

Challenges and Prospects of E-banking System in Commercial Bank of Ethiopia (A case study on fiche branch)

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By: Mikiyas Solomon

Advisor: Abdulselem f.



**COLLAGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE**

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DECLARATION

I, Mikiyas solomon, declare that this study entitled as “the Challenges and Prospects of E-banking system in commercial bank of Ethiopia fiche branch”, is my own work. I have carried out their search work independently with the guidance and support of the research advisor. This study had not been submitted to any degree/diploma in this or any other institution. It is done in partial fulfillment of requirement BA Degree program in Accounting and finance.

Name of student: Mikiyas Solomon Advisor name: Abdulselem f.

Signature: _____ Signature: _____

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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

ABSTRACT

E-banking is the most recent delivery channel of banking service in developing nations. This research paper is prepared to meet the objective of assessing the prospects and challenges of e-banking service in commercial bank of Ethiopia in Addis Ababa city. To meet this objective, data were collected from both the bank employees and customers. Here, by the primary data collection method, the researchers used questionnaires that contain open and close ended questions, and the data are analyzed by using qualitative and quantitative method, using tables and percentages. The result of this research was analyzed based on the data collected through questionnaires. The study showed that benefits of using e-banking services that the customers get and benefits of providing e-banking services that the bank get. Also the study, the result of the study indicated that, the major challenges of providing e-banking service are infrastructural challenge and socio cultural challenges. 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 of internet penetration problem through cooperative work with Ethiopian Telecommunication Corporation

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The precursor for the modern home online banking service was the distance banking service over electronic media from early 1980. The term on line became popular in the late 1980s and referred to the use of a terminal, key board and TV or monitor to access to banking system using a phone line. (Gandy, 1995).

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 activity 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 rely 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 fice branch, 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 officialy and effectiveness of this operations. So that more transaction can be process faster and most conveniently, which will run 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. (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 (Ainin 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 & Storey, 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 Fiche branch 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 Fiche city.

1.3 Research Questions

The research was attempted to answer the following questions:

- ❖ What are the benefits of using e-banking service for the customer?
- ❖ What are the benefits of implementing e-banking service for commercial bank of Ethiopia in Fiche branch?
- ❖ What are the major infrastructural challenges facing e-banking services in CBE Fiche branch?
- ❖ What are the major socio-cultural challenges facing e-banking services in CBE Fiche branch?

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 Fiche city.

1.4.2. Specific Objectives

The specific objectives of the study are;

- ❖ To identify the benefits of using e-banking services for the customers.
- ❖ To identify the benefits of implementing e-banking services for commercial bank of Ethiopia fiche branch.
- ❖ To analyze the infrastructural challenges of e-banking services in CBE fiche branch.
- ❖ To analyze the major socio-cultural challenges of e-banking services in CBE fiche branch.

1.5 Significance of the Study

First of all, the study will 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 will 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 will alert bankers tomorrow's problems today in order to achieve the stated objectives. Moreover, it will be used 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 which found in fiche city, which is fiche main branch. The bank provides e-banking service through Card Banking (ATM and POS), Mobile banking and Internet banking channels. The researchers concerned with some employees and customers of those selected branches who are in the best position to disseminate the information. We select the main branch under consideration of cost, time, and employee's experience, year of establishment and under the assumption that have better information access in fiche city. The study primarily gives much emphasis to the challenges and prospects of e-banking service.

1.7 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 and scope 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. Finally 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

2.1 Terms and Concepts

The definition of Electronic banking (E-banking) varies amongst researchers partially because Electronic banking refers to several types of services through which bank customers can request information and carry out most retail banking services via computer, television or mobile phone (Daniel, 1999). Different authors have defined it 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. Sathye (1999) also asserted that electronic banking can be defined as a variety of the following platforms: (a) Internet banking (or online banking), (b) telephone banking, (c) television-based banking, (d) mobile phone banking, and (e) PC bank (or offline banking). In the opinion of Daniel (1999), E-banking 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. For many consumers, electronic banking means 24-hour access to cash through an Automated Teller Machine (ATM) or Direct Deposit of pay checks into checking or savings accounts (FTC, 2006). But electronic banking now involves many different types of transactions. Electronic banking, also known as Electronic Funds Transfer (EFT), is simply the use of electronic means to transfer funds directly from one account to another without the physical involvement of the bank personnel, rather than by check or cash. By using Electronic fund transfer an account holder can use:

- Salary deposited directly into bank or credit union account
- Withdraw money from account through an ATM machine with a personal identification number (PIN), at any convenience, day or night
- Settle utility bills and other regular payments
- Transfer money between accounts
- Order payment to government offices like tax and pension

- Conduct transactions at the point-of-sale, using a credit/debit card rather than cash, credit or a personal check
- Use computer and personal finance software to coordinate total personal financial management process, integrating data and activities related to income, spending, saving, investing, recordkeeping, bill-paying and taxes, along with basic financial analysis and decision making.

2.1.1 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.

2.1.2. 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)

2.1.3. 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 post banking, 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 booked 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 a 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 needs. 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 processed to the banks website and login .this gives easy access to the persons accounts and this enables the person to clearly see transactions that have occurred wit in his/her accounts; (puopiel Felix 2014)

2.1.4. 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 accesses 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.

2.1.5 E-banking: prospects

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

Opportunities offered by ICT through e-learning programs. The School Net program introduced in Ethiopia to connect more than 500 schools creates opportunities to 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 application.

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).

2.1.6 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. (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, check 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)

2.1.7 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.

2.1.8 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 3rd 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).

2.1.9 Empirical Review

The Study of Hanan Abu Taqa,(2017) aimed to identify and analyze factors affecting customer's adoption of E-banking services in Jordan. The study sample was 450 E-banking services users, who have been chosen from nine main banks selected by the researchers. The study concluded that there was a significant effect of E-service quality, E-perceived usefulness, E-security, E-reliability on the adoption of E-banking services. E-service quality was the most effecting factor on customers' adoption of E-banking services, while e-security was the least influential factor. The study proved the existence of the effect of the following E-service quality dimensions: ease of use, E-privacy, E-efficiency, E-design and E-cost effectiveness and denied the existence of the effect of E-responsiveness on customers' adoption of E-banking services.

The study of DR, Mohammed O. (2012) aimed to identify Factor Affecting the Adoption of E-banking: An analysis of the perspectives of banks customers. The study of E-banking service are being used with increasing frequency in most countries, including Jordan. Although previous studies have confirmed the importance for such services for both banks and customers, the level of electronic banking services adoption in the Jordan still know. This study aims to identify and understand factors that affect bank customers' use of electronic banking services. This study integrates technology acceptance model (TAM) with the theory of planned behavior(TPB) and incorporates five cultural dimensions and perceived risk to propose a theoretical model. The primary data were collected from 387 valid questioners' which were distributed to random banking customers in all 26 licensed banks in Jordan. Multiple regression analysis was employed to test the hypotheses. The main findings of the study are: uncertainty avoidance has a positive

and significant impact on perceived ease of use and perceived Usefulness. Perceived risk has the stronger impact on customers' attitude, which in turn influences customers' intention to use electronic banking services.

The study of Ayana Gemechu, (2014) aimed to identify Factors that Affect Adoption of E-banking in the Ethiopian banking industry. The study was conducted based on the data gathered from four banks in Ethiopia; three private banks (Dashen bank, Zemen bank and wegage bank) and one state owned bank (commercial bank of Ethiopia). A mixed research approach was used to answer the research questions that emerge through the review of existing literature and the experiences of the researcher in respect of the E-banking system in Ethiopia. The study statistically analyzes data obtained from the survey questionnaire. A research framework developed based on technology-organization environment model (TOE) developed by Tornatzky and Fleischer. The result of the study indicated that, the major barriers Ethiopian banking industry faces in the adoption of Electronic banking are: security risk, lack of trust, lack of legal and regulatory frame work, Lack of ICT infrastructure and absence of competition between local and foreign banks. The study suggests a series of measures which could be taken by the banking industry and by government to address various challenges identified. These measures include: Establishing a clear set of legal framework on the use of technology in banking industry, supporting banking industry by investing on ICT infrastructure and banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition.

2.2 Conclusion and Research gap

The above study showed that the comparisons of the studies on the e-banking services. This studies shows that the understanding of the e-banking service is important for banking industries. Most of the previous studies on the e-banking industry focused on the factors that affect the adoption of e-banking system. But unlike others to fill the gap and contribute literature, this study aimed to analyze challenges and opportunities of e-banking services. Additionally as per knowledge of the researcher there is no study is done on the challenges and opportunities of e-banking services in fiche branch.

CHAPTER THREE

3. Methodology of the Study

3.1 Research Design

Research design is usually a plan or blue print which specifies how data relating to a given problem should be collected and analyzed. It provides the procedural outlines for the conduct of any investigation (Creswell 2007).

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 Fiche city, and also the research attempt to explain the phenomenon and assess the current situations of e-banking. Therefore, descriptive type of research is selected to fulfill the objective.

3.2 Sources of Data

The study used to take data from primary sources. The primary data obtained from distributed questionnaires to those respondents from selected branch 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 populations were defined in terms of elements, sampling units, extent, and time. In this research the target populations were 30 employees and 652 e-banking customers' commercial bank of Ethiopia Fiche branch.

3.4 Sampling Technique

The study has two target groups' workers of the bank and customers of the bank. In order to conduct the sample for this study the researcher uses census method of surveying for employees and purposive sampling method for the customers. The sample used for this study is one selected branch of commercial bank of Ethiopia and customers. The reason why Purposive sampling technique is for customer is that customers were selected on the basis of their willingness to answer research questions. The reason of using census for the employees is that employees are small in number and easily addressing them to answer the research questions.

3.5 sample size

In order to achieve the objective of the research, the researcher used all 30 employees of the bank and purposely selects 25 e-banking users' (customers) of the bank. The customers participate in this study was the ones which were users of e-banking and the ability to answer the research questions.

3.6 Data collection instruments

In conducting the study the researcher collect data from the employees and customers of the bank. The researcher used 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 researcher. Thus open-ended and closed-ended questions were used.

3.7 Data analysis

After primary data had been collected, descriptive and analytical analysis were used. Because the descriptive analysis is used to understand the data observed and the analytical analysis is used to analyze the statistical tools. Finally, the results from questionnaires have been presented in written form supported by the tables and percentage.

CHAPTER FOUR

4. Data Analysis and Interpretation

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

Out of the total 248 employees, 30 employees were selected. On the other hand, from the large number of customers, 25 individuals were selected as sample respondent through purposive sampling technique. Questionnaires were prepared for both employees and customers of the bank.

The researchers distributed 30 questionnaires to employees and 25 questionnaires to the customers to fill the necessary data. However from the total number of employees, 5 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 25 returned questionnaires of employees and the total 25 customer's questioner to analyze the research.

4.1. Characteristics of Customers respondents.

Table 4.1.1 Respondent's personal information.

Item	General characteristics	Customer	
		Frequency	%
1	Sex		
	Female	5	20%
	Male	20	80%
	Total	25	100%
2	Age		
	18-25	10	40%
	26-30	4	16%
	31-35	4	16%
	36-45	4	16%
	Above 46	3	12%
	Total	25	100%

3	Educational Background		
	Elementary	2	8%
	high school	4	16%
	Diploma	3	12%
	Bachelor degree	8	32%
	MSC	4	16%
	PHD	3	12%
	Other	1	4%
	Total	25	100%
4	How long have you been served by commercial bank of Ethiopia?		
	< 2 years	3	12%
	3-5 years	9	36%
	6-10 years	9	36%
	>10 years	4	16%
	Total	25	100%
5	Occupation		
	Student	5	20%
	Self employed	7	28%
	Government employed	12	48%
	Other	1	4%
	Total	25	100%

Source :(Data collected through Questionnaire)

According to item 1 of Table 4.1.1, regarding the sex of respondents, from total respondents 20 individuals or 80% of respondents are male and the rest 5 individuals or 20% 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 10(40%) are in the age category of 18-25, 4(16%) are in the age group of

26-30, 4(16%) are in the age group of 31-35, 4(15%) are in the age category of 36-45 and the rest 3(12%) are in the age category of above 45. This implies that the majority of customers are relatively young. This show the new generations are active in using this technology.

Considering education level of customer respondents in item 3 of table 4.1.1, from the total number of respondents 2 (8%) are learn up to elementary, 4(16%) are learn up to high school, 3(12%) are Diploma holders, 8(32%) are Bachelor degree holders, 4(16%) are MSC holders, 3(12%) are PHD holders and the rest 1(4%) 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(12%) indicated that they have been served for 2 years, 9(36%) indicated that they have been served for 3-5 years, 9(36%) indicated that they have been served for 6-10 years and the rest 4(16%) 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(20%) of respondents replied that they are student, 7(28%) responds self employed, 12(48%) replied government employed and the rest 1(4%) replied as other. From this result we can conclude that most of the customers are government employed who participate in different sector.

4.2. Customers General Information

The researcher has 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.

4.2.1 Opportunities of using e-banking services.

4.2.1.1 Benefits of e-banking services for customers.

Table 4.2.1.1.1 Identify the benefits of using e-banking service for the customers.

Benefits of e-banking to the customers.	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Fre	%	Fre	%	Freq	%	freq	%	Freq	%
	q		q							
It saves time spent in banks.	5	20%	10	40%	0	0%	5	20%	5	20%
Reduced costs in accessing and using the banking services.	18	72%	3	12%	0	0%	4	16%	0	0%
Banks are available 24 hours a day.	8	32%	12	48%	0	%	3	12%	2	8%
Self-service channel.	10	40%	8	32%	0	0%	5	20%	2	8%
It provides some security and privacy to customers.	20	80%	5	20%	0	0%	0	0%	0	0%
E-banking service increase customer satisfaction.	11	44%	9	36%	0	0%	3	12%	2	8%
E-banking services enable customers to complete banking activities more easily.	488	32%	12	48%	0	0%	4	16%	1	4%
E-banking enables customers to use bank services conveniently.	20	80%	5	20%	0	0%	0	%	0	0%
E-banking service makes easy access for many customers.	12	48%	9	36%	0	0%	4	16%	0	0%

Source: questionnaire

In relation with save time spent of e-banking services, On the basis of the above table, 44%, 36%, 12%, and 8% strongly agree, agree, disagree, and strongly disagree. On the Reduce costs in accessing, 72%, 12%, 16% and 0% strongly agree, agree, disagree, and strongly disagree. On banks are available 24-hours 32%, 48%, 12% and 8% strongly agree, agree, disagree and strongly disagree. On self service channel, 40%, 32%, 20% and 8% of respondents strongly agree, agree, disagree and strongly disagree. On the provides some security and privacy to customers side 80%, 20%, 0% and 0% strongly agree, agree, disagree, and strongly disagree.

In relation with E-banking service increase customer satisfaction, On the basis of the above table, 43.3%, 33%, 16.7% and 6.7% of respondents strongly agree, agree, disagree and strongly disagree. E-banking services enable customers to complete banking activities more easily. 32%, 48%, 16% and 4% of respondents are strongly agree, agree, disagree, and strongly disagree. On e-banking enables customers to use bank services conveniently, 80%, 20% of respondents are strongly agree and agree. On e-banking service makes easy access for many customers. 48%, 36% and 16% of respondents are strongly agree, agree and disagree. In general e-banking services (ATM, Mobile banking, and Internet banking) enable the customers to use e-banking services conveniently.

4.2.2 Challenges of using e-banking services.

4.2.2.1 Infrastructural challenges of e-banking services.

Table 4.2.2.1.1 Analyze the major challenges of using electronic banking service.

Infrastructural challenges of E-banking	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High cost of internet.	19	76%	6	24%	0	0%	0	0%	0	0%
Failure in telephone line and other network lines.	20	80%	5	20%	0	0%	0	0%	0	0%
Low level of internet penetration.	9	36%	11	44%	4	16%	1	4%	0	0%
Poorly developed telecommunication infrastructure.	10	40%	12	48%	1	4%	2	8%	0	0%
Lack of internet because of low bandwidth and low speed.	20	80%	5	20%	0	0%	0	0%	0	0%
Customer low levels of computer literacy.	10	40%	8	32%	4	16%	2	18%	1	4%

Source: questionnaire

As the above table 4.1.3 shows on the high cost of internet, that 76% of the respondents strongly agree, 24% agree, there is no disagree and strongly disagree from the respondents. This indicated that high cost of internet is one of the major challenges that face e-banking services in commercial bank of Ethiopia.

Also on the failure in telephone line and other network lines, that 80% of the respondents strongly agree, 20% agree, and there no disagree and strongly disagree from the respondents. This one also has indicated that failure in telephone line and other network lines is one of the major challenges that affect e-banking service in commercial bank of Ethiopia.

The other major challenges of e-banking are Low level of internet penetration. As the above table shows that 36% of the respondents are strongly agreed, 44% agree, 16% neutral, and 4% disagreed of the respondents. On this challenge only one respondent is disagree, so most of the respondents are agreed with the low level of internet penetration is one of the major challenges that face commercial bank of Ethiopia e-banking services.

As the above table shows on the poorly developed telecommunication infrastructure, that 40% of the respondents are strongly agree, 40% agree, 4% neutral, 8% disagree from the respondents. On this challenge only 3 respondents were disagreed, so most of the respondents are agreed with poorly developed telecommunication infrastructure is one of the major challenge that affect commercial bank of Ethiopia e-banking services.

As the above table shows on the Lack of internet because of low bandwidth and low speed, which 80% of the respondents are strongly agree, and 20% agree from the respondents. On this challenge there is no respondent that is disagreed, so the majority of the respondents are agree with lack of internet because of low bandwidth and low speed is the major challenge that faces commercial bank of Ethiopia e-banking services.

As the above table shows on the Customer low levels of computer literacy, which 40% of the respondents strongly agree, 32% of the respondents disagree, 16% of the respondents neutral, 18% of the respondents disagree, 4% of the respondents were strongly disagreed. So this indicated that customer low level of computer literacy is the major challenge that faces commercial bank of Ethiopia e-banking services.

4.2.2.2 Socio-cultural challenges of e-banking services.

Table 4.2.2.1 Analyze the major challenges of using electronic banking service.

Socio-cultural challenges of E-banking.	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Lack of awareness on new technology.	11	44%	9	36%	0	0%	4	16%	1	4%
Lack of confidence with the security aspects.	8	32%	12	48%	0	0%	3	12%	2	8%
Lack of training and sticking with existing structure.	9	36%	8	32%	3	12%	3	12%	2	8%
Customer Fear of risks to use e-banking.	9	36%	7	28%	5	20%	3	12%	1	4%
Cultural and historical differences in attitudes.	3	12%	5	20%	3	12%	9	36%	5	20%

Source: questionnaire

The respondents were asked whether or not Lack of awareness on new technology is a challenge to the e-banking services. In this regard, the most of the respondents (80%) strongly agree and agree with that Level of development of the society is one of the challenges that are facing e-banking services. thus; only 16% and 4% of respondents disagree and strongly disagree respectively. This implies that, that Level of development of the society is one of the challenges that are facing e-banking services.

As the above table shows that on the lack of confidence with the security aspects, which 32% of the respondents strongly agree, 48% agree, and 12% disagree from the respondents. So most of respondents were agreed with the lack of confidence with the security aspects is the major socio cultural challenge that face e-banking services.

On the basis of the above table 36%, 32%, and 12% of the respondents strongly agree, agree and neutral of e-banking challenge related with Lack of training and sticking with existing structure only 12% and 8% of respondents disagree and strongly disagree respectively. This implies that, lack of training and sticking with existing structure is the major challenges facing e-banking services.

As the above table shows 36%, 28%, and 20% of the respondents strongly agree, agree and neutral of e-banking challenge related with Customer Fear of risks to use e-banking service only 12% and 4% of respondents disagree and strongly disagree respectively. This implies that Customer Fear of risks to use e-banking service is other challenges that face e-banking services.

As the above table shows on Cultural and historical differences in attitudes, which 12% of the respondents strongly agree, 20% agree, 12% neutral, 36% disagree and 20% strongly disagree from the respondents. So the majority of the respondents are disagree, this implies that, it is difficult to conclude Cultural and historical differences in attitude as one of the challenges that are facing e-banking services.

4.2.2.3 Other challenges of using e-banking services.

Table 4.2.2.3.1 Analyze the major challenges of using electronic banking service.

Other challenges	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	freq	%	Fre q	%	Fre q	%	Fre q	%	freq	%
	Web Usability Issues.	6	24%	8	32%	5	20%	4	16%	2
Security and Privacy Issues.	3	12%	4	16%	3	12%	9	36%	6	24%
Information Quality Issue.	9	36%	5	20%	4	16%	3	12%	4	16%
Trust Issue.	2	8%	6	24%	3	12%	10	40%	4	16%
Service Quality Issue.	3	12%	4	16%	6	24%	8	32%	4	16%

Source: questionnaire

On the basis of the above table 24%, 32%, 20%, 16%, and 8% of the respondents strongly agree, agree, neutral, disagree and strongly disagree from the respondents. So the majority of the respondents are agreed. This implies that, Web Usability Issues is the other challenge that affects e-banking services.

As the above table shows on Security and Privacy Issues, which 12% of the respondents strongly agree, 16% agree, 12% neutral, 36% disagree and 24% strongly disagree from the respondents. So the majority of the respondents are disagree, this implies that Security and Privacy Issue is the other major challenge facing e-banking services.

As the above table shows on Information Quality Issue, which 36% of the respondents strongly agree, 20% agree, 16% neutral, 12% disagree and 16% strongly disagree from the respondents. So the majority of the respondents are strongly agree, this implies that Information Quality Issue is the other challenge that affect e-banking services.

On the basis of the above table which 8% of the respondents strongly agree, 24% agree, 12% neutral, 40% disagree and 16% strongly disagree from the respondents. So the majority of the respondents are disagree, this implies that, it is difficult to conclude that trust Issue as one of the other challenges that are facing e-banking services.

As the above table shows which 12% of the respondents strongly agree, 16% agree, 24% neutral, 32% disagree and 16% strongly disagree from the respondents. So the majority of the respondents are disagree, this implies that, it is difficult to conclude Service Quality Issue is as one of the other challenges that are facing e-banking services.

4.3 Characteristics of Employee Respondents.

4.3.1 Personal information of employers of the bank.

Table 4.3.1.1 Employee’s personal information.

Item	General characteristics	Employers	
		Frequency	%
1	Sex		
	Female	5	20%
	Male	20	80%
	Total	25	100%
2	Age		
	18-25	3	12%
	26-30	7	28%
	31-35	11	44%
	36-45	4	16%
	Above 46	0	0%
	Total	25	100%
3	Educational Background		
	Diploma	2	8%
	Bachelor degree	15	60%

	MSC	5	20%
	PHD	3	12%
	Total	25	100%
4	Please, indicate your current position in Commercial bank of Ethiopia		
	Customer relation officer(CRO)	7	28%
	Customer service officer(CSO)	5	20%
	Banking operation officer(BOO)	2	8%
	Digital banking officer(DBO)	2	8%
	Banking business officer(BBO)	9	36%

Source :(Data collected through Questionnaire)

According to item 1 of Table 4.3.1.1, regarding the sex of respondents, from total respondents 20 individuals or 80% of respondents are male and the rest 5 individuals or 20% are female. This implied that more than half of the employers are males and the participation of females in this aspect is less. This means female's participation is low, so the benefit of the bank that gets from females employers is low.

According to item 2 of Table 4.3.1.1, with regard to age of employers respondents, from the total number of respondents 3(13%) are in the age category of 18-25, 7(28%) are in the age group of 26-30, 11(44%) are in the age group of 31-35, 4(16%) are in the age category of 36-45 and the rest age category of above 45 are 0. This implies that the majority of employers are relatively young.

Considering education level of employers respondents in item 3 of table 4.3.1.1, from the total number of respondents 2(8%) are diploma, 15(60%) are bachelor degree, 5(20%) are MCS holders, and the rest 3(12%) are PHD holders. Therefore, the majority of the sample indicates that the employers of the bank are bachelor degree holders.

According to item 4 of Table 4.3.1.1 , With regard to the employers of the bank indicating their current position in commercial bank of Ethiopia, from the total number of respondents 7(28%)

are in the position of customer relation officer, 5(20%) are in customer service officer, 2(8%) are banking operation officer, 2(8%) are digital banking officers and the rest 9(36%) are banking business officers. Therefore the majority of the sample indicates that most employers of the bank are under the position of banking business officers.

4.4. Employees General Information

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

4.4.1 Opportunities of implementing e-banking services.

4.4.1.1 Benefits of e-banking services for employees.

Table 4.4.1.1.1 Identify the benefits of implementing e-banking service for the bank.

benefit of e-banking to the banks	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Reduce transaction cost.	5	20%	19	76%	1	4%	0	0%	0	0%
Increase transaction speed and accuracy.	10	40%	15	60%	0	0%	0	0%	0	0%
Increases the productivity of the bank.	13	52%	12	48%	0	0%	0	0%	0	0%
Increase service quality by providing 24-hour service without employee and customer contact.	10	40%	13	52%	2	8%	0	0%	0	0%
Improves relationship with customers.	3	12%	18	72%	4	16%	0	0%	0	0%

Maximize profit by reducing human resource of the bank and paper work.	8	32%	14	56%	3	12%	0	0%	0	0%
Allow remote transactions facilities that replace physical presence of a customer in a bank branch.	11	44%	9	36%	3	12%	2	8%	0	0%

Source: questionnaire

Table 4.4.1.1.1 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, 20% are strongly agreed on this benefit, 76% agreed from the respondents and the rest 4% are neutral from the respondents. 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, 40% of the respondents said strongly agree, 60% of the respondents said agree. From this we can conclude that the majority of respondents are 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 Increases the productivity of the bank. From the total respondents, 52% of the respondents said strongly agree, 48% of the respondents were agreed. From this we can conclude that the majority of respondents are strongly agreed on the benefit of e-banking; i.e., increasing the productivity of the bank. This implied that the bank increase customer satisfaction.

The fourth benefit is increase service quality by providing 24-hour service without employee and customer contact. From the total respondents, 40% of the respondents said strongly agree, 52% of respondents said agree and the rest 8% are neutral. This implied that more than half of the

respondents are 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 five benefits is Improves relationship with customers. From the total respondents, 12% of the respondents said strongly agreed, and 72% of the respondents said agree and 16% of the respondents were neutral. From this we can conclude that the majority of respondents are agreed on the benefit of e-banking; i.e. improves relationship with customers. This implied that the bank has increased customer satisfaction.

The sixth benefit is maximizing profit by reducing human resource of the bank and paper work. From the total respondents, 32% of the respondents replied strongly agree, 48% of respondents replied agree, 12% of respondents replied neutral and the remaining 8% 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, 44% of respondents replied strongly agree, 36% of respondents said agree, 12% of respondents said neutral and the remaining 8% 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.

4.4.1.2 Benefit of e-banking services to the customers.

Table 4.4.1.2.1 Analyze the benefits of implementing electronic banking service.

It saves time spent in banks.	9	36%	16	64%	0	0%	0	0%	0	0%
Reduced costs in accessing and using the banking services.	7	28%	17	68%	1	4%	0	0%	0	0%
E-banking services are available 24 hours a day.	8	32%	12	48%	5	20%	0	0%	0	0%
Self-service channel.	10	40%	15	60%	0	0%	0	0%	0	0%
It provides some security and privacy to customers.	5	20%	8	80%	0	0%	0	0%	0	0%
E-banking service increase customer satisfaction.	6	24%	12	48%	2	8%	5	20%	0	0%
E-banking services enable customers to complete banking activities more easily.	5	20%	13	52%	4	16%	3	12%	0	0%
E-banking enables customers to use bank services conveniently.	9	36%	6	24%	5	20%	5	20%	0	0%
E-banking service makes easy access for many customers.	12	48%	5	20%	6	24%	2	8%	0	0%

Source: questionnaire

In relation with it save time spent of e-banking service, On the basis of the above table, 36% and 64% strongly agree and agree. On the Reduce costs in accessing, 28%, 68% and 4% strongly agree, agree and neutral. On the e-banking are available 24-hours a day, 32%, 48% and 20% strongly agree, agree and neutral. On self service channel, 40% and 60% of the respondents strongly agree and agree. On provides some security and privacy to employee side 20% and 80%, strongly agree and agreed.

In relation with E-banking service increase customer satisfaction, On the basis of the above table, 24%, 48%, 8% and 20% of respondents strongly agree, agree, neutral and disagree. E-banking services enable customers to complete banking activities more easily, 20%, 52%, 16% and 12% of respondents are strongly agreed, agree, neutral and disagree. On e-banking enables customers to use bank services conveniently, 36%, 24%, 20% and 20% of respondents are strongly agree, agree, neutral and disagree. On e-banking service makes easy access for many customers, 48%, 20%, 24% and 8% of respondents are strongly agree, agree, neutral and disagree. In general e-banking services (ATM, Mobile banking, and Internet banking) enable the customers to use e-banking services conveniently.

4.4.2 Challenges of implementing e-banking services.

4.4.2.1 Infrastructural challenges of e-banking services.

Table 4.4.2.1.1 Analyze the major challenges of using electronic banking service.

Infrastructural challenges of E-banking	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High cost of internet.	10	40%	12	48%	3	12%	0	0%	0	0%
Failure in telephone line and other network lines.	13	52%	8	32%	4	16%	0	0%	0	0%
Low level of internet penetration.	20	80%	0	0%	5	20%	0	0%	0	%
Poorly developed telecommunication infrastructure.	25	100%	0	0%	0	0%	0	0%	0	0%
Lack of internet because of low bandwidth and low speed.	11	44%	8	32%	6	24%	0	0%	0	0%
Customer low levels of	16	64%	7	28%	2	8%	0	0%	0	0%

computer literacy.										
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Source: questionnaire

As the above table 4.4.2.1.1 shows on the high cost of internet, that 40% of the respondents strongly agree, 48% agree and 12% of the respondents were neutral. This indicated that high cost of internet is one of the major challenges that face e-banking services in commercial bank of Ethiopia.

Also on the failure in telephone line and other network lines, that 52% of the respondents strongly agree, 32% agree, and 16% of the respondents neutral from the respondents. This one also has indicated that failure in telephone line and other network lines is one of the major challenges that affect e-banking service in commercial bank of Ethiopia.

The other major challenges of e-banking are Low level of internet penetration. As the above table shows that 80% of the respondents are strongly agreed and 20% of the respondents neutral. On this challenge only 5 respondents is neutral, so most of the respondents are agreed with the low level of internet penetration is one of the major challenges that face e-banking services.

As the above table shows on the poorly developed telecommunication infrastructure, that 100% of the respondents are strongly agreed. On this challenge all respondents were strongly agreed, so most of the respondents are strongly agreed with poorly developed telecommunication infrastructure is one of the major challenge that affect commercial bank of Ethiopia e-banking services.

As the above table shows on the Lack of internet because of low bandwidth and low speed, which 44% of the respondents are strongly agree, 32% agree and 24% neutral from the respondents. On this challenge there is no respondent that is disagreed, so the majority of the respondents are agree with lack of internet because of low bandwidth and low speed is the major challenge that faces commercial bank of Ethiopia e-banking services.

As the above table shows on the Customer low levels of computer literacy, 64% of 16 respondents strongly agree, 28% of 7 respondents agree and 8% of 2 respondents neutral. So this

indicated that most of the respondents were strongly agreed, so customer low level of computer literacy is the major challenge that faces commercial bank of Ethiopia e-banking services.

4.4.2.2 Socio-cultural challenges of e-banking services.

Table 4.4.2.1.2 Analyze the major challenges of electronic banking service.

Socio-cultural challenges of E-banking.	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Lack of awareness on new technology.	22	88%	3	12%	0	0%	0	0%	0	0%
Lack of confidence with the security aspects.	22	88%	3	12%	0	0%	0	0%	0	0%
Lack of training and sticking with existing structure.	22	88%	3	12%	0	0%	0	0%	0	0%
Customer Fear of risks to use e-banking.	16	64%	5	20%	4	16%	0	0%	0	0%
Cultural and historical differences in attitudes.	10	40%	6	24%	9	35%	0	0%	0	0%

Source: questionnaire

The respondents were asked whether or not Lack of awareness on new technology is a challenge to the e-banking services. In this regard, most of the respondents (88%) strongly agrees and (12) agrees with that Level of development of the society is one of the challenges that are facing e-banking services. This implies that, that Level of development of the society is one of the challenges that are facing e-banking services.

As the above table shows that on the lack of confidence with the security aspects, w88% of the respondents strongly agree and 12% of the respondents agreed. So most of respondents are strongly agreed with the lack of confidence with the security aspects is the major socio cultural challenge that face e-banking services.

On the basis of the above table 88% and 12% of the respondents strongly agree and agree of e-banking challenge related with Lack of training and sticking with existing structure respectively. This implies that, lack of training and sticking with existing structure is the major challenges facing e-banking services.

As the above table shows 64%, 20%, and 16% of the respondents strongly agree, agree and neutral of e-banking challenge related with Customer Fear of risks to use e-banking service. This implies that Customer Fear of risks to use e-banking service is other challenges that face e-banking services.

As the above table shows on Cultural and historical differences in attitudes, which 40% of the respondents strongly agree, 24% agree and 36% neutral from the respondents. So the majority of the respondents are strongly agree, this implies that Cultural and historical differences in attitude is one of the major challenges that are facing e-banking services.

4.4.2.3 Other challenges of e-banking service.

Table 4.4.2.1.3 Analyze the major challenges of electronic banking service.

Other challenges	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	freq	%	Fre q	%	Fre q	%	Fre q	%	freq	%
	Web Usability Issues.	13	52%	6	24%	6	24%	0	0%	0
Security and Privacy Issues.	11	44%	13	52%	1	4%	0	0%	0	0%
Information Quality Issue.	5	20%	10	40%	5	20%	5	20%	0	0%
Trust Issue.	8	32%	13	52%	4	16%	0	0%	0	0%
Service Quality Issue.	6	24%	16	64%	3	12%	0	0%	0	0%

Source: questionnaire

On the basis of the above table 52%, 24% and 24% of the respondents strongly agree, agree and neutral from the respondents. So the majority of the respondents strongly agree. This implies that, Web Usability Issues is the other challenge that affects e-banking services.

As the above table shows on Security and Privacy Issues, which 44% of the respondents strongly agree, 52% agree and 4% neutral from the respondents. So the majority of the respondents are agree, this implies that Security and Privacy Issue is the other major challenge facing e-banking services.

As the above table shows on Information Quality Issue, which 20% of the respondents strongly agree, 40% agree, 20% neutral, and 20% disagree from the respondents. So the majority of the respondents are agree, this implies that Information Quality Issue is the other challenge that affect e-banking services.

On the basis of the above table on trust issue, which 32% of the respondents strongly agree, 52% agree and 16% neutral from the respondents. So the majority of the respondents are agree, so this implies that trust Issue is one of the other challenges that are facing e-banking services.

As the above table shows on service quality issue which 24% of the respondents strongly agree, 64% agree and 12% neutral from the respondents. So the majority of the respondents are strongly agree, this implies that, Service Quality Issue is one of the other challenges that are facing e-banking services.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

For the purpose of having a clear picture about service delivery of electronic banking system, the previous chapter has analyzed the collected data properly. In this chapter the analyzed data's are concluded and possible recommendations for the research questions would be forwarded.

5.1. Conclusions

Based on the analysis made in chapter four the following conclusions are made on the challenges and opportunities of e-banking service in commercial bank of Ethiopia.

Currently the banking service of commercial bank of Ethiopia in Fiche city is not developed as expected and therefore there is 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 Fiche city 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 internet because of low bandwidth and low speed, high cost of internet and failure in telephone line and other networks 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; reduce transaction cost, increase the productivity of the bank, increase service quality by providing 24-hours service without employee and customer contact and maximize profit by reducing human resource of the bank and paper work are the major opportunities for the development of electronic banking services in Ethiopia.

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 its 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:

- ❖ 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 fiche city. 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 make the system easy and understandable by anyone.

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PART-TWO: Research related questions. Where, **5** = strongly agree, **4** = agree, **3** = neutral, **2** = disagree and **1**= strongly disagree.

I. Identify the benefits of using e-banking service for the customers.

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
It saves time spent in banks					
Reduced costs in accessing and using the banking services					
Banks are available 24 hours a day					
Self-service channel					
It provides some security and privacy to customers					
E-banking service increase customer satisfaction					
E-banking services enable customers to complete banking activities more easily.					
E-banking enables customers to use bank services conveniently.					
E-banking service makes easy access for many customers.					

1. Any other benefit you can give me that are important _____

II. Analyze the major challenges of using electronic banking service.

INFRASTRUCTURAL CHALLENGES	1.	High cost of internet.					
	2.	Failure in telephone line and other network lines.					
	3.	Low level of internet penetration.					
	4.	Poorly developed telecommunication infrastructure.					
	5.	Lack of internet because of low bandwidth and low speed.					
	6.	Customer low levels of computer literacy.					
SOCIO-CULTURAL CHALLENGES	1.	Lack of awareness on new technology.					
	2.	Lack of confidence with the security aspects.					
	3.	Lack of training and sticking with existing structure.					
	4.	Customer Fear of risks to use e-banking.					
	5.	Cultural and historical differences in attitudes.					
OTHER CHALLENGES	1.	Web Usability Issues.					
	2.	Security and Privacy Issues.					
	3.	Information Quality Issue.					
	4.	Trust Issue.					
	5.	Service Quality Issue.					

2. Any other benefit you can give me that are important_____

APPENDIXES

WOLKITE UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTEMENTE OF ACCOUNTING AND FINANCE

QUESTIONNAIRE PREPARED TO BANK EMPLOYEES RELATED TO ELECTRONIC BANKING SERVICE

This questionnaire is prepared by prospective graduating student from wolkite University to identify the challenges and prospect of e-banking from employees prospective. The outcome of the study will help to the suggest possible solution from the problems observed you are kindly requested to response the questions are reasonable as possible .The researchers assures you that your response is kept confidential and used for only academic purpose .

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

Dear respondent after you read each of the practice, evaluate them in relation to your e-banking service and then put a tick mark (√) under the choices below.

PART-ONE: Information regarding respondent's background

1) Sex Male Female

2) Age 18-25year 26-30 year 31-35 years 36-40 years above 40years

3) Your educational background.

Diploma Bachelor-degree MSC PHD

Other; Please specify

4) Please, write your current position in Commercial bank of Ethiopia?

PART-TWO: Research related questions. Where, **5** = strongly agree, **4** = agree, **3** = neutral, **2** = disagree and **1**= strongly disagree.

I. Identify the benefits of implementing e-banking service for commercial banks of Ethiopia.

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Reduce transaction cost					
Increase transaction speed and accuracy.					
Increases the productivity of the bank.					
Increase service quality by providing 24-hour service without employee and customer contact.					
Improves relationship with customers.					
Maximize profit by reducing human resource of the bank and paper work.					
Increases the productivity of the bank.					
Allow remote transactions facilities that replace physical presence of a customer in a bank branch.					

1. Any other benefit you can give me that are important _____

II. Benefits of using e-banking service for the customers.

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
It saves time spent in banks					
Reduced costs in accessing and using the banking services					
Banks are available 24 hours a day					
Self-service channel					
It provides some security and privacy to customers					
E-banking service increase customer satisfaction					
E-banking services enable customers to complete banking activities more easily.					
E-banking enables customers to use bank services conveniently.					
E-banking service makes easy access for many customers.					

2. Any other benefit you can give me that are important _____

III. Analyze the major challenges of electronic banking service in commercial bank of Ethiopia.

CHALLENGES	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
INFRASTRUCTURAL CHALLENGES	1. High cost of internet.					
	2. Failure in telephone line and other network lines.					
	3. Low level of internet penetration.					
	4. Poorly developed telecommunication infrastructure.					
	5. Lack of internet because of low bandwidth and low speed.					
	6. Customer low levels of computer literacy.					
SOCIO-CULTURAL CHALLENGES	1. Lack of awareness on new technology.					
	2. Lack of confidence with the security aspects.					
	3. Lack of training and sticking with existing structure.					
	4. Customer Fear of risks to use e-banking.					
	5. Cultural and historical differences in attitudes.					
OTHER CHALLENGES	1. Web Usability Issues.					
	2. Security and Privacy Issues.					

	3.	Information Quality Issue.					
	4.	Trust Issue.					
	5.	Service Quality Issue.					

Any other Challenges you can give me that are important_____
