer of funds from one bank to another bank and one branch to another branch. (Stephen G.2006)

#### Mobile banking

Mobile banking is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or personal digital assistant (Michael H.mescon,2002).

#### Internet Banking

Internet banking refers to systems that enable bank customer to get access to their accounts and general information on bank products and services through the use of banks website, without the intervention or inconvenience of sending letters, faxes original signatures and telephone

confirmation. According to them for those that have access to the internet and a computer all that one needs to do is to be processed to the bank's website and login. This gives easy access to the person's accounts and this enables the person to clearly see transactions that have occurred within his/her accounts; (Puopiel Felix 2014)

#### **2.4. E-Banking: Importance**

E-payment offers substantial advantages to the customers in the form of convenience, timesaving and easy access to the banking services. The customers can transact in their account at anytime and anywhere throughout the country or outside the country. There is no time and place restriction. The customers need not visit the branch for each and every transaction and no need to wait in the big queue. By this they can save the time. The customers can avail access to the banking services at anywhere. With the help of e-banking, the easy access to the banks will be another advantage to the customers. Thus the e-banking provides sophisticated services to the customers. (Nyangosi 2009)

In general some of the advantages are; Increase payment efficiency and convenience of making payment, reduce transaction costs, enable trade in goods and services of very low value, payment can be made swiftly and remotely using various devices, used for E-commerce/e-Trade and it can be used for other purposes like paying bills, taxes, etc.

#### **2.5 E-banking: prospects**

The major opportunities for the adoption of the e-banking system in the bank industry are listed as follows;

Opportunities offered by ICT through e-learning programs. The School Net program introduced in Ethiopia to connect more than 500 schools creates opportunities for citizens to be familiar with ICT applications and increases the awareness of the public (Yayehyirad Kitaw, 2006).

Late adopter opportunities- the commercial bank of Ethiopia should take advantage of already developed best and existing software applications.

UNECA, World Bank and UNCTAD are helping developing countries to design national e-strategies, via National Information and Communication Infrastructure Plan (UNCTAD 2004).

Commitment of the government- the Ethiopian government considers ICT as an indispensable tool to alleviate poverty and facilitate a state transformation aiming an effective and efficient service

delivery. It has initiated commendable ICT policy frameworks and several e-government projects, including the World Net Project (TU4D, 2006).

## **2.6 E-Banking: Challenges**

E-banking with many types and great advantages cannot take the place of cash in trading activity. Cash is still the preferred mode of payment for the sake of security anonymity, for tax purposes or for keeping secret what one's money is being spent on. Banking is still done in the conventional way "explicit consent" (i.e., a signature) is required before a transaction is considered valid and transaction security (e-transactions and e-payment) Privacy and safety are yet to be in place. Also e-banking cannot ensure equal accesses to all consumers are non-existent because of lots of challenges it faces. Let us see the common challenges of E-banking in general aspect. (BCBS, 2001)

The main challenges are; Infrastructure problem, heavy investment costs, socio-cultural challenges, legislative and regulative issues and security challenges.

- **Infrastructure Problem:**

The first challenge for e-banking and e-payment in most of developing country is short of well-developed infrastructure. For effective deployment of e-payment services, it is necessary to have a reliable and cost effective infrastructure that can be accessible to the majority of the population. The base communication infrastructure for e-payment is computer network, user access devices with internet facility. Most of the transactions use internet to communicate with the customers. Automating the banking services is another prerequisite for e-payment. Close financial links between banks and other financial institutions is necessary. This link is used for clearing and payment systems among the institutions. (Kaleem \$ Ahmed 2008)

- **Heavy Investment Costs:**

In order to offer electronic services in all aspect, banks have to invest huge amount of money. They have to incur heavy maintenance costs also. This may not be the problem for well-established banks. But in case of new and small banks, they have to face financial problems at the initial stage. Banks in developed countries have already deployed huge amount of investments for e-banking services. For banks in developing and underdeveloped countries, this may create financial crisis. (Abor 2004)

- Socio-Cultural Challenges:

Normally customer's confidence and trust in traditional banking system will make customers less likely to adopt new technologies. New technologies will not be successful until customers are satisfied with privacy and security aspects. It also requires some time to earn confidence among the customers even it is easier and cheaper than the traditional methods.

- Security Challenges:

It is first and foremost requirement of E-payment as the internet is inherently unsecured. Securing the process in e-payment involves authenticating both customer and banker and protecting the information to be transmitted from interception. This authentication can be done using user ID and passwords. Every transaction is authorized against a customer's account balance; banks can safely offer cards to anyone of legal age, regardless of their banking history or credit status. Customers who demonstrate their ability to manage electronic debit card accounts can be offered other banking services, such as loans, mortgages and credit cards. (BCBS, 2001)

- Legislative and Regulatory Issues

Proper legal and regulatory frameworks are vital for the success of e-payment. National, regional and international laws, rules and regulations are important prerequisites for successful implementation of e-payment. Legal or Legislative support is essential for protecting the interests of customers and banks in various areas relating to e-banking and payment systems. Some of the main issues like liability for loss in case of fraud, allocation of loss in case of insolvency, cheque truncation, evidence and burden of proof, preservation of records, prevention of fraud, etc. are to be cleared in the legislation. This can be done by adopting model laws at global level such as UNCITRAL Model Law on E-commerce and UNCITRAL Model Law on E-signature. (SG-SSB, 2007)

## **2.7 E-Banking System in Ethiopia**

The banks in Ethiopia currently are using the following E-banking services:

- ✓ SWIFT:

SWIFT [Society for Worldwide Inter-bank Financial Telecommunication] provides a messaging service that enables to settle majority of high value payments internationally. Banks in Ethiopia currently settle their foreign transaction payment through SWIFT. They are using SWIFT as a

primary payment system for international payment system. Connection to SWIFT network is done only through a dial up connection which makes the usage of SWIFT as expensive. Banks must make a dial up call to the server found in Brussels.

✓ Western Union Money Transfer:

Western union is the world's largest money transfer network with more than 212,000 agents in over 195 countries. In Ethiopia, Commercial Bank of Ethiopia, Construction and Business Bank, United Bank, Dashen Bank S.C. and others are agent companies for Western Union. The money transfers are paid out in Ethiopian Birr with the maximum ceiling of Br. 60,000. It includes a test question to be answered by the receiver. Unlike SWIFT, which is used to transfer money from Ethiopia to abroad and vice versa, Western Union is used to transfer money only from abroad to Ethiopia (Sumani Yahiya 2011)

✓ Plastic Cards:

Currently, there is no issue of local and international credit cards in Ethiopia. But there are some business firms (Hotels, Supermarkets, etc.) that accept international credit cards. Commercial Bank of Ethiopia currently gives encashment services to VISA and Master Card users. This card is mostly used by foreigners and Ethiopians residing abroad. Commercial bank only acts as a merchant accepting credit card issued by banks outside Ethiopia. But the bank is finalizing its preparation to start issuing credit cards with Debit-Credit cards. Presently, Commercial Bank is issuing a VISA branded debit card, which works locally in Ethiopia only. The card uses as an ATM card and used to effect payment at merchant outlets. With the Commercial Bank card, one can operate multiple accounts with a single card, withdraw up to 10,000 Birr per day per card subject to the balance in your account and check the balances of all accounts linked to the card.

Commercial Bank uses ETC's (Ethiopia Telecommunication Corporation) internet broad band system for its banking networking. If any connection problem (telecommunication failure) happens, the whole networking system will be off line, this means every customer's account will not be updated automatically till the system becomes on line.

During such period the Base 24 doesn't stop working and hence all ATMs (automatic teller machine) and POSs (Point of sale) works by taking the last available balance on flex cube before the off-line (telecommunication network failure). Consequently, the customer's account balance

may be affected at the area bank where the account is maintained and Base 24 is not aware of it due to the communication gap between the two. Therefore the person using a card may not have the actual balance in his account when he/she tries to make transactions.

✓ **Electronic Fund Transfer (EFT):**

EFT system permits transfer of funds from any account at any branch of any member bank in any city to any other account at any branch of any member bank in any other city. In our country there is no bank to bank connection. The only transfer mode we have in Ethiopia is branch to branch within the same bank at different places at the same time. This system utilizes the Service Branches of the member banks. It facilitates the transfer of funds from one place to another place within the country quickly and safely. It has replaced the old money transfer method which was telegram. Banks collect service charges from customers. The system reduces telephone expenses to the cost of internet charges and stationeries. Most customers of commercial Banks are the beneficiaries of this new money transfer system in Ethiopian case. (www.NBE.com)

Locally, in Ethiopia, electronic fund transfer, plastic card, and Tele banking are the ones in use and on the verge of growing. The two banks being the first to introduce those service, are promoting the payment system to their customers since the service provides highly efficient in time saving, cost minimizing and ease of accessing for the banks.

## **2.8 Key challenges of E-banking in Ethiopia**

E-payment system in Ethiopia is having the following challenges which are not different what we have seen above but with more severity:

■ **Infrastructure:**

Information and Communication Technology (ICT) infrastructure is prior most to offer and to implement e-banking services. Communication infrastructure such as Internet, Telephone lines must be adequate for e-banking. In Ethiopia, due to poor telecommunication infrastructure, ICT is facing lot of problems or challenges. Ethiopian Telecommunication Corporation is unable to provide reliable and fast telecommunication services. Failures in telephone line and other network lines are happening frequently. This will create problems to offer e-banking services. Especially, Internet is the major problem because of Low bandwidth and low speed.

Problems related to infrastructure capacity for e-payment service in Ethiopia can be summarized as; Frequent connectivity failure in telephone lines and electric power interruption, low bandwidth

(particularly for Internet), high cost of Internet, availability of Internet especially at peak hour is low and lack of dedicated data service networks and closed financial networks.

- Establishment Expenses (cost):

Initially, banks have to invest huge amount of money in order to provide e-banking services. They have to buy and install the required systems and facilities which lead increased establishment expense. For well-established banks in developed countries, the establishment cost may not be a problem. But for banks in 3<sup>rd</sup> world like Ethiopia and for new banks, it is very difficult to invest such huge amount. According to the information gotten from both banks, it takes above a million dollar each to commissioning their current ITC package, not to mention the indirect costs like maintenance charge. (www.NBE.com)

- Lack of Skilled Manpower:

In order to offer and maintain e-banking services without any fault, banks need skilled manpower. But in Ethiopia, the banks are suffering due to inadequate skilled manpower. They have to hire manpower from foreign countries to overcome this problem. Otherwise, they have to provide proper training to the existing manpower. It will result in increased operating expenses.

- Legal Framework:

Legal framework is playing a crucial role in facilitating e-payment system and in its growth. Instead of strict regulation, the country should make some amendments in order to coincide with the current up-dated practices. Ethiopia has not yet set a comprehensive legal framework for e-commerce and e-payment. The reason for nonexistence of comprehensive legal framework in Ethiopia may be inexistence of large pool of e-commerce user group. Another reason may be the existence of Ethiopian Civil Code of 1960, which is open by many standards to incorporate technical and institutional improvements. The Ethiopian Civil Code addresses some of the most important legal issues pertaining to electronic transactions like freedom of form of contracts. The code, however, doesn't allow signatures to be in electronic form. Clearly stipulated privacy and data protection laws are absent in Ethiopia. But mostly in developed countries, they have developed a comprehensive legal framework for e-commerce which includes e-banking.

- Socio-Cultural Aspects:

The banks in Ethiopia, especially Commercial Bank of Ethiopia and other private banks have faced some problems related to social and cultural attitude. This is mainly because of lack of awareness on new technologies and its benefits. The fear of risk is also another reason for their resistance. In case of staff members, the lack of training and sticking with existing structure are the problems. In general, peoples are resistant to new payment mechanisms (Sumani Yahiya 2011).

## **CHAPTER THREE**

### **3. METHODOLOGY OF THE STUDY**

#### **3.1 Research Design**

This research focused on describing the current situations of the problem and examining the main challenges and prospects of e-banking in commercial bank of Ethiopia in Wolkite city, and also the research attempt to explain the phenomenon and assess the current situations of e-banking. Therefore, descriptive type of research was used to fulfill the objective. According to Shone Macomb's(2020) Descriptive research aims to accurately and systematically describes population, situation or phenomenon.

#### **3.2 Research technique**

I used mixed methods research combines quantitative and qualitative approaches by including both kinds of data in a single study. This allows for the phenomenon that is being researched to be understood.

#### **3.2 Sources of Data**

The study would be used to take data from both primary and secondary sources. The primary data obtained from distributed questionnaires to those respondents and secondary data from employers, from selected branches of commercial bank of Ethiopia.

#### **3.3 Target Population**

The target population is the collection of elements or objects that possess the information sought by the researchers and about which inferences are to be made. The target population were defined in terms of elements, sampling units, extent, and time. In this research the target populations are one branches of commercial bank of Ethiopia in wolkite city.

#### **3.4 Sample size and Sampling Technique**

The data of sample size was collected from current customers of the bank who are user of the e-banking and employee of the bank. I selects the study population by using non probability techniques depending on the range of elements of target population. Because this represent all the study population for area is difficult. Therefore I used to convenience sampling Techniques. The reason why non-probability sampling technique wasselected is that it is less complicated to collect the data, is less expensive, less time since concerned bodies. The total target population for this study is 30,000 customer and 30 employees from 30,000 customer 20 and from 30 employees 20

was selected conveniently for this study. I used non-probability sampling techniques particularly judgmental the reason behind the researcher used this type of sampling is because the respondent is selected based on the researcher judgment that the researcher think the respondent that different for the researcher questionnaires.

### **3.5 Data collection instruments**

In conducting the study the researchers collect data from the employees and customers of the bank. The researchers relied up on primary data. Questionnaires are used as data collection instrument in the study.

Questionnaire-it is prepared accurately and distribute to the respondents to get adequate answer for the question as intended by the researchers. Thus open-ended and closed-ended questions were used.

### **3.6 Data analysis**

The data after being collected from the questionnaire were processed and analyzed with the use of tables and percent. The data gather from the respondents are analyzes using Descriptive statistics such as frequency and percentage. Data processing like coding and recording to be done both manually and using computer. Averages, percentages, frequency and tables used for the analysis of the collect data.

## CHAPTER FOUR

### 4. DATA ANALYSIS AND INTERPRETATION

This chapter discusses about the data gathered from the sampled customers and employees of the selected five branches of commercial bank of Ethiopia in wolkite town. All the data is obtained through questionnaires containing close and open ended questions.

Out of the total 30 employees, 20 employees were selected. On the other hand, from the large number of customers, 20 individuals were selected as sample respondent through non probability sampling specifically using convenient sampling technique. Questionnaires were prepared for both employees and customers of the bank.

The researchers distributed 20 questionnaires to employees and 20 questionnaires to the customers to fill the necessary data. However from the total number of employees, 3 of them could not return back the questioner. On one hand, the questionnaires which are distributed to the total customer were fully returned. Because of this the researcher's uses 17 returned questionnaires of employees and the total 20 customer's questioner to analyze the research.

#### 4.1. Characteristics of respondents

Table 4.1.1 Customer's profile

Item	General characteristics	Customer	
		Frequency	%
1	Sex		
	Female	8	40
	Male	12	60
	Total	20	100
2	Age		
	18-25	3	15

	26-30	7	35
	31-35	5	25
	36-45	3	15
	Above 46	2	10
	Total	20	100
3	Educational Back Ground		
	Elementary	2	10
	high school	2	10
	Diploma	4	20
	Bachelor degree	6	30
	MSC	4	20
	PHD	1	5
	Other	1	5
	Total	20	100
4	How long have you been served by commercial bank of Ethiopia?		
	< 2 years	3	15
	3-5 years	5	25
	6-10 years	5	25

	>10 years	7	35
	Total	20	100
5	Occupation		
	Student	5	25
	Self employed	6	30
	Government employed	8	40
	Other	1	5
	Total	20	100

**Source :**( Data collected through Questionnaire)

According to item 1 of Table 4.1.1, regarding the sex of respondents, from total respondents 12 individuals or 60% of respondents are male and the rest 8 individuals or 40% are female. This implied that more than half of the customers are males and the participation of females in this aspect is less. Female’s participation in business activities is very low. This reduces the benefit of the bank that gets from females.

According to item 2 of Table 4.1.1, with regard to age of customer respondents, from the total number of respondents 3(15%) are in the age category of 18-25, 7(35%) are in the age group of 26-30, 5 (25%) are in the age group of 31-35, 3(15%) are in the age category of 36-45 and the rest 2(10%) are in the age category of above 46. This implies that the majority of customers are relatively young. This shows the new generations are active in using this technologies.

Considering education level of customer respondents in item 3 of table 4.1.1, from the total number of respondents 2(10%) are learn up to elementary, 2(10%) are learn up to high school, 4(20%) are Diploma holders, 6(30%) are Bachelor degree holders, 4(20%) are MSC holders, 1(5%) are PHD holders and the rest 1(5%) choose the alternative other. Therefore, the majority of the sample indicates that the customers of the bank are first degree holders.

According to item 4 of Table 4.1.1, With regard to the length of time respondents have stayed as customers of CBE, 3(15%) indicated that they have been served for 2 years, 5(25%) indicated that they have been served for 3-5 years, 5(25%) indicated that they have been served for 6-10 years and the rest 7(35%) indicated that they have been served for 10 years. This implies that majority of customers with equal number of individuals, (i.e 15 for each) selected 3-5 years and 6-10 years that they were served by Commercial Bank of Ethiopia.

According to item 5 of Table 4.1.1, from the total respondents 5(25%) of respondents replied that they are student, 6(30%) responds self employed, 8(40%) replied government employed and the rest 1(5%) replied as other. From this result we can conclude that most of the customers are government employed who participate in different sector.

#### 4.2. General Information

The researchers have tried to investigate the service delivery of electronic payments system of the bank, from customer point of view. To this end, various questions were passed to sample respondents mainly related to e-banking service delivery. Then responses from the selected customers are summarizes in the form of percentage and presented as follows.

Table 4.2.1

To what extent is your awareness about e-banking service which provided by commercial bank of Ethiopia?	Customers	
	Frequency	%
Very high	4	20
High	8	40
Moderate	3	15
Low	3	15
I don't have awareness	2	10

Total	20	100
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**Source :**( Data collected through Questionnaire)

As it is shown on table 4.2.1 respondents were asked for to what extent is their awareness about e-banking service which provided by commercial bank of Ethiopia. As it is shown in the table , 4(20%) respondents have a very high awareness about e-banking , 8(40%) respondents have high awareness, 3(15%) respondents have moderate awareness, 3(15%) respondents have low awareness and the rest 2(10%) respondents have no awareness about e-banking service provided by commercial bank of Ethiopia . This indicates that majority of the respondents have awareness. Therefore it is possible to say that the bank provides reliable awareness for customers about e-banking service.

Table 4.2.2 if your answer for question NO.6 is I don't have awareness why?

Types of response	Respondents	
	Frequency	%
I am not interested in e-banking services	0	0
I prefer to use bank services other than e-banking services(use bank book)	3	100
Lack of available information about e-banking services	0	0
Other	0	0
Total	3	100

**Source :**( Data collected through questionnaire)

As indicated in the table 4.2.2 regarding the awareness of respondents about e-banking; from the total respondents three of them replied that they don't have any awareness notifying that they don't want to be served by e-banking than using bank book accounts.

The respondents were provided with open ended question to justify for which type of e-banking service has more knowledge and the service currently they use. From the total respondents the majority of respondents replied that they have a very high awareness about ATM and Mobile Banking, and they also currently use ATM and Mobile Banking. On the other hand some respondents replied that they have highly aware of ATM, Mobile Banking, POS and Internet banking, although they do not use any of them.

Table 4.2.3 Are there any challenges for the adequate infrastructure of e-banking service like; ATM, POS, Debit Card, Credit card, Internet banking and Mobile Banking?

Types of response	Respondents	
	Frequency	%
Yes	15	75
No	5	25
Total	20	100

**Source :**( Data collected through Questionnaire)

As indicated in the table 4.2.3 regarding the challenges for the adequate infrastructure of e-banking service, from the total respondents, 15(75%) of the respondents indicates as it have challenges by replying yes & the rest 5(25%) replied no. This implies that there are major challenges regarding adequate infrastructure of e-banking.

The respondents were provided with open ended question to specify the most common e-banking services which face infrastructural problems and the challenges that faced; majority of the respondents replied that the most common e-banking services which face infrastructural problems are ATM, Mobile Banking and Internet Banking. The respondents were also given the opportunity

to give their general comment on the challenges that faced. The comments forwarded by the customers are generally summarized as follow as;

Several respondents firmly commented that the e-banking service has the problem of internet connection and poor service speed. They further elaborated their comment that the ATM machine is not available in the nearest location. Even if there is a machine available in the nearest location they are not well operated and not effectively serve customers. The other point strongly raised by the respondents is that there is a problem of frequent power interruption and system failure. According to their view all this challenges are faced by e-banking service.

Table 4.2.4 how the ATM machine placed in convenient place to you?

Types of response	Respondents	
	Frequency	%
Very convenient	10	50
Convenient	6	<b>30</b>
Less convenient	4	<b>20</b>
Not convenient	0	<b>0</b>
<b>Total</b>	<b>20</b>	<b>100</b>

**Source :**( Data collected through Questionnaire)

One of the most important factors in service delivery is placement of the service where it is required. As it was clearly shown in the above Table 4.2.4 regarding the convenience of placement of ATM machine, from the total 20 respondents 10 individuals or 50% replied that it is very convenient, 6 individuals or 30% indicated that it is convenient and the rest 4 individuals or 20% indicated that it is less convenient on the other hand 0% of respondents indicates that the placement of the ATM machine is not convenient. In general, from this result we can conclude that the placement of ATM machine is somewhat convenient.

#### 4.2.5 What is your chance of getting ATM?

Types of response	Respondents	
	Frequency	%
Very high	3	10
High	9	45
Moderate	5	25
Low	2	10
Very low	1	5
Total	20	100

**Source :**( Data collected through Questionnaire)

As indicated in the table 4.2.5 with regarding the chance of getting ATM machine, from the total respondents, 3(10%) of the respondents indicates that the chance of getting is very high, 9(45%) of respondents indicates that the chance is high, 5(25%) of the respondents indicates that moderate, 2(10%) of respondents indicates that low and the rest 1(5%) of the respondents indicates that the chance of getting ATM machine is very low. This implies that the chance of getting ATM machine is high.

Table 4.2.6 if your answer for question number (12) is low or very low how much it affects your activity?

Types of response	Respondents	
	Frequency	%
Vary greatly	0	0
Moderately	3	60
Slightly	0	0

Very slightly	2	40
Total	5	100

Table 4.2.6 shows that the effect of e-banking service on customers activity, if the chance of getting ATM machine is low or very low. From the total respondents who replied low or very low, 3(60%) of respondents indicates that low or very low chance of getting ATM machine affect the activity moderately, on the other hand 2(40%) of respondents replied that the effect is very slight. From this we can conclude that for those respondents who replied chance of getting ATM machine is low or very low, the ATM machine has a moderate effect on their activity.

Table 4.2.8: How do you measure your satisfaction on electronic banking services?

Type of responses	Respondents	
	Frequency	%
Vary satisfied	4	20
Satisfied	9	45
Neutral	4	20
Dissatisfied	3	15
Total	20	100

As indicated in the table 4.2.8 regarding the satisfaction of customers on e-banking service, among the total respondents 4(20%) replied very satisfied, 9(45%) replied satisfied 4(20%) replied neutral and 3(15%) replied not satisfied. The inference of this data indicates that most of customers are satisfied with the e-banking service of commercial bank of Ethiopia.

The respondents were provided with open ended question to state their suggestion if the banks made any effort to enquire opinion. With this regard different respondents discuss their opinion as follows.

- Some customers said that the bank does not make any effort to take their suggestion, comment, and opinion.
- And some customers suggest that the bank made little effort.
- The rest of customers agreed that the bank made effort to inquire them.

From this we can conclude that there is a gap in making effort as much as intended to take the customers idea and opinion.

Regarding improvement and development on VISA card and other e-banking services the respondent suggest that the bank should make:-

- Need of fast maintenance during the system failure while providing service
- Taking customer opinion
- The bank should increase its ATM service in to different areas
- The bank should solve the network problem
- Try to improve the quality of service and accessibility

Source: data collect through questioners

### 4.3 Background characteristics of respondents

Table 4.3.1 profile of employees related to e-banking service

Item	General characteristics	Employees related to e-banking service	
		Nº.	%
1.	Sex		
	Female	7	41
	Male	10	59
	Total	17	100

2.	Age		
	18-25	2	12
	26-30	10	59
	31-35	0	0
	36-40	4	23
	Above 40	1	5
	Total	17	100
3.	Educational Background		
	Diploma	0	0
	Bachelor degree	5	29
	MSC	9	53
	PHD	3	18
	Other	0	0
4.	Total	17	100
	Current position		
	Customer service officer	7	41
	Customer service management	3	18
	Internal auditor	3	18

	Knowing your customer	2	12
	Loan officer	2	12
	Total	17	100

**Source :**( Data collected through Questionnaire)

Table 4.2 shows that the sex factor of the respondents profile was 7(41%) are female and 10(59%) are male employees. As shown in the tables above the majority of the employees relating to e-banking service are males. This implies that the participation of females in providing service related to e-banking service is very low. Because females have low awareness of e-banking system.

Table 4.2 shows that the age of respondents profile was 12% (18-25 years);59%(26-30 years);23%(36-40) and 5%(41 and above years). As it is shown in the table above, the majority of the employees related to e-banking service fall in the working age group accounting to 64%, (i.e, above half of the employees). This shows that working age groups are engaged in providing service related to e-banking. This helps the bank to provide good service to the customers.

When we see respondent’s educational status 29% are degree level, 53% are MSC and 18% are PHD holders. Here we can see that most of the respondents are MSC that are expected to have service providing performance related to e-banking. This implied that the bank have more experienced and skilled person who add great value to the success of the bank.

When we see respondents current position in commercial bank of Ethiopia, from the total respondents 41% are customer service management, 18% are customer service officer, 18% are internal auditor, 12% are knowing your customer and the rest 12% are loan officer. This implies that the majority of commercial bank of Ethiopia employees is customer service officer. So, the bank can provide effective e-banking service to the customer.

**4.4 Analysis on electronic banking service for Respondents**

Table 4.3.1 how do you evaluate the contribution of e-banking system in increasing customer satisfaction?

Types of response	Respondents	
	Frequency	%
Necessarily	10	59
Helpful	5	29
Not necessary	2	12
Not helpful	0	0
Total	17	100

**Source :**( Data collected through Questionnaire)

The contribution of e-banking service towards increasing customer satisfaction is very important because the system of e-banking encourages the customer to save time and use resource wisely. As table4.3.1 show that 10 (59%) of the respondents said that the contribution of e-banking towards increasing customer satisfaction is necessarily on the other hand 2(12%) of the respondents said that the contribution of e-banking towards increasing customer satisfaction is not necessary. From this we can conclude that e-banking service has great contribution towards increasing customer satisfaction.

Table 4.3.2 how do you evaluate the contribution of e-banking service concerning on reduction of transaction cost?

Types of response	Respondents	
	Frequency	%
Very important	10	59

Important	4	24
Less important	2	12
Not important	1	6
<b>Total</b>	<b>17</b>	<b>100</b>

Source : (Data collected through Questionnaire)

As indicated in the table 4.3.2, regarding the importance of e-banking service in reducing transaction cost, from the total respondents 10(59%)of respondents replied that e-banking service is very important in reducing cost, 4(24%) of respondents said that e-banking service is important, 2(12%) of respondents replied that e-banking service is less important and the rest 1(6%) of respondents replied that e-banking service is not important. From this we can conclude that e-banking service is significant to reduce transaction cost. Additionally it has an advantage like; save time and money for cost of employee’s salary, protects the money from theft and other related problems.

Table 4.3.4 how do you evaluate level effectiveness of e-banking activity of commercial bank?

Types of response	Respondents	
	Frequency	%
very high	4	24
High	5	29
Moderate	4	24
Low	3	18
Very low	1	6
<b>Total</b>	<b>17</b>	<b>100</b>

**Source :**( Data collected through Questionnaire)

Understanding the level of effectiveness of e-banking system is important as shown in table 4.3.4 from the total respondents, 24% of the respondent said that the level of effectiveness of e-banking is very high, 29% of the respondent said that the level of effectiveness of e-banking is high, 24% of respondents said that the level of effectiveness of e-banking is moderate, 18% of respondents said that the level of effectiveness is low and the rest 6%of the respondents said that the level of effectiveness of e-banking is very low. This implied that e-banking activity in commercial bank of Ethiopia is effective. Therefore, the bank becomes more preferable by customers.

Table 4.3.5 what is the extent of capacity and growth of e-banking service?

Types of response	Respondents	
	Frequency	%
Very high	4	24
High	7	41
low	4	24
Very low	2	12
Total	17	100

**Source :**( Data collected through Questionnaire)

Currently the capacity and growth of e-banking system is increasing and become more effective in Commercial bank of Ethiopia in Bahir Dar city. The table show that 24% of respondent said that the capacity and growth of e-banking system is very high, 41% of the respondent said that the capacity and growth of e-banking system is high, 24% of the respondents replied that the capacity and growth of e-banking system is low and the remaining 12% of the respondents replied that the capacity and growth of e-banking system is very low. From this we can conclude that the growth of e-banking system is increasing as the economic requirement to facilitate transactions.

The respondents were provided with open ended question to express their justification about the growth and capacity of e-banking. They issued several comments regarding the capacity and growth of e-banking system. The comments are generally summarized in three points as listed below:

- The growth of e- banking is not satisfactory
- Even if the growth is satisfactory, most customers are illiterates
- There is some technical problem and it has some impact on effectiveness.

As shown above, most of the respondents commented that the growth of e-banking is not satisfactory. This means the growth is not rapid as expected. The other comment raised by respondents is even if the growth is satisfactory, most customers are illiterate. This indicates that the bank needs to improve the capacity growth of e-banking service and make the system easy and understandable. Some other respondents said that there is some technical problem and it has some impact on the effectiveness of the service. From this we can conclude that the capacity and growth of e-banking service have some problem of performance. There for, it needs some corrective actions for the capacity and growth of e-banking service to become satisfactory.

The respondents were also provided with open ended question about the competitive advantage of e- banking service. There are comments raised by respondents on the competitive advantage of e-banking. The comments are summarized as follow as;

- It increase the market share of the bank
- Save time and reduce cost for customers and the bank
- Create cash less society
- Expanding the accessibility of the bank

As indicated in the above, majority of the respondents replied that the competitive advantage of e-banking is increase the market share of the bank. Some respondents also replied that the competitive advantage of e-banking system is reducing time and cost for customers and also for bank. This means the application of e- banking system reduce cost by avoiding paper work of the bank and reduce the number of employees work in the bank this reduce wage expense of the bank. The other respondents commented that the competitive advantage of e-banking is creating cash

less society and expanding the accessibility of the bank. This implied that the adoption of e-banking service has competitive advantage on the accessibility of the bank in remote areas out of cities and towns without opening bank branches.

Table 4.3.6 Identify the benefit realized by commercial bank of Ethiopia in the adoption and practices of e-banking?

Statements	Strongly		Agree		Nether agree nor disagree		Disagree		Strongly disagree	
	F	%	F	%	F	%	F	%	F	%
Reduce transaction cost.	6	35	7	41	2	12	1	6	1	6
Increase transaction speed and accuracy.	10	59	7	41	1	6	1	6	1	6
Increase service quality by providing 24-hour service without employee and customer contact.	7	41	6	35	3	18	0	0	0	0
Maximize profit by reducing human resource of the bank and paper work.	6	35	5	29	4	24	2	12	0	0

Allow remote transaction facilities that replace physical presence of a customer in a bank branch.	9	53	5	29	2	12	1	6	0	0
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Table 4.3.6 shows the benefits realized by commercial bank of Ethiopia by providing e-banking service. There are different benefits listed in the above table for choices, from the listed benefits the first one is reduce transaction cost. From the total respondents, 35% are strongly agree on this benefit, 41% are agree, 12% are neither agree nor disagree, 6% are disagree and the remaining 6% are strongly disagree. This implied that the majority of the respondents are agreed on the benefit of, reducing transaction cost. Due to this reason the bank can increase their operation and profit.

The second benefit is increase transaction speed and accuracy. From the total respondents, 59% of the respondents said strongly agree, 41% of the respondents said agree, 6% of the respondents said that neither agree nor disagree, 6% of the respondents said disagree and the rest 6% of the respondents said strongly disagree. From this we can conclude that the majority of respondents are strongly agreed on the benefit of e-banking; i.e, increasing transaction speed and accuracy. This implied that the bank reduce misstatement, time and increase customer satisfaction.

The third benefit is increase service quality by providing 24-hour service without employee and customer contact. From the total respondents, 41% of the respondents said strongly agree, 35% of respondents said agree, and the rest 18% of respondents said neither agree nor disagree. This implied that more than half of the respondents are strongly agreed on the benefit of e-banking enjoyed by commercial bank of Ethiopia; i.e, increasing service quality by providing 24-hour service without employee and customer contact. This creates a great advantage to customers to be served at any time without restriction.

The fourth benefit is maximizing profit by reducing human resource of the bank and paper work. From the total respondents, 35% of the respondents replied strongly agree, 29% of respondents replied agree, 24% of respondents replied neither agree nor disagree and the remaining 12% of the respondents replied that disagree. From this we can conclude that maximizing profit by reducing human resource of the bank and paper work is one of the key benefits realized by commercial bank of Ethiopia. Hence, majority of the respondents agreed on it. The reduction of employees decreases the bank expense related to wage payment. In addition to this reduction of paper work has become effective on cost saving and securing documents.

The last from the listed benefit are allowing remote transactions facilities that replace physical presence of a customer in a bank branch. From the total respondents, 53% of respondents replied strongly agree, 29% of respondents said agree, 12% of respondents said neither agree nor disagree and the remaining 6% of respondents replied disagree. This implied that more than half of respondents are strongly agreed on the benefit that the e-banking allows remote transactions facilities that replace physical presence of customer in bank branch. With the adoption of e-banking system we can perform different transactions like transferring money, paying bills e.t.c without physical existence of the customer in a bank branch.

Table 4.3.7 Identify the major challenges of the adoption of e-banking service in commercial bank of Ethiopia?

Statements	Strongly		Agree		Nether agree nor disagree		Disagree		Strongly disagree	
	F	%	F	%	F	%	F	%	F	%
Infrastructure problem; low level of internet penetration and poorly developed telecommunication infrastructure.	7	41	4	24	3	18	3	18	0	0

Heavy investment cost; high cost of machine; like, ATM machine.	5	29	5	29	2	12	3	18	2	12
Frequent power interruption; no sufficient and sustainable power supply.	5	29	5	29	4	24	3	18	0	0
Lack of technological infrastructure; most rural areas have no access to internet facilities and communication technology equipments	5	29	4	24	3	18	3	18	2	12

Commercial bank of Ethiopia faces numerous challenges to fully adapt e-banking system. From those challenges we list some of them in general term for evaluation in table 4.2.7. We can start the evaluation with the challenge that is infrastructure problem; this includes low level of internet penetration and poorly developed telecommunication infrastructure. With regard to this from the total respondents; 41% of respondents replied strongly agree, 24% of respondents replied agree, 18% of respondents replied neither agree nor disagree, 12% of respondents replied disagree the rest 8% of respondents replied strongly disagree. This implied that most of the respondents are

strongly agreed on the challenge of infrastructure problems on building additional ATM, POS internet networking etc... Due to this, reduce customer satisfaction and would lost their customers.

The next challenge for the adoption of e-banking is Heavy investment cost; this includes high cost of machine. For instance the cost for placement of ATM machine and the purchasing cost of the machine are very high. This indicates that it is challengeable for adoption. From the total respondents; 29% of respondents replied strongly agree, 29% of respondents replied agree, 12% of respondents replied neither agree nor disagree, 18% of respondents replied disagree and the rest 12% of respondents replied strongly disagree. From this we can conclude that majority of respondents are agreed on the challenge that is heavy investment cost. Most of electronic instruments (machines) are very expensive. This situation has negative effect on the expansion of e-banking service and also accessibility of the bank.

The third challenge is frequent power interruption; lack of reliable power supply is a key challenge for smoothly running e-banking in commercial bank of Ethiopia. From the total population; 29% of respondents replied strongly agree, 29% of respondents replied agree, 24% of respondents replied neither agree nor disagree the rest 18% of respondents replied disagree. This implied that more than half of respondents are strongly agreed the challenge that is frequent power interruption. We understood that the bank lost its benefit from customers and the customers become disappointed due to failure of their plan.

The last challenge from the above listed challenges is lack of technological infrastructure; From the total respondents, 29% of respondents said strongly agree, 24% of respondents said agree, 18% of respondents said neither agree nor disagree, 18% of respondents disagree and the remaining 12% of respondents replied strongly disagree. From this we can conclude that lack of technological infrastructure is a key challenge for the adoption of e-banking system. Most of the respondents are strongly agreed on the challenge that is lack of technological infrastructure. The level of technological development is very low in Ethiopia condition. This has a negative impact on the adoption of e-banking system. Commercial bank of Ethiopia also exposed to this challenge. Table 4.3.8 Identify the major prospects of the adoption of e-banking service in commercial bank of Ethiopia?

Statements	Strongly		Agree		Nether agree nor disagree		Disagree		Strongly disagree	
	F	%	F	%	F	%	F	%	F	%
Commitment of the government on ICT and e-government projects	7	41	10	59	0	0	0	0	0	0
Opportunities offered by ICT through e-learning programs.	10	59	3	18	2	12	2	12	0	0
Late adopter opportunities(use already developed and existing software applications	6	35	5	29	2	12	3	18	1	6

Table 4.3.9 shows the prospects of e-banking in commercial bank of Ethiopia; there are many prospects listed in the above table for choices, from the listed prospects the first one is; commitment of the government on ICT and e-government projects, the Ethiopian government considers ICT as an indispensable tool to alleviate poverty and facilitate a state transformation aiming an effective and efficient service delivery. It has initiated commendable ICT policy frameworks and several e-government projects, including the World Net Project. From the total respondents, 41% of respondents are strongly agreed and the rest 59% of respondents are agree.

From this we can conclude that all the respondents are agreed on prospect of e-banking that is commitment of the government on ICT and e-government project. The Ethiopian government considers ICT as an indispensable tool to alleviate poverty and facilitate a state transformation aiming an effective and efficient service delivery. It has initiated commendable ICT policy frameworks and several e-government projects, including the World Net Project.

The second prospect is opportunities offered by ICT through e-learning programs, from the total respondents, 59% of respondents are strongly agree, 18% of respondents are agree, 12% of respondents are neither agree nor disagree and the rest 12% of respondents are disagree. This implied that most of the respondents are agreed on the prospect of e-banking i.e, opportunities offered by ICT through e-learning programs. The School Net program introduced in Ethiopia to connect schools creates opportunities to citizens to be familiar with ICT applications and increases the awareness of the public.

The last from the listed prospects is late adopter opportunities (use already developed and existing software application). From the total respondents, 35% of respondents are strongly agree, 29% of respondents are agree, 12% of respondents are neither agree nor disagree, 18% of respondents are disagree and the rest 6% of respondents are strongly disagree. From this we can conclude that more than half of the respondents are agreed on the prospect of e-banking that is late adopter opportunities (use already developed and existing software application). Using already developed software doesn't require more effort regarding the adoption of e-banking system.

Table 4.3.9 Identify the accessible opportunities for the adoption of e-banking service in commercial bank of Ethiopia?

Statements	Strongly		Agree		Nether agree nor disagree		Disagree		Strongly disagree	
	F	%	F	%	F	%	F	%	F	%
Improvement in the banking habit of the society.	7	41	7	41	3	18	0	0	0	0%

Commitment of the government to facilitate the expansion of ICT (Information Communication Technology) infrastructure.	4	24	7	41	3	18	3	18	0	0%
Willingness among banks to cooperate in building infrastructure.	8	47	5	29	3	18	1	6	0	0

As indicated in table 4.2.8 regarding with the accessible opportunities for the adoption of e-banking in commercial bank of Ethiopia there are some opportunities available for the adoption of the system. We summarize those opportunities with general term as shown in the above table. The first opportunity for the adoption of the system is improvement in the banking habit of the society. From the total respondents, 41% of respondents replied strongly agree, 41% of respondents replied agree and the remaining 18% of respondents replied neither agree nor disagree. This implied that the majority of respondents are agreed on accessible opportunity for the adoption of e-banking; i.e, improvement in banking habit of the society. The bank habit of the society has a major effect on e-banking system expansion. As a result of the improvement, the bank can control the market easily.

The second opportunity for the adoption of e-banking system is commitment of the government to facilitate the expansion of ICT (Information Communication Technology) infrastructure. From the total respondents, 24% of respondents said strongly agree, 41% of respondents said agree, 18% of respondents said neither agree nor disagree and the rest 18% of respondents said disagree. This

implied that more than half of the respondents are agreed on the opportunity that is commitment of the government to facilitate the expansion of ICT (Information Communication Technology) infrastructure. When the government works best on the expansion of ICT infrastructures it gives a great advantage for expanding the adoption of the system.

The last accessible opportunity for the adoption of e-banking service in commercial bank of Ethiopia from the list of the above is willingness among banks to cooperate in building infrastructure. From the total respondents, 47% of respondents replied that strongly agree, 29% of respondents replied that agree, 18% of respondents replied that neither agree nor disagree and the remaining 6% of respondents replied that disagree. This indicated that the majority of the respondents are strongly agreed that willingness among banks to cooperate in building infrastructure is one of the accessible opportunities for the adoption of e-banking. Cooperation is essential thing for any activity, this also work for banks to adopt different new technologies which facilitate their activity and improve their acceptance on the eye of customers. When banks work together they can easily adopt the system.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1. Conclusions**

Currently the electronic banking service of commercial bank of Ethiopia in wolkite town is not developed as expected and therefore there is a need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world. With a growing number of import and export business, and increased international trades and international relations, the current banking system is poor in providing efficient service and therefore all branches of commercial bank of Ethiopia operating in Wolkite town should recognize the need for introducing e-banking system to satisfy their customers and meet the requirements of rapidly expanding domestic and international trades and increasing international banking service. Low level of internet penetration and poorly developed telecommunication infrastructure, lack of suitable legal and regulatory framework for e-commerce and e-payment high rate of illiteracy, high cost of internet, absence of financial networks that links different banks and lack of reliable power supply are the key challenges of the development of e-banking in Ethiopia.

Regarding the prospects of e-banking system in commercial bank of Ethiopia; there are many ways to help the development of e-banking system including; Late adopter opportunities (i.e, the commercial bank of Ethiopia can take advantage of already developed and existing software application) and Commitment of the government(i.e, the Ethiopian government considers ICT as an indispensable tool to alleviate poverty and facilitate a state transformation assuming an effective and efficient service delivery. It has initiated commendable ICT policy frameworks and several e-government projects, including the World Net Project).

Based on the responses collected from the respondent it has been tried to draw the following conclusions:

- The important of the card was to make customers carry less cash, decrease work load for employees and thereby reduce theft or loss of actual currency notes. However the bank has also ignored customer demand to find ATM machines at their convenience which affects the acceptance and dependability of the service to general public.

- According to the feedback from customers at branch level, customers complain on network system, power supply, shortage of changes, machine break down.
- Still there is a problem of infrastructure like electric power and it need fast improvement in network connection.
- Contribution of e-banking system to ward for customer satisfaction is significant because system of e-banking encourages the customer to save time and use resource wisely.
- Currently the capacity and growth of e-banking system is increasing as the economic requirement to facilitate transactions. But, still it has some problem of performance.

## **5.2. Recommendations**

Based on the study conducted prospects and challenges of e-banking service in commercial bank of Ethiopia were identified and possible recommendations are forwarded so that it may help the bank and the customers of the bank to solve those problems by cooperation. There for the following are recommended to strengthen the e-banking system in commercial bank of Ethiopia: develop a comprehensive regulatory and legal framework for e-commerce and payment, raise customer awareness on the uses of IC, e-commerce and e-payment, provide incentives for financial institutions to invest rigorously on ICT and uses of e-commerce and e-payment, encourage the current efforts to develop and expand ICT infrastructure. In addition to this the bank should also do the following things: Each bank should strengthen its ICT department through providing training to IT personnel and procuring required hardware and software. Create separate unit in each branch for rendering ICT related operational activities under the supervision of the ICT department. Train all staff in basic ICT related matters in phases.

- ❖ The bank should give much attention to promote the electronic payment services in a view to attract people from every walk of life.
- ❖ The bank should improve the network and the infrastructure system regarding to the development of e-banking system in the respective area of Wolkite town. To solve the problem of network failure the bank should work together with Ethiopian Telecommunication Corporation.
- ❖ With regard to making effort to ask customer opinion, the bank should make an extensive effort in order to be competitive and accessible to all customers.

- ❖ The bank should do move in order to provide quality service to customers since it plays a vital role in the development of the bank and assess the impact of e-banking on the service quality of the bank and create awareness for the existing e-banking services.
- ❖ E-banking service requires the customers to have some knowledge about it. So, the bank should be make the system easy and understandable by anyone.

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## APPENDIXES

### WOLKITE UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS

#### DEPARTEMENTE OF ACCOUNTING AND FINANCE

#### QUESTIONNAIRE PREPARED TO ELECTRONIC BANKING SERVICE USERS

This questionnaire is prepared by prospective graduating student from Bahir Dar University to identify the challenge and prospects of electronic banking service from user prospective. The outcome of the study will help to suggest possible solutions from the observation; you are kindly requested to respond the questions as responsible as possible. The researchers assure you that your response is kept confidential and used for only academic purpose.

*Thank you in advance for your cooperation!!!*

Dear respondent for the questions followed by choice write a mark (x) in the space provided

#### PART-ONE: Information regarding respondent's background

- 1) Sex                      male                              female
- 2) Age    18-25year     26-30year     31-35 year        36-45years        above45years
- 3) Your educational background    Elementary        High school        Diploma      
Bachelor degree        Master degree        PHD        Other
- 4) For how long have you been served by Commercial bank of Ethiopia?  
Less than 2 years        3-5 years        6-10 years        >10 years
- 5) What is your occupation?  
Student        Self employed        Government employed        Other

#### PART-TWO: Research related questions

- 6) To what extent is your awareness about electronic banking services which provided by Commercial bank of Ethiopia?  
Very high     moder     low     I don't ha     aware
- 7) If your answer for question number (6) is I don't have awareness why?  
I am not interested in e- banking services

I prefer to use bank services other than e-banking services (use bank book)

Lack of available information about e-banking services

Other.....

8) If your answer for question No. (6) is very high and high please justify; for which type of e-banking services do you have more knowledge and you currently used?.....

9) Are there any challenges for the adequate infrastructure of electronic banking service like, ATM, POS, Internet banking, Debit Card, Credit Card and Mobile banking?

Yes  No

10) If your answer for question No. (9) is yes please specify the most common services which face the problems and determine the challenge that faced?

.....

11) How the ATM machine placed in convenient place to you?

Very convenient  convenient  Less convenient  Not convenient

12) What is your chance of getting Automate teller machine (ATM)?

Very high  High  Moderate  low

13) If your answer to question no (12) is low or very low how much it affects your activity?

Vary greatly  moderately  slightly  Very slightly

14) How do you express your satisfaction on electronic banking services?

Very satisfied  satisfied  dissatisfied

15) What the bank has made to enquire your opinion about the service?

.....

16) What improvement and development do you suggest that the bank should make on visa card service and other electronic banking services?

.....



