ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

AN ASSESSMENT ON BENEFITS AND RISKS OF E BANKING ON CUSTOMER SAVING: IN THE CASE OF CBE UNDER NORTH ADDIS ABABA DISTRICT

BY: MEIRAF HAILU

JUNE, 2019

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

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By
MEIRAF HAILU

APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies	Signature
Advisor	Signature
External Examiner	Signature
Internal Examiner	Signature

DECLARATION

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

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Name Signature

ENDORSEMENT

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

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Advisor Signature

St. Mary's University, Addis Ababa June, 2019

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Acknowledgement

I am most grateful to Almighty God who through His infinite mercy and love guided me throughout the duration of the study.

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List of tables

ACRONYMS

ATM	Automated Teller Machine
CBE	Commercial Bank of Ethiopia
E-banking	Electronic banking
EFT	Electronic fund transfer
ICT	Information and Communication Technology
NBE	National Bank of Ethiopia
PIN	Personal Identification Number
POS	Point of Sale
SPSS	statistical package for social science

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Abstract

Ethiopian banking system is still underdeveloped compared to the rest of the world. In Ethiopia Cash is still the most dominant medium of exchange and electronic payment systems are at an embryonic stage. This study is aimed to assess the benefits and risks of E banking on customer saving. The study was conducted based on the data gathered from Commercial Bank of Ethiopia, bank managers, clerks and customers. Qualitative and quantitative 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 statically analyses data obtained from the survey questionnaire. The study used descriptive type of statistics and Data was analyzed using a statistical package for social sciences (SPSS). Result of the study indicated the introduction of e-banking has a positive effect on saving level of the country. The study also identified that Since most of our banks are at infant stage and they are not strong enough financially, cost of the automating their system could be a factor that affect the modernizing effort they tend to put in effect. It also indicated that E-banking affects customer consumption saving patterns by simplifying banking tasks, reducing costs per transaction, improving customer satisfaction, attracting new segment of customers, creating additional ways of transaction. The study suggests a series of measures which could be taken by the banking industry and by government to address various challenges identified in the thesis. These measures include: ICT infrastructure is a major prerequisite for e-banking and hence the government should support banking sector by investing on ICT infrastructure development, Aggressive e-banking awareness through all media of communication should be embarked upon by banks and Continuous effort must be put by the government and all stake holders to overcome hindering factors that are treats to the development of e-banking.

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

The banking industry is being reshaped by globalization, competition and innovation and customer needs, and due to the emergence of a knowledge-based economy and society as information and communication technology (ICT) advanced, banking services have undergone profound changes during the last period. (ImolaDrigă, Claudia Isac 2014, P.49). Now a day, new possibilities in banking system and device technology are being exposed highly. According to Turban, 2008, as cited in AbebeZeleke 2016 E-banking is an improvement over traditional banking system because it has reduced the cost of transaction processing, improved the payment efficiency, financial services and the banker-customer relationship. The researcher added that in rapidly changing and highly competitive environment success in the banking industry especially depends on having use of the appropriate technology along with retention of well trained and motivated employees who have the capacity to exploit the bank's existing technology as well as look for better advancement.

The evolution of the e-banking industry can be traced to the early 1970s when banks began to look at these types of services as an alternative to some of their traditional bank functions that e-banking products and services like ATMs and Electronic fund transfer were an important qualitative element of differentiation for banks that used them (Mobarek, 2007 as cited in ImolaDrigă, Claudia Isac 2014, P 52.). Mobarak also, in his study added that Electronic banking services have actually started to develop only since 1995, when the Maryland Presidential Bank, an American bank, allowed bank accounts to be opened online. Electronic banking is a 24/7 availability of goods and services; communicating, making order, buying, selling, and paying occurs 24 hours a day, 7 days a week and 365 days a year.

According to Gardachew (2010) there is an all immediate 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. However, in Ethiopia, the banking industry is till underdeveloped when related to other countries. There are eighteen banks in Ethiopia that each has branches in Addis Ababa, but not enough branches are accessed all over the country. This

underdeveloped has also been seen in continued to the delivery of Electronic banking especially in small towns which was supported by Jensen (2003) as cited in Mohammed ArifShaikh (2014), most countries in Africa, except South Africa, have Internet infrastructure only in their major cities.

In Ethiopia, Electronic banking appeared since the beginning of 2000 as scholars have written, and documents shows. Gardachew, 2010 reported that the appearance of E-banking in Ethiopia goes back to the late 2001, when CBE introduced the service for local users with its eight ATMs located in Addis Ababa. Mobile banking, Internet banking, Automatic Teller Machine (ATM) and Point of Sale Terminal(POS) are some forms of Electronic banking. Electronic banking benefits customers by encouraging them to save. On the contrary, this banking system has risks which discourage customers. Hence the main objective of this study is to assess the benefits and risks related to E banking.

1.2. Statement of the problem

Electronic banking benefits for easy transactions, security, saving of time, reduction of cost, market expansion and increase in customers which encourage customers forward to saving. Despite its benefits, Electronic banking has drawbacks which discourage people saving.MohammedArifShaikh (Sep 2014) developed the observation of Wondwossen&Tsegai (2005) in his study that lack of appropriate infrastructure for E-payment, lack of internet facilities with customer and learning how to interact with bank website are reasons hindrance factors for the use of electronic payment system in Ethiopia.

Mohammed ArifShaikh (Sep 2014) explained his recognition 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 (simply there is no foreign banks in the country).Hence, the most challenging issues for the development of Electronic banking in Ethiopia are: low level of internet connection with its high cost, and unimproved telecommunication infrastructure delivery, high rates of illiteracy, absence of financial networks that links different banks, lack of reliable power supply and Cyber security which can lead people to be demo in using Electronic banking that in turn harms customers' saving motivation, if they face challenges and not secured

with their saved money and do not get it whenever they require their own cash they may think it is not necessary to keep their cash in banking which affect their saving. Again since electronic banking is available for 24/7 people easily can withdraw their money whenever they need money. This frequent withdrawal leads to high consumption which make them not save more, and can affect the country saving rate which contributes to growth.Therefore, the main aim of this study is to assess the benefits and risks related to E banking.

1.3. Research questions

- What are the benefits of Electronic banking that encourage customers saving?
- What are the risks of Electronic banking that discourage customers saving?
- Does the electronic banking make any change on customer saving patterns?
- Whatis the feeling of e-banking users regarding to use of E-banking(positive or negative)

1.4. Objectives of the Study

General Objective

The main objective of the study is to assess the benefits and risks of e banking on customer saving.

Specific Objectives

- To investigate the benefits that are affecting customer saving
- To investigate the risks that are affecting customer saving
- To identify weather there is change in saving patterns due to usage of electronic banking
- To identify the feeling of e-banking users regarding with use of E-banking

1.5. Significance of the study

This study will have great importance for government office (national bank) and financial institutions, especially banks that it will suggest recommendations and possible solutions based on the findings that may discourage customers saving during the use electronic banking thus identify and monitor challenges that customer face whenever they use electronic banking. In addition, banks will have additional information of electronic banking as a product of electronic business with a view to making strategic decisions. This study will also useful for academicians as a reference literature if they wish to make further investigation.

1.6. Scope of the study

This study is confined to assess the benefits and risks of E banking on customer saving of the purposely selected bank, commercial bank of Ethiopia North Addis Ababa district. Future studies with larger, more representative sample size are encouraged to investigate how the finding can be generalized to larger population. In addition, due to the popularity of social media, future studies are also advised to examine how e-banking can influence customers' perception on saving.

1.7. Organization of the study

This paper is divided into five sections, which give readers a comprehensive overview of the study. The first section presents the introduction part of the study. The second section will discusses review of related literature; this is followed by the third section which is research design and methodology of study. The last two sections will cover the data analysis, presentation, conclusion and recommendation.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

The second chapter discuses the literature reviews. Related work and theories of different authors is discussed to explain tue purpose and to answer the research problems of the study.

2.1. Theoretical literature

2.1.1. History of Electronic Banking

The economy of most developing countries is cash driven; meaning that monetary transactions are basically made through the exchange of bank notes and coins for goods and services. (Ozuru 2010; Johnson, 2005). According to Turban, 2008, as cited in AbebeZeleke 2016 E-banking is an improvement over traditional banking system because it has reduced the cost of transaction processing, improved the payment efficiency, financial services and the banker-customer relationship. The evolution of the e-banking industry can be traced to the early 1970s when banks began to look at these types of services as an alternative to some of their traditional bank functions that e-banking products and services like ATMs and Electronic fund transfer were an important qualitative element of differentiation for banks that used them. Mobarek, (2007)as cited inIMOLA DRIGĂ, CLAUDIA ISAC 2014, p 52.). Mobarakin his study also, added that Electronic banking services have actually started to develop only since 1995, when the Maryland Presidential Bank, an American bank, allowed bank accounts to be opened online, in mid-2004, over 17% of Americans were already using Electronic banking services.

Technological innovations play a crucial role in banking industry by creating value for banks and customers, that it enables customers to perform banking transactions without visiting a brick and mortar banking system. On the other hand, E-banking has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space AbebeZeleke(2016).“From the citizen’s point of view, electronic transaction provides an instant window on their details threatening their personal privacy. The increased data intensive relationship between individuals and the organizations with which they deal might well result in very substantial transparency of consumers’ economic behavior. This will enable marketers to manipulate consumers. People's behavior will also become more transparent to government agencies, opening them up to greater oppression and repression. ”Wondwossen, Taddesse and Tsegai G. Kidan(October 2005)

2.1.2. Definition of Electronic Banking

According to different scholars E-banking is defined as follows in different way but almost the same meaning. In simple words, e-banking implies provision of banking products and services through electronic delivery channels. Electronic banking has been around for quite some time in the form of automatic teller machines (ATMs) and telephone transactions. In more recent times, it has been transformed by the internet – a new delivery channel that has facilitated banking transactions for both customers and banks. For customers, the internet offers faster access, is more convenient and available around the clock irrespective of the customer's location (Chavan, 2013)

Electronic banking is one of the most successful online businesses. E-banking allows customers to accept their accounts and execute orders through a simple to use web site. There is no special software for customers to install (other than a web browser and many banks don't charge for this service some banks even lower costs for online transactions versus on site banking transactions). Electronic banking saves individuals and companies time and money. Online banking puts the power of banking tin to the hands of the customer and allows to the customers to choose self-service for all their banking needs with online served as customers can view their account histories transfer funds, order checks, playbills, re order checks, or get in touch with the customer service department of the bank. Electronic banking is an online service that allows customers to perform the same banking functions as in quicken, except that they can access their accounts directly over the internet. (Amor Daniel, 2002).

Electronic banking technologies have led banks and financial institutions to improve effectiveness of distribution channels through reducing the transaction cost and increasing the speed of service. Electronic banking is the application of information technology which helps to facilitate the information and services over public standards based networks. There are different forms of electronic banking like; Internet banking, mobile banking, and telephone banking. Sometimes there are misunderstanding between electronic banking and Internet banking. But it has to be clear that, E-banking is the wider part and Internet banking is the specific area under the E-banking services (Bisrat, 2015).

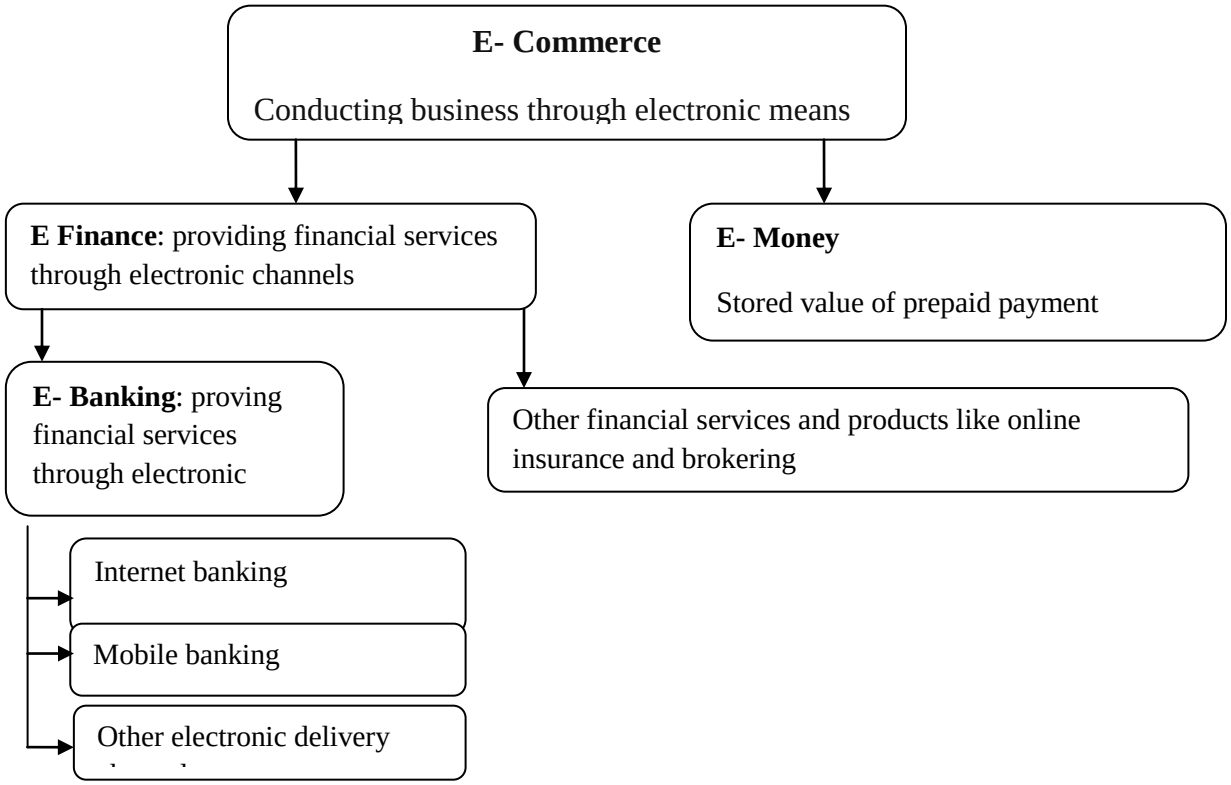

Figure 1: definitionof E-banking
Source: Finance & Development a quarterly magazine of IMF, September 2002, Volume 39 Number 3.

2.1.3. Why E-Banking?

There are not many inventions that have changed the business of banking as quickly as the e-banking revolution. World over banks are reorienting their business strategies towards new opportunities offered by e-banking. E-banking has enabled banks to scale borders, change strategic behavior and thus bring about new possibilities. E-banking has moved real banking behavior closer to neoclassical economic theories of market functioning. Due to the absolute transparency of the market, clients (both business as well as retail) can compare the services of various banks more easily. For instance, on the internet, competitors are only one click away. If clients are not happy with the products, prices or services offered by a particular bank, they are able to change their banking partner much more easily than in the physical or real bank-client relationship. From the banks' point of view, use of the internet has significantly reduced the physical costs of banking operations (Chavan, 2013).

2.1.4. Evolution of E-Banking

Electronic innovation in banking industry can be traced back to 1970, when the computerization of financial institutions gained momentum (Malak 2007), However; a visible presence of this was evident to the customers since 1980, with the introduction of ATM. Innovative banking has grown since then, aided by technological developments in the telecommunications and information technology industry. The early decade of the 1990s witnessed the emergence of automated voice response (AVR) technology. By using the AVR Technology, banks could offer telephone banking facilities for financial services. With further advancements in technology, banks were able to offer services, through PC owned and operated by costumers at their convenience, through the use of intranet propriety software. The users of these services were, however, mainly corporate customers rather than retail ones (Sohail&shanmugham 2003). The security first network bank was the first Internet banking in the world that was built in 1995 in USA. After that some famous banks introduced their internet banking one after another, such as Citibank and Bank of America.

Since the late 1990s E-Banking has developed from virtual insignificance to tens of millions of users worldwide (OECD, 2001). However, E-Banking is the product of different generations of electronic transactions. The current web-based internet is the latest of several generations of systems: Automated Teller machine (ATMs), Phone Banking, PC or House Banking. Automated teller machines (ATMs) were the first well-known machines to provide electronic access to customers where as in phone banking, users call their bank's computer system on their ordinary phone and use the phone keypad to perform banking transactions. PC banking superseded phone banking and allowed users to interact with their bank by means of a computer with a dial-up modem connection to the phone network. Phone and PC banking entailed maintenance costs associated with keeping up to date with diverse modems and with avoiding prohibitively complex installation procedures. After those generations Deutsche Bank launched the very first Internet banking project in Latin America in 1996 and Citibank has developed a special "e-toolkit" across all its branches worldwide (UNCTAD, 2002). E-Banking uses the web browser for the user interface and the Internet for data transfer and download of software, and so has a potential for reducing maintenance costs. For users, E-Banking provides current information, 24-hours-a-day access to banking services. The primary services provided by e-banks are

transferring money among one's own accounts, paying bills, and checking account balances. Loans, brokering, share trading, service bundling, and hosts of other financial services are being added to these primary services).

2.1.5. E-Banking Technologies

E-banking relies heavily on information and communication technology(ICT) to 24hrs availability, Low error rates and quicker delivery of financial services, When considering e-banking, bank websites usually come to mind first but e-banking requires much more than just a good website, It needs back end applications such as account systems, support applications such as customer relationship management(CRM) systems, communication technologies to link e-banking to the payment systems and middleware to integrate all those often different type of systems.

The two major technologies that influences E-banking are Internet and Mobile technology. The Internet is a massive global network of interconnected packet-switched computer networks, the most existing E-banking development are occurring on the portion of the internet known as World Wide Web, the internet eliminates obstacles created by geography, time zones and locations, this really help the financial sector to market their product and offer services globally. Internet is less functional in E-banking without the use of tangible appliances like PCs, ATMs and mobile phones.

Some banks are making significant investments in mobile systems to deliver business activities so as to increase efficiency and reduce cost, to improve operational effectiveness and customer services to maintain a competitive hedge.

2.1.6. Developments in E-Banking

Traditional banking business assumes that we have to have customer's desk at the bank's building and that we have the office hours from 8:00AM to 7:00PM. On the other hand, our customers have their jobs during the day, and they have family activities after the job. As you can see, there is obvious collision between customers' demand and financial institutions capabilities. E-banking is transforming banking business into E-business through utilizing various e-channels such as: Internet, WAP based mobile network, automated telephone, ATM Networks, SMS and Fax Messaging, Multipurpose E-banking Kiosk, Web TV and others. These E-Channels enables financial transactions from anywhere and they allow non-stop working time that the customers require and they want to be able to use these services anytime, anywhere, we

can see that in E-banking business we now have a perfect match between the customers' requests and the financial institutions capabilities.

Banks are deemed to be the early users of technology and the main drivers of technological revolution. The first applications of the computer age were the use of mainframes, and later minicomputers, to process data such as customer accounts, bank inventories, and personal records and accounting packages and ultimately evolved into spreadsheets, the use of technology was a support tool for banking operations, helping staff to do their work faster, more conveniently and with less human errors.

The Idea of direct customer services was clear but first ATM (Automated teller machine) came into commercial use in 1968.ATMs were the first visible face of electronic banking. From being mere currency dispensers they have now evolved into multifunctional devices enabling customer. To conduct a whole range of transactions from account management, fund transfer, to bill payments.

The next step in providing direct customer service came with the extended use of credit and debit cards in merchants' shops through EPOS (electronic point of sale) technology. Electronic fund transfers were another application where technology was used extensively, mainly to cut down the cost of transaction and to speed up payments. This led to the development of specialized products like corporate cash management systems.

2.1.7. Forms of E-Banking

There are many electronic banking delivery channels to provide banking service to customers. Among them ATM, POS, Mobile banking and internet banking are the most widely used and discussed below.

ATM (Automated Teller Machine)

ATM is an electronic machine in a public place, connected to a data system and related equipment and activated by a bank customer to obtain banking services without going in to the banking hall. It allows customers to access banking services such as withdrawals, transfers, inquiries about account balances, requests for cheque books, account statements, direct deposits, foreign currency exchange etc. (Fenuga, 2010). Using an ATM requires an ATM card and a pass code, often referred to as a PIN (Personal Identification Number).

Internet Banking

Internet banking is conducted by completing bank transactions by directly accessing the bank through the internet. Nowadays, internet banking customers can access many different services online, which makes physical banks open even after office hours. Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution. Internet banking can be conducted either by accessing the internet with a computer or by using a phone that has internet features (Alabar& Timothy, 2012).

POS (Point of Sale) Terminal

Point of Sale (POS) also sometimes referred to as Point of Purchase (POP) checkout is the location where a transaction occurs. A "checkout" refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register. A POS terminal manages the selling process by a sales person accessible interface. The same system allows the creation and printing of the receipt (Shittu, 2010).

Mobile Banking

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

2.1.8. Benefits of Electronic Banking

According to Shraddha N. &, Mohsin K. A. Pathan(2014) Businesses rely on efficient and rapid access to banking information for cash flow reviews, auditing and daily financial transaction processing. E-banking offers ease of access, secure transactions and 24-hour banking options. From small start-up companies to more established entities, small businesses rely on e-banking to eliminate runs to the bank and to make financial decisions with updated information.

According to (Bhaskar R. &Tewdros s., 2011) E-cards offer a number of benefits to the issuing banks and customers of the bank including: Dramatically reduce printing, mailing and financial handling costs associated with processing transaction, Enhance payment security by minimizing theft or loss, Reduce undeliverable payments via electronic delivery to the card account, Prevent fraud through automated controls, Increase customer satisfaction, Improve operational efficiency and profitability of the issuing banks.

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

2.1.8.1 From the Banks Point of View

Attracting High Value Customers: E-banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of revenue streams. For a retail bank, e-banking customers are therefore of particular interest, and such customers are likely to have a higher demand for banking products. Most of them are using online channels regularly for a variety of purposes, and for some there is no need for regular personal contacts with the bank's branch network, which is an expensive channel for banks to run (Berger S. & Gensler, 2007). Some research suggests that adding the Internet delivery channel to an existing portfolio of service delivery channels results in nontrivial increases in bank profitability (Young, 2007). These extra revenues mainly come from increases in noninterest income from service charges on deposit/current accounts. These customers also tend to be of high-income earners with greater profit potential.

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

Increased Revenues: Increased revenues as a result of offering e-channels are often reported, because of possible increases in the number of customers, retention of existing customers, and

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

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

Load Reduction on Other Channels: E-Channels are largely automatic and most of the routine activity such as account checking or bill payment may be carried out using these channels. This usually results in load reduction on other delivery channels, such as branches. This trend is likely to continue as more sophisticated services such as mortgages or asset finance are offered using e-Banking channels. In some countries, routine branch transactions such as cash/cheque deposit related activities are also being automated, further reducing the workload of branch staff, and enabling the time to be used for providing better quality customer services.

Cost Reduction: The main economic argument of e-banking so far has been reduction of overhead costs of other channels such as branches, which require expensive buildings and a staff presence. It also seems that the cost per transaction of e-banking often falls more rapidly than that of traditional banks once a critical mass of customers is achieved. The research in this area is still inconclusive, and often-contradicting reports appear in different parts of the world. The general consensus is that fixed costs of e-banking are much greater than variable costs, so the

larger the customer base of a bank, the lower the cost per transaction would be. Whilst this implies that cost per transaction for smaller banks would in most cases be greater than those of larger banks, even in small banks it is seen as likely that the cost per transaction will be below that of other banking channels.

Organizational Efficiency: To implement e-banking, organizations often have to re-engineer their business processes, integrate systems and promote agile working practices. These steps, which are often pushed to the top of the agenda by the desire to achieve e-banking, often result in greater efficiency and agility in organizations. However, radical organizational changes are also often linked to risks such as low employee morale, or the collapse of traditional services or the customer base. In addition, Electronic banking has also helped banks in proper documentation of their records and transactions.

2.1.8.2. Benefits from the Customers' Point of View

The main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main advantages of e-banking for corporate customers as per (BankAway, 2001) are as follows:

- Reduced costs in accessing and using the banking services.
- Increased comfort and time saving: transactions can be made 24 hours a day, without requiring the physical interaction with the bank.
- Quick and continuous access to information: Corporations will have easier access to information as, they can check on multiple accounts at the click of a button.
- Better cash management: E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments is available on internet sites. For example, it is possible to manage company's short term cash via internet banks (investments in over-night, short- and long term deposits, in commercial papers, in bonds and equities, in money market funds).

Private customers seek slightly different kind of benefits from e-banking. In the study on online banking drivers (Aladwani, 2001) has found, that providing faster, easier and more reliable services to customers were amongst the top drivers of e-banking development.

The main benefits from e-banking for private customers are as per (BankAway, 2001) are as follows:

- *Reduced costs*: This is in terms of the cost of availing and using the various banking products and services.

- *Convenience*: All the banking transactions can be performed from the comfort of the home or office or from the place a customer wants to.
- *Speed*: The response of the medium is very fast; therefore, customers can actually wait till the last minute before concluding a fund transfer.
- *Funds management*: Customers can download their history of different accounts and do a "what-if" analysis on their own PC before affecting any transaction on the web.

This will lead to better funds management. In addition, besides withdrawing cash, customers can also have mini banks statements, balance inquiry at these ATMs. Through Internet Banking customer can operate his account while sitting in his office or home, there is no need to go to the bank in person for such matter. E- Banking has also greatly helped in payment of utility bill. Now there is no need to stand in long queues outside banks for his purpose. All services that are usually available from the local bank can be found on a single website. The Growth of credit card usage also owes greatly to E-banking. Now a customer can shop worldwide without any need of carrying paper money with him and banks are available 24 hours a day, seven days a week and they are only a mouse click away.

2.1.9. Risks of Electronic Banking

Mohammed ArifShaikh (Sep 2014) recognized that major barriers that 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.Internet banking is difficult for the beginners and is not accessible when internet connection has interruption and the bank's server is down. Password security as well as security of transaction are also big issues since account information be hacked by unauthorized people over the internet.

Although e-banking has bright prospects, it involves some financial risks as well. The major E-banking risks according to FSA (2010) include:

Operational risks: Banks faces three main types of operations risk: such as volume forecasts, management information systems and Outsourcing. Accurate volume forecasts have proved difficult - One of the key challenges encountered by banks is how to predict and manage the volume of customers that they will obtain. Many banks going on-line have significantly misjudged volumes. When a bank has inadequate systems to cope with demand it may suffer reputational and financial damage, and even compromises in security if extra systems that are inadequately configured or tested are brought on-line to deal with the capacity problems. The

second type of operations risk concerns management information systems. Again, this is not unique to E-banking. Banks may have difficulties in obtaining adequate management information to monitor their service, as it can be difficult to establish/configure new systems to ensure that sufficient, meaningful and clear information is generated. Such information is particularly important in a new field like e-banking. Finally, a significant number of banks offering e-banking services outsource related business functions, e.g. security, either for reasons of cost reduction or, as it is often the case in this field, because they do not have the relevant expertise in-house. Outsourcing a significant function can create material risks by potentially reducing a bank's control over that function.

Security risk: Security issues are a major source of concern for everyone both inside and outside the banking industry. E-banking increases security risks, potentially exposing hitherto isolated systems to open and risky environments. Security breaches essentially fall into three categories; breaches with serious criminal intent (e.g. fraud, theft of commercially sensitive or financial information), breaches by 'casual hackers' (e.g. defacement of web sites or 'denial of service' - causing web sites to crash), and flaws in systems design and/or set up leading to security breaches (e.g. genuine users seeing / being able to transact on other users' accounts). All of these threats have potentially serious financial, legal and reputational implications.

Reputational risk: This is considerably heightened for banks using the Internet. For example, the Internet allows for the rapid dissemination of information, which means that any incident, either good or bad, is common knowledge within a short space of time. Internet rumours can easily become self-fulfilling prediction. The speed of the Internet considerably cuts the optimal response times for both banks and regulators to any incident. Banks must ensure their crisis management processes are able to cope with Internet related incidents (whether they be real or hoaxes). Any problems encountered by one firm in this new environment may affect the business of another, as it may affect confidence in the Internet as a whole. There is therefore a risk that one rogue e-banking could cause significant problems for all banks providing services via the Internet. This is a new type of systemic risk and is causing concern to e-banking providers. Overall, the Internet puts an emphasis on reputational risks.

Legal risks: (e.g. without proper legal support, money laundering may be influenced);

Strategic risks: credit risks; market risks; and liquidity risks are also e-banking risks. Therefore, identification of relevant risks, and formulation and implementation of proper risk mitigation

policies and strategies are important for banks while performing e-banking. Among these security risk that affects the network system is the major one (FSA, 2016).

2.2. EmpiricalLiterature

2.2.1 Electronic Banking System in Developed Country

The picture of e-banking in the USA as (Kolodinsky, 2004), is one of a wide variety of services used by a disparate number of consumers. Approximately 91 percent of US households have a bank account and, of these, 93 percent have one or more Electronic Fund Transfer features associated with their accounts. In 2003, the number of ATM transactions stood at 902 million per month, up slightly from 2002 (EFT Data Book, 2003). In addition, by 2003, the number of point-of-sale debit transactions stood at 495 million per month, up 21 percent from 2002, and the volume of electronic payments in the USA in 2003 exceeded that of checks for the first time. A total of 32 million Americans view at least one bill each month over the Internet. Of Internet users, 18 percent already use electronic bill paying, while another 41 percent have expressed an interest in using some form of electronic bill presentment and payment (Bills, 2002). To meet consumer demand it was predicted that 87 percent of community banks would offer Internet banking services in 2003 (Pastore, 2001). On the other hand, 90 percent of households were not choosing PC banking (ABA Banking Journal, 2001). Others report that while 39 percent of US households had access to online banking, only 18 percent have used it (Electronic Payments International, 2001).

Some e-banking services are still in their infancy while others are more mature, and banks are making adjustments in service to meet customer needs. The (American Banker, 2000) reported that one-third of consumers who had signed up for e-banking had stopped using it due to unsatisfactory customer service or the complexity of using the service. While consumers may be willing to adopt e-banking technologies, they also want assurance that problems will be resolved and that some transactions will remain personal (Goldfarb J., 2001).

Thus, banks are recognizing the importance of customer service and incorporating the “new” while holding on to consumer preferences for the “old.” For example, “Check tech” allows consumers to see pictures of their paid checks and to see checking statements online (Marjanovic, 2000) “Check tech” is intended to encourage increased Internet use as well as to provide a marketing tool aimed at those consumers who feel that online banking does not fit well with their current banking preferences and behaviour.

Consumers have also expressed concerns over the security and privacy of their financial information in online environments (Federal Deposit Insurance Corporation, 2001). This brief overview of the e-banking marketplace points to mixed results with regard to consumer adoption and success of e-banking products and services. While adoption of some e-banking technologies is widespread, this may be due to the fact that the technology is passive rather than active in nature (for example, once consumers sign up for direct deposit, there is nothing else they need to do). Some technologies are mature, while others are more truly new. For example, ATMs have been in use for 30 years, while PC banking has not yet become main stream. Other e-banking products, such as electronic bill payment and presentment (EBPP), create a new product that does not alter established usage patterns. EBPP allows consumers to review a bill and deduct the amount from their account ledger without having to write and mail a check. Some e-banking technologies, such as PC banking, require new behavioural patterns of the consumer.

According to (Wondwossen&Tsegai, 2005) the paper "E-payment in Europe" presents a comprehensive investigation on retail e-payments, i.e. payments that are initiated and processed electronically.

The paper covered many initiatives on the automation of the payment transaction. E-invoicing which focuses on the automation of the billing process between the payer and the beneficiary has experienced only a limited customer adoption. E-reconciliation, which involves the electronic communication of balance and payment information from the payment provider to the beneficiary for bookkeeping purposes, is widely used between large companies and their banks. As far as e-payments, which focus on the relationship between the payer and the payment provider, are concerned, a good deal of heterogeneous initiatives has emerged. These consist of traditional payment instruments that have been adapted for e-commerce, and new payment instruments and services that have begun to be adopted. Credit cards have, however, remained the single most used payment instruments on the Internet in Europe.

One of the main obstacles to the development of e-payments, according to the paper, is lack of customers trust in the initiatives. An adequate legal structure and security framework could foster the use of e-payments. The European commission has developed a legal framework related to e-commerce, which consists of a Directive to ensure free movement of online services, a Directive Covering the issuance of e-money, and a Directive for the creation of e-signatures. In these Directives, the central issue among other things has been the country of origin principle,

allowing mutual recognition of licenses and supervision between countries in the European Union.

The attempt to ensure security of e-money and e-payments by implementing more stringent and consistent security requirement may be costlier for consumers, merchants, and payment service providers; thereby limiting the adoption and efficiency of the services. Because of this possible trade-off between security requirements and efficiency, the Euro system stresses the need to strike balance between the two factors.

Another important Directive in the Euro system is the Directive on electronic signatures. The Member states implemented the Directive on a community framework for electronic signatures in 2001. The rationale for the Directive stems from the fact that divergent rules with respect to legal recognition of electronic signatures in the member states may create significant barriers to the use of electronic communications and e-commerce.

The major objectives of the Directive include making sure that all Members States accept the legal validity of an electronic signature, and all services relating to electronic signatures can be provided on the EU market without national obstacles.

The Directive provides every kind of electronic authentication attached to or logically associated with the data to be signed, obtains legal validity. Using Public Key Infrastructure (PKI) fall under electronic signatures.

2.2.2 Electronic Banking System in Developing Country

Electronic banking in most African countries is very limited in use or virtually not exists. According to (Tadesse w. and Kiddan T., 2005), e-banking in most African countries is either inexistent or practiced in limited circumstances. Most African countries lack the infrastructure and proper legal and regulatory framework for e-banking system. E-banking infrastructure such as, internet is not widely available in Africa, bank and other financial institutions are not adequately automated to enable e-banking and e-payment. Legal and regulatory framework is also inexistent in most African countries.

In a study work by (Tadesse w. and Kiddan T., 2005) the following have been identified as barriers for the introduction, adoption and growth of electronic payments in the African context:

- Most banks in Africa do not deliver credit cards
- Behavioural constraints: the fact that African society is cash based, people are accustomed to using cash for most of their transactions.

- Banks attitude: African banks are very conservative; they use very few innovative products and marketing techniques.
- Lack of confidence: the security issue is one of the major challenges in the development of e payments in Africa.

2.2.3 Electronic Banking System in Ethiopian Banking Industry

In Ethiopia private, public banks and other financial institutions are operating today. Despite a rapid increase in the number of financial institutions the Ethiopian e-banking system is still underdeveloped compared to the rest of the world. Cash is still the dominant medium of exchange. Currently commercial bank of Ethiopia provides e-payment services. The common banking functions provided by public and private banks in Ethiopia are deposit mobilization, credit allocation, money transfer and safe custody. Commercial bank of Ethiopia is the pioneer to introduce e-banking system in 2001 by eight Automatic teller machines (ATMs) (Gardachew W., 2010).

According to (AyanaGemechu, 2012) the e-banking in Ethiopian banking industry is reviewed as follows, in addition to eight ATM Located in Addis Ababa, CBE has had Visa membership since November 14, 2005. But, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Despite being the pioneer in introducing ATM based payment system and acquired visa membership, CBE Lagged behind Dashen bank, which worked aggressively to maintain its lead in E-payment system. As CBE continues to move at a snail's pace in its turnkey solution for Card Based Payment system, Dashen Bank remains so far the sole player in the field of E-Banking since 2006. According to (Gardachew W., 2010) Dashen bank, a forerunner in introducing E-banking in Ethiopia, has installed ATMs at convenient locations for its own cardholders. Dashen's ATM is available 24 hours a day, seven days a week and 365 days a year providing service to Debit Cardholders and International Visa Cardholders coming to the country. At the end of June 2009, Dashen bank has installed more than 40 ATMs in its area branches, university compounds, shopping malls, restaurants and hotels. In the year 2011 the payment card services have witnessed significant strides, Dashen's ATM service expanded to 70 and 704 POS terminals (Annual report of the bank 2011).

Tuesday, 19 June 2012 Commercial Bank of Ethiopia announced the launch of internet banking services for the 74 branches connected through integrated banking solutions (Core Banking). The bank will offer the service to individual customers as well as to companies. The new system operates on any device that is able to support an internet browser and makes use of anti-hacking

and anti E- theft systems building up on the experience of Asian and European banks. The electronic banking system put in place by the commercial bank also has strict customer authentication methods as well as building a significant Information technology architecture. The new online service will allow clients to send money, keep track of their accounts, check on the status of loans, and transfer money between personal accounts or to the account of another bank customer. The service also allows customers to pay utility bills such as electricity, water and telephone online. The internet banking project took eighteen months to realize beginning from the selection of technology and including development and deployment in the 74 CBE branches which have implemented CORE banking solutions. CBE anticipates that more than 100,000 of its customers will be able to make use of the newly offered internet banking service initially (http://www.cbebank.eth.et).

E-banking which refers to the use of modern technology that allows customers to access banking services electronically whether it is to withdraw cash, transfer funds, to pay bills, or to obtain commercial information and advices are not known in Ethiopia at the early stage but at this time commercial bank of Ethiopia provides the modern E-banking technologies like ATM, Debit card, Tele banking, Internet banking, Mobile banking and Point of sale. Banking through mobile phones lets people take part in financial services even if they are not near a bank. Until recently, Ethiopia and Zimbabwe were the only nations in Africa without mobile money services. Now, that has changed for Ethiopia. BelCash and M-Birr are mobile banking technology providers. They have been setting up mobile banking and mobile money services in Ethiopia for the past three years. The Dutch company BelCash is working in partnership with banks to provide easier access to financing through bank accounts. Ireland based M-Birr is a mobile money service that works with microfinance groups where no registration with a bank is needed. Ethiopia's mobile phone industry is young. And wireless service coverage in the county is not well developed. The pressure on the wireless network is expected to increase. The National Bank of Ethiopia recently finished a draft order on how mobile banking services should be structured. This comes as international companies have shown interest in starting mobile banking services. (http://www.nbe.gov.et).June 2018

Table 2.1 E-banking services that are available in the Ethiopia banking industries at present

NO.	Name of Banks	E-banking Services provided
1	Abay bank s.c	• Abay Online • Mobile Banking • POS (Point of Sale) • ATM Banking
2	Addis International bank	• Not yet provide the service
3	Awash International bank	• Internet banking • ATM & POS (Point of Sale Services) • Call Center Banking
4	Bank of Abyssinia	• Card banking • mobile banking
5	Berhan International bank	• ATM Banking
6	Bunna International bank	• Not yet provide the service
7	Commercial bank of Ethiopia	• ATM Card banking • Mobile banking • POS(Point of Sale) • Internet banking
9	Cooperative Bank of Oromia	• SMS banking • Mobile banking • Internet banking • ATM/POS
10	Dashen bank	• Internet banking • Mobile banking • ATM/POS • Agency banking
11	Debub Global bank	• Not yet provide the service
12	Development Bank of Ethiopia	• Not yet provide the service
13	Enat bank	• Not yet provide the service
14	Lion International bank	• Mobile banking • Agent banking
15	Nib International bank	• Agent banking • Mobile banking • Card &pos services • Internet banking
16	Oromia International bank	• Not yet provide the service

17	United bank	• Internet banking • Mobile banking • Card banking
18	Wegagen bank	• ATM banking • Internet banking • Mobile banking
19	Zemen bank	• Internet banking • SMS banking • Call center banking • ATM banking

Source: (http://www.nbe.gov.et)

2.3. Conceptual Framework

Now the time advanced financial service are important for better financial transaction. But, at this time there are not many inventions that have changed the business of banking as quickly as the e-banking revolutionespecially in the country Ethiopia. World over banks are reorienting their business strategies towards new opportunities offered by e-banking. E-banking has enabled banks to scale borders, change strategic behavior and thus bring about new possibilities. E-banking has moved real banking behavior closer to neoclassical economic theories of market functioning. Due to the absolute transparency of the market, clients (both business as well as retail) can compare the services of various banks more easily. For instance, on the internet, competitors are only one click away. If clients are not happy with the products, prices or services offered by a particular bank, they are able to change their banking partner much more easily than in the physical or real bank-client relationship. From the banks' point of view, use of the internet has significantly reduced the physical costs of banking operations (Chavan, 2013).

According to Shraddha N. &, Mohsin K. A. Pathan(2014) Businesses rely on efficient and rapid access to banking information for cash flow reviews, auditing and daily financial transaction processing. E-banking offers ease of access, secure transactions and 24-hour banking options.

From small start-up companies to more established entities, small businesses rely on e-banking to eliminate runs to the bank and to make financial decisions with updated information.

According to (Bhaskar R. &Tewdros s., 2011) E-cards offer a number of benefits to the issuing banks and customers of the bank including: Dramatically reduce printing, mailing and financial handling costs associated with processing transaction, Enhance payment security by minimizing theft or loss, Reduce undeliverable payments via electronic delivery to the card account, Prevent fraud through automated controls, Increase customer satisfaction, Improve operational efficiency and profitability of the issuing banks.

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

Electronic Banking as already stated has greatly serviced both the public and the banking industry. This has resulted in creation of a better enabling environment that supports growth, productivity and prosperity. Besides many tangible benefits in the form of reduction of cost, reduced delivery time, increased efficiency, reduced wastage, banking electronically controlled and thoroughly monitored environment and discourage many illegal and illegitimate practices associated with banking industry like money laundering, frauds and embezzlements.

Further E-banking has helped banks in better monitoring of their customer base. This is a useful tool in the hand of the bank to device suitable commercial packages that are in conformity with customer needs. As e-banking provide opportunity to banking sector to enlarge their customer base, a consequence to increase the volume of credit creation which results in better economic

condition. Besides, E-banking has also helped in documentation of the economic activity of the masses (Mahdi Salehi, 2004).

Here, e payments have the power to attract customer for the banks, but some customer are not interesting to be a user of the new technology e payments. Some of the theoretical reason for this is lack of trust on the technology and some system failure happen and lack of immediate response for that case. Also, some customers say that using e payment increase my consumption and I don't like to use e payment.

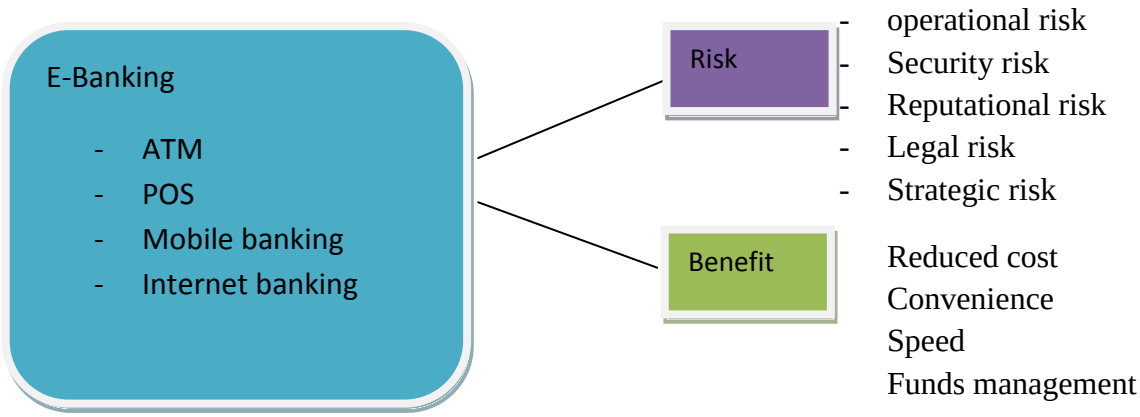

Figure 2 conceptual frame work (self-developed)

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

The aim of this chapter is to discuss the overall methodological considerations of the research. In this chapter the research design, population of the study, sample and sampling techniques, sources of data collection, instruments of data collection and procedures of data collection will be discussed thoroughly. It will also discuss the methods of data analysis, validity and reliability and the ethical considerations of the research in depth

3.1 Research Design

Three possible types of research designs that can be undertaken while conducting research: (i) exploratory, (ii) descriptive and (iii) explanatory studies. An exploratory study pertains to research that aims at shedding new light on a given subject and is often done to clarify the general understanding of a certain problem. The most general way in which an exploratory study is conducted, is through reviewing literature, interviewing subject area experts and by means of focus group interviews. Descriptive studies on the other hand, aim to describe persons, occurrences and situations. Lastly, explanatory studies are studies that show relationships between variables in order to explain certain problems or events (Saunders, et al., 2007). As the study is going to find out the benefits and risks of E banking on customer saving, descriptive type of **r**esearch design was used.

3.2 Sampling Technique and Sample Size

The researcher used, to select the intended sample size, both non-probability (purposive) and probability (simple random sampling) because, some study area are selected purposely and other targeted customers are selected randomly. The target population is bank managers, clerks and customers. North Addis Ababa district was selected purposefully. Ten branches were particularly selected depending on the availability of contact person for the researcher and large customer base but, individual customers are selected by using simple random sampling. Those both North Addis Ababa District and 10 branch are selected duo to get information easily to the researcher. All managers and clerks whom selected purposefully are respondents of the study. 400 questioners are organized and distributed but, from those only 380s are collected and, questioners with fully answered are 366. Customers were chosen from ten branches using simple

random sampling method. This is because to minimize the cost as well as the time of the researcher, and the researcher sample size is 366 based on the following two tables. The total population in the study area is more than 100,000. So, the sample size have a probability be 384-400 (at 95% degree of confidence) or at 5% error. The researcher prepared 400 questioners but, 366 are correctly used for the analysis purpose.

Required Sample Size†

Population Size	Confidence = 95% Margin of Error				Confidence = 99% Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

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Figure3: Required sample size

Determining Sample Size

Table 1. Sample size for ±3%, ±5%, ±7% and ±10% Precision Levels Where Confidence Level is 95% and P=.5.

Size of Population	Sample Size (n) for Precision (e) of:			
	±3%	±5%	±7%	±10%
500	a	222	145	83
600	a	240	152	86
700	a	255	158	88
800	a	267	163	89
900	a	277	166	90
1,000	a	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100
50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	1,111	400	204	100

a = Assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.

Table 3.1 determining sample size

3.3 Source and method of Data Collection

Quantitative data was collected from the target population (E-banking users and other stakeholders like bankers)in order to gather numerical data. Both primary and secondary sources of data were used to collect appropriate numerical information of customer saving and use of E-banking. Primary data was collected by using well-structured questionnaires and personal interviews. Whereas secondary data was gathered from published and unpublished documents of the bank, manuals, and annual reports of CBE

3.4 Methods of Data Analysis

As discussed in above, the researcher followed a mixed Method. Hence, both qualitative and quantitative analyses. Then the researcher performs the analysis process for the collected data using statistical package for social science (SPSS).Descriptive statistics were used for the data analysis process. Tables were used to easily understand the data analysis.

3.5 Validity and Reliability of the Research Instrument

The quality of a given measure is expressed in terms of its reliability and validity *(*William d.crano and Marilynn b. brewer, 2002*)*. The validity and reliability of the data were checked carefully. Validity and reliability of scores on instruments, additional standards for making knowledge claims, lead to meaningful interpretations of data.

3.5.1. Validity

Validity refers to the extent to which the measurement instrument actually measures what it intended to measure. It is used to suggest determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers an account (Creswel, 2003).

(Kothari, 2004), Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. In order to ensure the quality of this research design content validity of the research instrument will be checked. The content validity will be verified by the advisor of this research, who looks into the appropriateness of questions and the scales of measurement. Peer discussion with other researchers was also conduct since it is another way of checking the appropriateness of questions. Moreover, copies of the questionnaire will be distributed to twenty respondents as a pilot test. This will be done to find out whether the developed instruments measures what it meant to measure and also to check the clarity, length, structure, and wording of the questions. This test will help the researcher to get valuable comments to modify some questions.

3.5.2. Reliability

Reliability has to do with the accuracy and precision of a measurement procedure. When instruments are robust and perform well at all times under different conditions.

Cronbachs alpha is a coefficient of reliability. It is commonly used as a measure of the internal consistency or reliability of the instrument. According to statistical interpretation, the closer the reading of Cronbach‘s Alpha to digit 1, the higher the reliability is in internal consistency. In general, reliabilities less than 0.60 are considered to be poor, those in the 0.70 range, acceptable and those over 0.80 good. (1).Cronbach’s Alpha will be calculated to test the reliability of the research instrument. The researcher will use this measurement to know the instruments are consistent based on time and conditions of the instrument.

3.6. Ethical Consideration

In the context of research, according to Saunders, Lewis and Thornhill, (2001:130), “… ethics Refers to the appropriateness of your behavior in relation to the rights of those who become the Subject of your work, or are affected by it”.

The data were collected from those willing sample respondents without any unethical behavior or forceful action. The results or a report of the study will be used for academic purpose only and response of the participants is kept confidential and analyzed in aggregate without any modification by the researcher. In addition, the researcher respects the work of previous investigations or study and cited appropriately those works that has been taken as a basis.

CHAPTER FOUR

4. DATA ANALYSIS, PRESENTATION AND DISCUSSION

This chapter discusses the analysis of data collected from various sources related with e-banking. The data is presented and analysed according to their scale and the sensitivity of the issues starting from the characteristics of respondents

4.1 Response Rate

As stated in the previous chapter the study took a sample size of 400. Of the 400 questionnaires distributed 380 were collected and 366 were fully filled in and returned.

4.1.1. Demographic Profile of Respondents

Based on the data collected the demographic characteristics as follow.This part of the research are used to simply understand; about the population ration (male to female), age of the users (which age category is largely used for e banking), education level (which education category is largely user of e banking, this may depends on the availability of education specially for degree, masters and above), which income level category are user of e banking technology and most of e banking users are employee or not.

Table 4.1 Demographic profile of respondents

Variables	Category	frequency	percent
Gender	Male	*155*	*42.35*
	Female	*211*	*57.65*
	Total	***366***	***100***
Age	<30 years	*184*	*50.27*
	31-40 years	*81*	*22.13*
	41-50 years	*52*	*14.21*
	>51 years	*49*	*13.39*
	Total	***366***	***100***

Source: Questionnaire

From the sampled population 42.35 % (155) are females and the other 57.65%(211) are male. So, in the use of e banking technology males are more adoptive than females. And of 366 e banking users 184 (50.27%) are age; between 18 and 30, 81 (22.13%) are age; between 31 and 40, 52 (14.39%) are age; between 41 and 50, and 49 (13.39%) are age; more than 51. Here we can conclude that when age increase the use of e banking decrease, this may the result of young customer are sensitive to adopt the new technology.

Employment Status of the Participants

Table 4.2 Employment Status of the Participants

Variable	Frequency	Percent
Employee	267	72.95
Self employeed	99	27.05
Total	366	100

Source: Questionnaire

From the sampled of 366, 72.95% (267) are employee in different governmental and private organizations and the other 27.05% (99) are self-employed. Here, employees are more user than self-employed; this may the result of employee must have CBE saving account especial for the civil servants, do this civil servants are try to use e banking technology to operate their account on line, even in holidays.

Income status of the respondents

Table4.3 Income status of the respondents

Variable	Frequency	Percent
<1500	0	0
1501 – 4000	57	15.57
4001 – 6000	190	51.91
6001-8000	83	22.68
>8001	36	9.84

Source: Questionnaire

From the sample population of 366, 15.57 % are with income below 1501- 4000, 51.9% are with income between 4001-6000, 22.68% are with income between 6001-8000 and the other 9.84 % are with income greater than 8001 ETB.

4.2 Benefits of E banking that encourage customer saving

An advantage that is expected to be gained from the practice of E-banking covers both direct and indirect benefits for the banking industries, customers and for the economy. Direct benefits include savings on operational cost, improved organizational functionality, productivity gain, improved efficiency, saving of time and increased profitability. Indirect benefits include the opportunity or intangible benefits such as improved customer's satisfaction through improved services, improved banking experience and fulfillment of their changing needs and lifestyle (Lu 2005; Kuan 2001 &Iacouou 1995).

In order to access E-banking services, it is important that bank should have ICT infrastructure and internet facility available to facilitate their customers with all kinds of E-banking services. Pikkarainen et al. (2004) argued that banks must have an official website which facilitates customers to perform all kinds of E-banking transaction so that, it saves customer cost and time as adopting E-banking system. Customer can make transactions from their home. Polatoglu et al.

(2001) suggests many benefits associated with E-banking. Customer can pay their bills, can pay their loans, credit and debit card facilities. In other words, it provides freedom from location, saves time and cost. So by making access to banks easy and convenient saving levels can also be positively affected.

The first batch of the survey questions tried to asses benefits of e-banking on saving level of customers. As presented in the table below several questions were forwarded for the respondents to assess thebenefits of e-banking on saving levels. Almost all questions got a mean value of 3 and above which shows most respondents agree that e-banking has a positive effect on saving levels.

Regarding ease of use as a benefit of introducing E-banking system, respondents were asked whether they `strongly agreed, Agreed, Neutral, and Disagreed or strongly disagreed‟. Mean and S. Deviation value is 3.53 and 0.99 respectively, which indicates the largest percent of (70%) respondents agreed that E-banking makes banking activity easy of which 25% of the respondents strongly agreed. One other benefit of e-banking is eliminating the time and space barriers. The result (table 4.2) shows that the mean value of the response fells on the agree level of agreement (3.88).

Other than avoiding resource barriers e-banking also makes banking activities convenient. Question number 3 and 4 with mean values of 4.07 and 3.22 which both fell on agree level of agreement backs the positive impact e-banking creates. Generally, almost all respondents agreed that the basic benefit of E-banking for customers are convince, accessibility, ease of use, and low cost of using banking activity, providing real time information and getting quality service.

Table 4.4 Benefits of e banking on saving

	N	**Minimum**	**Maximum**	**Mean**	**S. deviation**
E-banking makes it easier to perform banking activities.	366	1.00	5.00	3.53	0.99
Since e-banking has no border and time it provides opportunity to mobilize broader customer saving.	366	1.00	5.00	3.88	086
E-banking is highly convenient for customers than traditional banking which in intern help	366	1.00	5.00	4.07	1.03

saving.					
Customers can download their history of different accounts and do a "what-if" analysis on their own PC before affecting any transaction on the web.	366	1.00	5.00	3.22	1.00
E-banking let banks open even after office hours that can help customer to save given customer have to accounts that is saving account and account used for different transaction.	366	1.00	5.00	3.95	0.97
E-banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of saving streams.	366	1.00	5.00	3.49	1.10
E-banking helps to enhance the image of the organization as a customer focused innovative organization. This image also helps in becoming effective at e-marketing and attracting young/professional customer base.	366	1.00	5.00	4.02	0.99
E-banking has also helped in documentation of the economic activity of the masses customer behavior for stake holders which is helpful for saving oriented policies.	366	1.00	5.00	3.98	1.01
E-banking Improves customer service.	366	1.00	5.00	2.57	1.21
Using POS and mobile banking can help the national level saving since both are used for the transfer of funds from account to account.	366	1.00	5.00	3.57	1.01

Source; survey result and SPSS output

Providing e-banking systems also enables financial institutions to develop their customer service activities which in turn encourage saving. The mean value of 3.49 which fells on agree degree of

agreement on the question whether or not e-banking attracts high profit customers with higher than average income and education levels shows the benefit electronic banking can provide for banks. The 2.57 mean value on whether or not e-banking improves customer service tells that it is not the only factor in improving customer service.

As presented in the above table (table 4.2) an advantage that is expected to be gained from the practice of E-banking covers both direct and indirect benefits for the banking industries, customers and for the economy. Direct benefits include savings on operational cost, improved organizational functionality, productivity gain, improved efficiency, saving of time and increased profitability. Indirect benefits include the opportunity or intangible benefits such as improved customer's satisfaction through improved services, improved banking experience and fulfillment of their changing needs and lifestyle.

4.3 **Risks e banking that discourage customer saving**

Although there are many associated benefits with the practice of E-banking, there are many reasons which obstruct implementation of the system. In case of Ethiopian banking industries, many privates' banks are using old banking system and don't have access to take advantage from electronic banking facilities. These hindrance factors include, lack of appropriate infrastructure for E-payment, lack of internet facilities with customer and learning how to interact with bank website.

Basically banks got challenges in relation with E-banking on introduction stage and after introduction on the practice of the service. During introduction different literatures states that there are different challenges such as ICT infrastructure, lack of skilled man power, lack of suitable legal environment and cost of the software as well as the device. Despite the recent improvements made by Ethiopian government on the national infrastructure, the overall ICT infrastructure in Ethiopia remains inadequate. Card-based payment systems in Ethiopia have been growing fast in recent years. The questionnaire result in this study presents questions to examine the perception of bank staff on the issue. The values of the standard variation for all the questionnaire items is close to one implying there is low variation among respondents.

Table 4.5 challenges on implementation of e-banking

	n	Minimum	Maximum	Mean	S. deviation
Inadequate banking system challenges the development of e-banking	366	1.00	5.00	3.82	1.10
Lack of suitable legal and regulatory framework for e-commerce.	366	1.00	5.00	3.70	0.99
High cost of the software and Devices limits banks not to practice the E-banking service.	366	1.00	5.00	3.62	1.00
Lack of skills man power to implement E-banking system make costly to introduce the system.	366	1.00	5.00	3.82	0.89
Lack of telecommunication infrastructure for implementation of E-banking.	366	1.00	5.00	3.86	0.99

Source; survey result and SPSS output

It is stated in several previous studies that there is a problem regarding system integration in the financial sector in Ethiopia. This study also found out inadequate banking system is one of the challenges for proper implementation of e-banking. As presented in the above table (table 4.3) inadequate banking system challenges the development of e-banking got a mean value of 3.82 implying the respondents agree on underdeveloped banking system being a hindrance factor for proper implementation of e-banking.

Lack of legal framework may also hinder the introduction of cost effective modern electronic payment instrument such as ATMs, credit and debit cards, mobile/telephone/internet banking. The study of Gardachew (2010) revealed that lack of legal frame work is one of the challenges for E-banking system in Ethiopia. In contrary the study of Wondwossen and Tsegai (2005) revealed that an adequate legal structure and security framework could encourage the use of E-payments in Ethiopia. The result of survey presented in table 4.3 depicted that the mean score value of the respondent in relation to legal frame work is 3.70 i.e. the largest percentage of the respondents agreed that legal frame work is the basic challenges of E-banking practice. Since there is no legal frame works on the introduction of E-banking at central bank, Ethiopian banking industry cannot be enforced to implement E-banking system. So lack of legal frame work for the implementation of E-banking system is one of the basic barriers for Ethiopian banking industry.

Since most of our banks are at infant stage and they are not strong enough financially, cost of the software could also be a factor that affect the introduction of E-banking. The mean value of

respondent related with the issue is 3.62; this implies the largest number of the respondents agreed that cost of software is the basic challenge of banks to introduce E-banking.

To perform any activity in a company and make the work done the company need a skilled worker. In Ethiopia, there is a shortage of skilled man power in any field and specifically in ICT field. This study also supports the above idea, the mean score value of 3.82 which falls on the agree degree of agreement implies that the largest percent of the respondents agreed that shortage of skilled man power is a basic problem of E-banking in the introduction stage.

Other major problem for the implementation of e-banking is the lack of telecommunication infrastructures. The respondents agreed this lack of telecommunication infrastructure to also be another hindering factor.

Even after the implementation of e-banking another set of challenges may arise while the system is being practiced. Different literature stated that the challenge of e-banking after introduction or in practice stage are absence of legal frame works, less penetration of internet and strong ICT infrastructure, competitive pressure and government support, high rates of illiteracy, culture of the society, existence of cash based society, power interruption problem, and the like.

Table 4.6 challenges on the practice of e-banking

	N	**Minimum**	**Maximum**	**Mean**	**S. deviation**
African banks are very conservative; they use very few innovative products and marketing techniques.	366	1.00	5.00	4.12	0.82
Customers of banks were not familiar with service provided though ATM, Internet banking, telephone and mobile phone.	366	1.00	5.00	3.50	1.05
Lack of sufficient government support will affect customer's willingness to use technological innovation.	366	1.00	5.00	3.72	1.19
The culture of the society also affect the customers to use E banking easily.	366	1.00	5.00	2.56	1.18
Lack of trust is considered as barriers for the practice of E-banking system in Ethiopia,	366	1.00	5.00	2.69	0.89
Lack of confidence with the security aspects	366	1.00	5.00	3.06	1.15

considered as barrier for the practice of E- banking system,					
Customers of our bank fear risk to E-banking.	366	1.00	5.00	3.04	1.05
Frequent power interruptions seriously affect the practice of E-banking.	366	1.00	5.00	3.64	0.96

Source; survey result and SPSS output

As presented in the above table (table 4.3) several questionnaire items were presented for the respondents to assess the challenges of e-banking practice, thus discouraging saving levels of customers. The overall mean of 3.30 which falls on agree level of agreement shows most respondents agree most scenarios in question to be hindrance factors for the practice of e-banking.

The study found out that there is a strong level of agreement i.e. mean score of 4.12 on banks failing to have innovative products and marketing techniques to increase the practice of e-banking. Customers of banks were not familiar with service provided though ATM, Internet banking, telephone and mobile phone, resulting in a gap between customers and available services.

As it is depicted on the above table, respondents were asked whether, lack of government support is an inhabiting factor for the practice of E-banking in Ethiopia and the mean. By looking the mean value of 3.72, the largest number of respondents did agree with the idea that lack of government support affects practice of E-banking system in Ethiopia.

Since most of the societies in Ethiopia are cash based society, they do not give value for electronic money to made different transaction like paper or coin money. On the bases of this concept the respondents were asked whether such culture affect the customers to use E banking practice easily.

The result of the finding attested that the mean value is 2.56, which implies that a fair number of the respondents were neural to the concept that the culture of the society affects the practice of E-banking. The respondents also were neutral on the lack of trust being a challenge for the practice of e-banking.

The result presented in the above table shows that, the respondents asked whether customers of banks fear risk to use E-banking, and the descriptive statistics result gives mean of 3.04 that means the largest number of respondent agreed on the issue, therefore fear of risk is one of the

factor that hinder the practice of E-banking system in the country. Similarly, the result shown on the above table revealed that lack of confidence with the security issue is considered as barrier for the practice of E-banking system, were mean value for the question is 3.06, that implies the respondents agreed that confidence related with security issue is a barrier for customers to use e - banking.

Respondents were also asked whether, frequent power interruption seriously affect the practice of E-banking practice in Ethiopia and the mean value gives 3.64. By looking the mean value of 3.64, the largest number of respondents agreed with the idea that frequent power interruption seriously affects the practice of E-banking practice

4.4 E banking and consumption saving pattern

The practice of electronic banking has been gradually increasing in Ethiopia. The final items in the questionnaires tried to assess the link in the consumption saving patterns due to this increment in e-banking services.

Table 4.7 e-banking and consumption saving patterns of customers

	N	Minimum	Maximum	Mean	S. Deviation
Increased revenues as a result of offering e-channels are often reported.	366	1.00	5.00	4.09	0.86
E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments is available on internet sites.	366	1.00	5.00	4.06	0.92
Useful to make financial decisions with updated information.	366	1.00	5.00	3.96	0.99
Helpful for retailers or merchants not to be wasteful because with e-banking there is less contact with physical cash.	366	1.00	5.00	4.02	0.89
Individuals tend to smooth expenditures more with debit cards than with cash.	366	1.00	5.00	3.96	0.99
The use of the debit cards for direct purchases enjoys a reduction of the total	366	1.00	5.00	4.17	0.92

price paid.					
The more automatic spending is the more likely we are to not keep track or possibly remember what was spent.	366	1.00	5.00	3.78	1.03
E-payments can influence consumption pattern through providing access to easier, faster, more transparent and less restricted transactions.	366	1.00	5.00	4.21	0.81

Source; survey result and SPSS output

The benefits of advancing e-banking services are enjoyed both by banks and customers. The study asked respondents whether or not banks gain increased revenues as a result of offering e-channels. The respondents strongly agreed as seen in the above table with a mean value of 4.09 for this question. Furthermore, the respondents also strongly agreed on the notion that e-banking facilitates the speeding up of cash cycles resulting in increases efficiency of business processes as large variety of cash management instruments is available on internet sites.

Information is power; it is also required to convey decisions taken to the people responsible for implementing the decisions taken, and for monitoring the actual results achieved as the work progresses. All Standard Bank customers should contact the relevant department to request access to their own information. Any Standard Bank customer who wishes to be given access to information that belongs to another customer of the bank must follow the request for access to information procedure. On the bases of this concept the respondents were asked that whether E-banking is useful to make financial decisions with updated information. The mean score of 3.96 agree level of agreement shows respondents agree on this issue.

One other benefit of e-banking that affects customer consumption saving patterns is its convenience. As seen in the above table respondents strongly agreed that e-banking smooth up customers' expenditure by reducing the burden of carrying cash everywhere. Respondents also strongly agreed (mean score of 4.21) that e-payments can influence consumption pattern through providing access to easier, faster, more transparent and less restricted transactions.

4.5 Customer felling of e banking Users

Based on the objective of this paper, the respondents answer are as follow, this is for generally customer felling of e banking technology users. Among the sample population of 366 the following responses are collected from respondents. Here, the researcher try to address all the benefits of e banking technology and believe, it is better to analysis using table as follow

Table 4.8 customers felling of e-banking

Variable	Frequency	Percent
Positive feeling	205	56.01
Negative feeling	161	43.99

Source: Questionnaire

Based on the above result we can conclude that most of the respondents have good felling with use of e banking. Because the answer of the respondent for the question "what is your felling in the use of e banking positive / negative" here, about 56.01 % of the respondent answer is yes, we are positively feel with the use of e banking and the remaining 43.99 % of the respondent answer is, we are not positively fell with the use of e banking technology. To get more profit the bank must satisfy most of the customers.If customers have not a chance to choose the better serving bank, the only decision will be continuing without satisfaction and negative felling will arose rather positive felling.

CHAPTER FIVE

5. SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATION

This study intended to assess the benefits and risks of e banking on customer saving trough the descriptive research approach. On the other hand, the purpose of this chapter is to delineate the summary of findings in section 5.1, followed by conclusion in section 5.2 and presents some recommendations forwarded in section 5.3.

5.1 Summary of Finding

Based on the analysis and interpretation made in the previous chapter, the major findings are summarized as follows.

- E-banking was first introduced by commercial bank of Ethiopia (CBE) in 2001 and at the end of June 30, 2013there are 8 banks which start E-banking service.
- NBE introduced a system called automated transfer system (ATS) which is the back bone of any payment infrastructure. Moreover, NBE has started with its automatic cheque clearing house (ACCH) and real-time gross settlement (RTGS) services. All electronic interbank money transactions are to be integrated into NBE's new national payment system (NPS).
- In a national level an ICT company called ETH switch is under establishment with a motive of profit generation. The company enables all types of different bank card holders to use a given ATM. Moreover it also provides payment switch, get way for international payment system, Card print, card issue and switch for mobile and internet banking.
- The study also indicated that, the basic benefits of E-banking available in the world also work for the case of Ethiopia. The benefits of E-banking for customer are convenience, accessibility, ease of use, low cost of using banking activity, providing real time information and getting quality service.
- Most of the respondents agreed that the benefits of E-banking for banks is simplification of banking task, simplify works of employee, reduce costs per transaction, improve customer satisfaction, attract new segment of customers, additional revenue stream, and provide good image for the bank.
- On the other hand, the majority of the respondents agreed that the basic benefits of E-banking for the economy are: increase speed and efficiency, increase productivity, increase reliability and accessibility of financial service and also information control tool for governments. According to

the respondents, E-banking minimize cost of printing cash notes and its related distribution, Enhance an aggregate deposit, Banking the unbanked, Increase the potential of hard currency generation and used as better information control tool, Which generally related with speed and efficiency, reliability and accessibility, and productivity of the country.

- The majority of the respondent agreed that the challenge of E-banking in introduction stage are absence of skilled man power, absent well organized ICT infrastructure, Cost incurred during the purchases of the software and the device,lack of Support from government, absence of directive which guides the practice of E-banking and even the existing policies and procedures are limited the banks to perform their activity in the effective way.
- After the phase of introduction, on the practice stage, a majority of respondents agreed that the basic challenge of E-banking practice are high rates of illiteracy, low level of internet penetration and poorly developed infrastructure, lack of suitable legal and regulatory framework for e-banking, frequent power interruption, fear of risk and unavailability of competent and skilled employee.
- Based on the objective of this paper the researcher try to identify weather the e banking users are challenged by change saving pattern or not, according to the respondents, most of the are affected by change in saving pattern, due to the use of e banking. This may in the result of high risk and availability in any time and any were. So, customers try to withdraw and transfer for also luxury goods.
- In Ethiopia cash is still the most dominant medium of exchange and electronic payment systems are at an embryonic stage. Since most of our banks are at infant stage and they are not strong enough financially, cost of the automating their system could be a factor that affect the modernizing effort they tend to put in effect. Even in the presence of this and other constraining factors, some efforts are visible bi financial institutions to introduce modern e-banking services.
- E-banking has completely changed the way banking is conducted; it has brought a lot of numerous, convenience, flexible, efficient and interesting services to customers' at relatively lower cost. Customers can now check their balance; transfer funds; pay utility bills; view mini statement; order cheques, stop cheques, airtime top up etc. from the comfort of their bed room.
- E-banking has improved bank-customer relationship. Internet and mobile phones has become common media of information used by banks in getting across to their customers. Monthly

account statements are sent to customers via e-mails and mobile phones by banks free of charge. E-banking has become a necessary selling point for deposit money banks. Banks that want to survive, grow and remain relevant must offer efficient services through e-banking.

5.2 Conclusion

Based on the main findings above, the following conclusions are drawn.

In a national level an ICT company called ETH switch is under establishment which enables all types of different bank card holders to use a given ATM, provides payment switch, get way for international payment system, Card print, card issue and switch for mobile and internet banking. This all are helps to enhance banks to use E-banking system.

It is approved that Basic benefits of E-banking for the customers are convenience, accessibility, ease of use, low cost of using banking activity, providing real time information and getting quality service. It also identified that the basic benefits of E-banking for banks are simplifying works of employee, reduce costs per transaction, improve customer satisfaction, attract new segment of customers, additional revenue stream, and provide good image for the bank.

On the other hand, the study approves that; increasing speed and efficiency, productivity, reliability and accessibility of financial service and also acts as information control tool for governments are the benefits of E-banking for the Economy. E-banking system, such as ATM, mobile banking, internet banking and others are not well practiced by Ethiopian banking industry. This is due to low level of low level of ICT infrastructure and lack of legal frame works at NBE, Absence of skilled man power, Cost incurred during the purchases of the software and the device.

After the introduction of E-banking, banks get different challenges to practice E-banking effectively because of High rates of illiteracy, low level of internet penetration and poorly developed ICT infrastructure, lack of suitable legal and regulatory framework for E-banking, frequent power interruption, fear of risk and unavailability of competent and skilled employee. ICT infrastructure and lack of legal frame works at NBE, Absence of skilled man power, Cost incurred during the purchases of the software and the device.

E-banking benefits the economy through the reduction of cost of printing cash notes and its related distribution, enhance an aggregate deposit, banking the unbanked, increase the potential of hard currency generation and used as better information control tool, which generally increase speed and efficiency, reliability and accessibility, productivity of the country. The introduction of e-banking thus has a positive impact on saving level of the country.

Although there are many associated benefits with the practice of E-banking, there are many reasons which obstruct implementation of the system. In case of Ethiopian banking industries, many privates' banks are using old banking system and don't have access to take advantage from electronic banking facilities.

It is understandable that E-banking affects costumer consumption saving patterns by simplifying banking tasks, reducing costs per transaction, improving customer satisfaction, attracting new segment of customers, creating additional ways of transaction.

In general, the findings of this study offer additional insights into the current E-banking situation and its implications for E-banking growth in Ethiopia as an example of a developing country. Furthermore, the understanding of the challenges of E-banking introduction and practice as well as benefits identified in this study may help to identify the best course of actions to promote its development. It will also be valuable to all banking industries of the country to increase their awareness and understanding of E-banking benefits.

5.3 Recommendation

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

- Since E-banking has a wide range of benefits to the customers, the bank and for the Economy NBE should have to facilitate E-banking practice by creating a well-organized legal framework. NBE should urgently establish a clear set of legal frame works and directives on the use of E-banking in banking sector.
- For the successful implementation as well as practice of E-banking system, ICT infrastructure is a major prerequisite and hence the government should support banking sector by investing on ICT infrastructure development.
- Ethiopia is on the way to be a member of world trade, and other strong competitors or foreign banks will get involved in Ethiopian banking industries therefore banks have to strengthen their capacity by shifting the manual banking to electronic banking.

- In addition to the above, Ethiopian banking industry need to move away from traditional bases of retail bank competition to a new technology based form of competition by focusing on cost reduction, customer retention, awareness, credibility, security, ease of use, and wider scope of products and services.
- To exploit the benefit of E-banking system, banking industry operated in Ethiopia as well as NBE should have to create awareness for customers to familiarize the service and enjoy the benefit.
- Banks should pay special attention to deliver service to customers by using E- banking system, which can easily be accessible, convenience, reliable and which in turn maximize the satisfaction of customers.
- The bank should minimize all the sours of risks of e banking, and create awareness on customers, because most of the negative feeling and negative saving pattern are a result of poor infrastructure and low level of saving awareness respectively.

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Questionnaire

General Instruction

This questionnaire contains four sections that will expected to take approximately 10 to 15 minutes to complete. Please provide your responses to the questions based on the instructions under each section. If you have comments or if you want to need further explanations, please use this address and contact me.

Phone:-+251 913 229 452
Email:-hailumeiraf@gmail.com

Section 1: Demographic Profile of Respondents

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

1. Gender: ☐ Male ☐ Female

2. Age: ☐ below 30 ☐ 31-40 ☐ 41-50 ☐ above 50

3. Educational level: ☐ below 12th grade ☐

☐ Diploma holder ☐ first degree ☐ Master degree and above

4. Employment status: ☐ Employee ☐ Self Employed

5. Monthly income (in Eth. Birr): ☐ below 1,500 ☐ 1501-4000

☐ 4001- 6000 ☐ 6001-8000 ☐ above 8000

Section 2: Questionnaires related with benefits, risks, change on customer saving patterns and the general feeling of E-banking users regarding with use of electronic banking.

Instruction: Below are lists of statements related with benefits of electronic banking , risks of electronic banking, pattern of customer saving and the general feeling customers by using e-banking. Please indicate whether you agree or disagree with each statement by ticking (√) on the spaces that specify your choice from the options that range from 5= strongly agree to 5= strongly disagree. Each choice is identified by numbers ranged from 1 to 5.

Note: SA- Strongly Agree, A- Agree, DA- Disagree, N- Neutral, SD- Strongly Disagree

Part one: Questions related with the benefits of E-banking.

Code	The following are some of the benefits derived from the practice of E-banking, please indicate your choice.	SA	A	N	D	SD
		5	4	3	2	1
1	E-banking makes it easier to perform banking activities.					
2	Since e-banking has no border and time it provides opportunity to mobilize your account at any time.					
3	E-banking is highly convenient for you than traditional banking which is using cash in hand to buy goods and services.					
4	You can download your history of different accounts and do a "what-if" analysis on your own PC before affecting any transaction on the web.					
5	E-banking let banks open even after office hours that can help you to save given customer have two accounts that is saving account and account used for different transaction.					
6	E-banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of saving streams.					
7	E-banking helps to enhance the image of the organization as a customer focused innovative organization. This image also helps in becoming effective at e-marketing and attracting young/professional customer base.					
8	E-banking has also helped in documentation of the economic activity of the masses customer behaviour for stake holders which is helpful for saving oriented policies.					
9	Improves customer service.					
10	Using POS and mobile banking can help the national level saving since both are used for the transfer of funds from account to account.					
11	It is important to create cash less society including you					
12	It is important to the national growth by reducing cost of printing cash notes.					
13	It is cheaper to use					
14	It is important to free from thief					
15	Helpful for retailers or merchants not to be wastefully because with e-banking there is less contact with physical cash.					
16	The use of the debit cards for direct purchases enjoys a reduction of the total price paid.					

Source:-Mohammed ArifShaikh (Sep 2014)

Other any benefit, please specify

_____

Part two: Questions related with risk of e-banking that discourage customers.

Code	The following are some of the risks of e-banking that discourage customers; please indicate level of your choice.	SA	A	N	D	SD
		5	4	3	2	1
1	Ethiopian banks are very conservative; they use very few innovative products and marketing techniques.					
2	Inadequate banking system challenges the practice of e-banking					
3	Customers of banks were not familiar with service provided though ATM, Internet banking, POS and mobile banking.					
4	Lack of sufficient government support will affect customer's willingness to use technological innovation.					
5	The culture of the society also affect the customers to use E banking easily.					
6	Lack of trust is considered as barriers for the practice of E-banking system in Ethiopia,					
7	Lack of confidence with the security aspects considered as barrier for the practice of E- banking system,					
8	Customers of the bank fear risk to E-banking.					
9	Frequent power interruption seriously affect the practice of E-banking practice.					
10	Lack of suitable legal and regulatory framework for e-commerce.					
11	Low level of internet penetration and poorly developed infrastructure.					
12	High rates of financial illiteracy affect the easy practice of E-banking service.					
13	High cost of the software and Devices limits banks not to practice the E-banking service.					
14	It is difficult to perform E-banking because of Lack of suitable legal and regulatory framework for e-commerce and e-payment.					
15	Lack of skills man power to implement E-banking system make costly to introduce the system.					
16	Telecommunication infrastructure for implementation of E-banking.					
17	When the customer is start to process a transaction, double transaction will be happen by any means.					
18	It is difficult to make reversal, ones the transaction is completed					
19	It is costive to use e-banking					
20	High service charge and commission when, the transaction is done					

Source:-Mohammed ArifShaikh (Sep 2014)

Other any risks, please specify_____

Part three: Questions related with any change on customer saving patterns due to the use of electronic banking.

Code	The following are some changes on customer saving consumption patterns due to the use of electronic banking; please indicate level of your choice.	SA	A	N	D	SD
		5	4	3	2	1
1	Increased revenues as a result of offering e-channels are often reported, because of possible increases in the number of customers, retention of existing customers, and cross selling opportunities. Whether these revenues are enough for reasonable return on investment.					
2	E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments is available on internet sites.					
3	useful to make financial decisions with updated information.					
4	individuals tend to smooth expenditures more with debit cards than with cash.					
5	The use of the debit cards for direct purchases enjoys a reduction of the total price paid.					
6	the more automatic spending is the more likely we are to not keep track or possibly remember what was spent.					
7	e-payments can influence consumption pattern through providing access to easier, faster, more transparent and less restricted transactions.					

Other any change on customer saving consumption patterns, please specify

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Part four: Questions related with customer feeling regarding with by use of electronic banking.

The following are some of the feelings regarding with use of E-banking, please indicate your choice.		SA 5	A 4	N 3	D 2	SD 1
45	Am always interested to use e banking					
46	No any obstacle happen in the use of e-banking					
47	All obstacles are solved immediately, if may be					
48	The system is functional in any area and at any time					
49	Using e banking always make easier for my life					
50	Using e banking have no any consumption effect at any time					
51	Use of e banking has no any negative change in my saving pattern					
52	Use of e banking has no any negative effect in my saving pattern					
50	Generally what is your feeling regarding with use of E-banking, please choice your specific feeling.	☐ Positive			☐ Negative	

Other any idea regarding with this, please specify

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