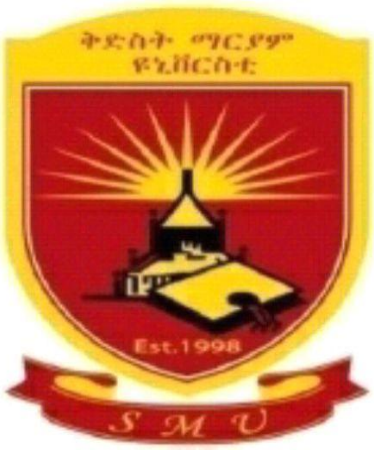

St. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

BARRIERS AND BENEFITS OF ADOPTING E-BANKING SYSTEM IN ETHIOPIA

BY

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JUNE, 2015

ADDIS ABABA- ETHIOPIA

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ACRONYM & ABBRIVATIONS

ATM Automated Teller Machine

POS Point of Sale

TAM Technology Acceptance Model

PU Perceived Usefulness

PEOU Perceived Ease of Use

TOE Technology –Organization-Environment

TPB Theory of Planned Behavior

TRA Theory of Reasoned Action

IT Information Technology

ICT Information & Communication Technology

PC Personal Computer

PDA Personal Digital Assistant

NBE National Bank of Ethiopia

SPSS Statistical Package for Social Scientists

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Abstract

This study aimed analyzing the barriers and benefits of adopting E-banking system in Ethiopia. Electronic banking is a generic term for delivery of banking services and products through electronic channels, such as telephone, Internet, cell phone, etc. So far this study focused on three selected commercial banks (Commercial Bank of Ethiopia, Dashen Bank and Abay Bank) that are providing E-banking services. The technique that the study used is purposive sampling by adopting a research framework developed based on Technology-Organization-Environment framework and Technology Acceptance Model to guide the study. The relevant data was gathered through structured questionnaire, interviews & secondary data from purposely selected banks in Addis Ababa through descriptive data analysis. The result of the study indicated that adopting E-banking has a lot of benefits to the economy, to the banks and to the customers too. Banks can benefit from lower transaction costs, less paper work, less staff and less physical bank branches .E-banking leads to higher level of customers' satisfaction & retention due to conveniences, speed and access to the bank account from any part of the world at any time. In Ethiopia E-banking faced many barriers such as lack of trust, security risk, lack of legal and regulatory frame work, lack of internet infrastructure and absence of competition between local and foreign banks. The study also identified that easy to use and its usefulness as a benefit of adopting E-banking system. Therefore, the researcher suggests some recommendations such as the Ethiopian government should be encouraged to initiate suitable steps to remove legal & regulatory barriers for E-Banking services and effective cooperation among banks has to be developed. In addition, banks should have to develop policy and procedures to oversight the risks of E-banking services & all E-Banking operated in Ethiopia should have to make an association of E-Banking so that efficiency will be improved. Generally, this study needs the attention of the government and the management of the banking industry, because Ethiopian banks today have no other choice than adopting E-Banking so as to coup up with the new technological innovation in the banking industry.

Key words: *E-Banking, Mobile Banking, Internet Banking, Adoption*

CHAPTER ONE

INTRODUCTION

1.1 General Background of the Study

The evolution of E-Banking started from the use of Automatic Teller Machines (ATMs) and Finland is the first country in the world to have taken a lead in E-banking Mishra and Kiranmai (2009). Electronic banking has been widely used in developed countries and is rapidly expanding in developing countries.

Statistics show that Africa is lagging behind in the adoption of E-commerce. However, according to Jensen (2003), most countries in Africa, except South Africa, have Internet infrastructure only in their major cities. Most rural areas in Africa, where the majority of small and medium businesses are concentrated, have no internet facilities and thus are unable to engage in E-commerce activities. Lack of suitable legal and regulatory framework for E-commerce and E-payment is another barrier for the adoption of new technology in banking industry.

Ethiopia has not yet enacted legislation that deals with E-commerce concerns including enforceability of the validity of electronic contracts, digital signatures and intellectual copyright and restrict the use of encryption technologies and high rates of illiteracy. Low literacy rate is a serious barrier for the adoption of E-Banking in Ethiopia as it hinders the accessibility of banking services. For citizens to fully enjoy the benefits of E-Banking, they should not only know how to read and write but also possess basic ICT literacy Gardachew (2010). But risks related with security issue, lack of competition between local banks & foreign banks and social awareness on the E-banking system were not addressed.

In Ethiopia, however, cash is still the most dominant medium of exchange, and electronic payment systems are at an embryonic stage. In the face of rapid expansion of electronic payment systems throughout the developed and the developing world, Ethiopia's financial sector cannot remain an exception in expanding the use of the system (Gardachew 2010, p.2). Creating an electronic banking in Ethiopia is the same as to building a web business for all who are participating in the economy of the country. This leads the country to the electronic business (E-business). The E-business, E-commerce is about using electronic techniques to create opportunities, create new markets, new processes and growth the creation of wealth using electronic mediums Abraham (2012).The development of Ethiopian banking system has largely been affected by the dominance of cash. In Ethiopia, cash is a king since the bulk of personal consumption is done through the medium of cash .For being companies in particular this has resulted in problems of cost and delay, arising from the counting, bundling,

transporting and depositing of large volumes of cash, as well as the risk and inconvenience of dealing with forged and the treatment of damaged notes.

Electronic banking (E-banking) is nothing but E-business in banking industry. It may also be referred as internet banking. The computer applications are paramount concern to the banks in today's business environment and internet has become the major platform for all financial, banking and commercial transactions in the present scenario Magemhe et.al (2002). The paperless banking has become inevitable. Electronic commerce has empowered the financial markets, by virtue of providing information on a finger tip and settling the payments in the same way C.S.V Murthy (2004). The rapidly growing information and communication technology is knocking the front-door of every organization in the world, where Ethiopian banks would never be exceptional.

The appearance of E-banking in Ethiopia goes back to the late 2001, when the largest state owned, commercial bank of Ethiopia (CBE) introduced ATM to deliver service to the local users. 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 1agged 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 Gardachew (2010).

Therefore, as Ayana G. (2014) stated that more studies are still required to understand the relevance of E-Banking Ethiopia to identify areas in which the country lags behind that inhibit their E-Banking adoption and diffusion. Hence, to address the current gap in the literature, this study is intended to assess the E-Banking adoption situation in Ethiopia and specifically focusing on the investigation of barriers and benefits of adopting E-banking in Ethiopia and to recommend appropriate actions to be taken to promote E-banking system in our country.

1.2 Statement of the Problem

In Ethiopia customers were missed to enjoy with the technological advancement in banking sector which has been entertained elsewhere in Africa and the rest of the world. This is due to lack of awareness or competition among banking industry. The modern E-banking methods like Automated teller machine (ATMs), Debit cards, Credit cards, Tele banking, Internet

banking, Mobile banking and others are new to the Ethiopian banking sectors. 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, and to pay bills, or to obtain commercial information and advices are not well known in Ethiopia.

The banking industry in Ethiopia is underdeveloped as compared with the banking industry operated in developed country and therefore 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. With a growing number of import-export businesses, and increased international trades and international relations, the current banking system is short of providing efficient and dependable services Gardachew (2010).
In E-banking system data is electronically transmitted over wireless communication channels and the internet. These processes raise issues of how users are authenticated, how integrity of data is maintained and importantly the confidentiality of this data. One of the issues raised with adoption of new technology is Perceived risk or uncertainty about the outcome of the use of the innovation Gerrard & Cunningham (2003) or uncertainty that the use of the innovation is secure. Uncertainty arises from a predictive validity of the attributes (for example functionality and security) that is, how well users of new technology will predict future performance Cox (1967).

With the low extent of development of ICT in developing countries, when compared with the developed countries E-banking has not really been able to diffuse into society given the low rate of internet access Banji(2004). Therefore, this study has been identified the major barriers and benefits for the adoption of E- banking service based on the research problems stated above.

1.3 Objective of the Study

1.3.1 General Objectives

The general objective of this study is to identify major barriers of adopting E-banking in Ethiopia and identifying the benefits in using of new technology in delivering service to customers in Ethiopian banking industries.

1.3.2 Specific Objectives

The specific objectives of this study are as follows:

- To identify the barriers of adopting E- banking system in Ethiopia.
- To determine the benefits of adopting E-banking

- To evaluate the supports of the Ethiopian government for the adoption of E-banking.

1.4 Research questions

- What are the barriers of adopting electronic banking system in Ethiopia?
- What are the benefits of adopting E-banking in Ethiopia?
- To what extent the government of Ethiopia supports the banking industry for the adoption of E-banking?

1.5 Scope & Limitations of the Study

The scope of this study was the questionnaires were distributed to the bank employees of three purposely selected banks that are found in Addis Ababa who are currently using the service of E-Banking but it does not consider all banks employees have on the technology. Hence the generalization may not be applicable to them. Some of the limitations were:

- Shortage of books and published sources were in Ethiopia concerning electronic banking.
- The study is conducted based on limited variables. It is difficult to collect all the desire information. In addition, Interviewing target respondents were not accessible or not available. Bank officials were too busy and also reluctant for interview.
- The study only covers one city that is Addis Ababa.
- Shortage of time

1.6 Significance of the Study

First, this study is useful for Ethiopian commercial banks in order to see the impacts of E-banking services on their performance. Second, it would help to the banks what actions should take in order to be benefited from the opportunities and how to overcome the challenges. Third, the outcomes of this study assisted other researchers for further studies in the area of electronic banking. Finally, this study provided recommendations for banks about changes needed in order to speed up the adoption of electronic Banking in our country.

1.7 Organization of the Paper

The research paper is divided into five chapters. Chapter one is the introduction part, which contains general background of the study ,statement of the problem, objectives of the study, research questions, research methodology, delimitation/Scope of the Study, significance of the study and organization of the research paper. Chapter two deal with the related literature review. Chapter three is the research methodology. The research results and discussion are presented in chapter four. The final part is chapter five which includes summary of major findings, conclusion & recommendations.

CHAPTER TWO
REVIEW OF RELATED LITERATURES

2.1 The Evolution of E-Banking

The use of electronic communication in finance goes back much further than the 1970s. As long ago as 1918, the payments between banks used to be settled electronically over the telegraph. This use of electronic communications in payments systems has steadily increased over time. Now virtually all large payments between banks & corporations are done electronically. The financial services industry has removed the boundaries between different financial institutions, enabling new financial products & services to appear and making the existing ones available in different packages Turban (2002). The evolution of E-banking started from the use of Automatic Teller Machines (ATMs) and Finland is the first country in the world to have taken a lead in E-banking Mishra & Kiranmai (2009). Electronic banking has been widely used in developed countries and is rapidly expanding in developing countries. However, the slow diffusion of e-commerce to African countries has been attributed to a number of issues some of which may be unique to the African continent Darley.W. (2001).

2.2 Definitions of E-Banking

The term electronic banking often refers to online banking or Internet banking which is the use of the Internet as a remote delivery channel for banking services Furst.et al (2002, pp.5). With the help of the internet, banking is no longer bound to time or geography. Consumers all over the world have relatively easy access to their accounts 24 hours per day, seven days a week.

Different scholars have a variety of definition for E-Banking. Some of them are stated below:

Daniel (1999) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery plat forms that can be used with different terminal devices such as personal computers and mobile phone with browser or desktop software, telephone or digital television.

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

Magembe et.al (2002) defined electronic banking (E-banking) is nothing but E-business in banking industry. E-banking is a generic term for delivery of banking services and products

through electronic channels, such as telephone, internet, cell phone, etc. The concept and scope of E-banking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably R.K. Uppal et.al (2007). Ovia (2001) argues that electronic banking is a product of E-commerce in the field of banking and financial services. In what can be describe as business to consumer domain for balance enquiry request, for cheque books recording, stop payment instruction, balance transfer instruction, account opening and other forms of traditional banking service.

Another definition of E-banking "Electronic banking is the use of a computer to retrieve and process banking data (statements, transaction details, etc.) and to initiate transactions (payments, transfers, requests for services, etc.) directly with a bank or other financial service provider remotely via a telecommunications network Yang (1997, pp.2). It should be noted that electronic banking is a bigger platform than just banking via the internet.

E-banking can be also defined as a variety of platforms such as internet banking or (online banking), TV-based banking, mobile phone banking, and PC banking (or offline banking) whereby customers access these services using an intelligent electronic device, like a Personal Computer (PC), Personal Digital Assistant (PDA), Automated Teller Machine (ATM), Point Of Sale (POS), kiosk, or touch tone telephone Alagheband (2006, pp.11).

2.3 Types of E-banking Products

2.3.1 Automated Teller Machine (ATM)

ATM is a device that allows customers who have an ATM card to perform routine banking transactions without interacting with the human teller. The ATM card holder can do most of the banking transactions like withdrawals, deposits of cash, balance enquiry, etc. With the use of ATMs, the banks are providing "Any Where and Any Time Banking" to their customers that is the customer can have access to ATMs at anywhere within the country or throughout the world at any time .Banks can use these media for publicity by displaying products on the screen. And the cost of setting up ATMs is much lesser than the branch Devamohan (2002).

2.3.2 Internet Banking

Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or society. It may include of any transactions related to online usage. Banks increasingly operate websites through which customers are able not only to inquire about

account balances, interest and exchange rates but also to conduct a range of transactions. Unfortunately, data on internet banking are scarce, and differences in definitions make cross-country comparisons difficult Alabar, T. Timothy (2012).

2.3.3 Point Of Sale (POS)

A point of sale service is an electronic payment type that allows credit or debit cardholders make payments at sales or purchase outlets. It allows customers to perform the following services; Retail Payments, Cash Back Balance Inquiry, Airtime Transaction, Printing Mini statements, etc. Kumaga(2010).

2.3.4 Mobile Banking

Mobile banking (also known as M-Banking), it 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 most of their population is un-banked. In most of these places, banks can only be found in big cities, and customers have to travel hundreds of 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 R. (2007).

2.4 Barriers Related to the Adoption of E-Banking

There are a lot of reasons which hold back the popularity of E-banking services in spite of the fact that bankers and customers can get benefit from online banking. The majority of private banks are still lacking behind the online banking channel. According to Pikkarainen *et al*. (2004) the reasons behind banks are not using the online banking services are as follows:

1. The internet connection is very important prerequisite for customers to use online banking services.
2. Before using these online banking services the new users need to learn how to use these internet services.
3. Some non user's complaint that the face to face banking situation is quite different from doing banking online so there are no social dimensions while doing online banking Mattila (2003).
4. The security issue hinders some customers to use the online banking services.

2.5 Challenges of E-Banking

E-banking despite its numerous benefits, there are challenges in the implementation of E-banking applications. Some of the identified challenges as discovered by previous research works include: security, infrastructure, regulatory and legal issues and socio-cultural challenges as stated below:

2.5.1 Security

One of the biggest challenges & the basic requirements of E-Banking are ensuring its security. Securing the process in E-Banking involves authenticating data of the customer and banker and protecting the information to be transmitted from interception.

According to Garadachew (2010) ,E-banking system must also take into account multilateral security keys i.e. security needs of all participating parties in the E-banking system .An E-Banking system that is not secured may not be trusted from its users . Trust is one of the crucial factors to ensure the acceptance of E-Banking system by users. Martina (2005) also indicated that E-banking application represent a security challenge as they highly depend on crucial ICT systems that create vulnerabilities in financial institutions ,businesses and potentially harm customers.

2.5.2 Infrastructure

The most common communication infrastructure for E-banking is computer network such as internet. According to Kumaga (2010), low level of internet penetration and poorly developed telecommunication infrastructure impede smooth development and improvements in E-commerce in developing countries. In this regard, a study made by microfinance Nigeria (2010) indicated that efforts made by the Nigerian Government and other financial & ICT stakeholders to move Nigeria's payment system from cash dependent platform to the global acceptance electronic-driven alternative ways is impeded by shortage of well developed telecommunication infrastructure. Another major problem that relates to E-banking System is frequent electric power interruption. This will create a lot of problems in E-banking activities which are basically depending on power supply.

The other communication infrastructure available for E-banking users is the mobile network used for mobile phone. Automating the banking activities is another prerequisite for E-banking system.

2.5.3 Regulatory and Legal Issues

According to Mishra (2009), the virtual & global nature of E-payment also raises legal questions such as which jurisdictions will be competent and about applicable laws in disputed cases, validity of electronic data, electronic contracts, and electronic signature. Moreover, a legal and regulatory frame work that bids trust and confidence supporting technical efforts to meet the same is another important issue that needs to be addressed. In this regard legislative support is essential for protecting the interests of customers & banks in various areas relating to E-banking & payment systems. Some of the main issues like liability for loss in case of fraud, allocation of loss in case of insolvency, cheque truncation (i.e. fast and efficient payment in which paper checks are replaced with digital images in which checks are transferred electronically through a system called check truncation) ,evidence & burden of proof ,preservation of records ,prevention of fraud, etc are to be cleared in the legislation (ECB,2002).This can be done by adopting model laws at global level such as model law on E-commerce (1996) ,UNCITRAL model law on E-Signatures(2001) and a regional level such as the SADC model law on Electronic Transaction and Data Protection Mishra(2009).

2.5.4 Socio-Cultural challenges

According to Kumaga (2010) consumer's confidence and trust in the traditional payment systems has made customers less likely to adopt new technologies .New technologies will not dominated the market until customers are confident that their privacy will be protected and adequate assurance of security is guaranteed .New technology also requires the test of time in order to earn the confidence of the people, even if it is easier to use and cheaper than older methods.

Generally, a difference in the degree of the required security and efficiency among peoples of different cultures and level of development aggravates the problem Tadesse and Kidan (2005).

2.5.5 Challenges to Employees of the Bank

E-banking has also posed other challenges to employees of banks engaged in technology adoption. Questions like what should be the code of conduct to be followed by employees and what should be the remuneration policy must be addressed in order to cope with internal forces which may affect the process of technology adoption. In the sphere of

traditional banking, employees are required to sign a privacy and confidentiality agreement which forbids them from disclosing the state of customers accounts with the advent of electronic banking several other issues like, use of internet, security, email access, access to and control of web browsing and transmission of customer data to outside service etc will have to incorporated in the confidentiality agreement. Taking into account that electronic banking will use the latest technology and that staff operating the same should be people of integrity, possessing technical skills and motivation to save the institution, in times when their services are in tremendous demand elsewhere, banks as perquisites, bonuses, incentive compensation, stock option and health and welcome schemes as part of competition packages for employees Verma (2006).

2.5.6 Other Challenges

Other challenges that should be considered in E-Banking system adoption are the standardization of software which is necessary to offer E-banking services. Proven high quality software is a must for high-tech banking services .For sophisticated types of services; the standardization of operating systems, systems software and application software throughout the banking industry is a necessary condition, which may have to pursued Muvva and Sisay(2011). And also Husni and Noor (2011), stated that the provision of E-Banking system require heavy investment costs. Because they have to buy and install the require systems and facilities which lead increased establishment expenses. As the same time they have to incur heavy maintenance costs. This problem might be difficult for new and small banks because they have to face financial problems at the initial stages.

2.6 Benefits of E-Banking

Electronic banking services are becoming the preferred way of making transactions in the developed world due to the fact that they understand the benefits very well through long years of using them in their economy Dawd (2004).The benefits of having electronic banking can be seen from different perspectives as follows:

2.6.1 Benefits for Customers

E-Banking offers substantial advantage to customers in the form of convenience, time saving and easy access to the banking services. The customer can transact at any time & any where throughout the country or outside the country. There is no time & place restriction. The

customers need not visit a branch for each & every transaction and no need to wait in the long queue. By this they can save their time. The customers can gain 24 hours a day and 7 days a week access to banking services at anywhere. With the help of E-Banking, the easy access to the banks will be another advantage to the customers. Thus the E-Banking provides sophisticated services to the customers Devamohan (2002).

2.6.2 Benefits for Banks

The first benefit to the banks offering E-Banking services is better branding & better responsiveness to the market .In this competitive world, E-Banking helps the banks to attract more number of customers and tackle the competition from other banks.

According to Olga (2003), those banks that would offer such services would be perceived as leaders in technology implementation. Therefore, those banks that provide the service can enhance the customer satisfaction through sophisticated services.

By providing secured E-Banking services, the banks can also avoid fraudulent activities .Banks can also save time & hence they can increase the number of transactions & business Devamohan(2002).

2.6.3 Benefits for the Economy

The benefits of electronic banking are immense for economic development of a nation. Some of the economic development benefits of E-banking as identified by Dawd (2009) are stated below.

2.6.3.1 Cost reduction for printing cash notes and its related distribution

In a cash based economy, governments are required to invest a great deal of fund on printing of cash notes & distributing or manual transfer of such notes or currency between individuals is costly. But now a day's E-Banking makes the life of cash notes is minimal. In the case of electronic banking system the transaction values are transferred from one account to another using electronic means, reducing the need for cash notes distribution. Thus by encouraging acceptance of payment cards, governments can achieve huge cost saving for their economy in terms of reducing cash notes printing & related expenditures Dad (2009).

2.6.3.2 Aggregate Deposit Enhancement

When people start to increase the proportion of their saving compared to their daily consumption, the saved money can be utilized for investment purposes that in turn will create employment opportunities. This is a great benefit for the economy as a whole.

However individual savings could not bring this kind of impact. The benefit can only be obtained when savings are made in a banking system whereby the saved fund can be deployed to the economy in the form of loan to encourage the require investment Dawd(2009).

In an electronic banking infrastructure people do not need to carry cash notes for their day to day expenditures as well as contingencies. They rather are encouraged to deposit their fund in the banking system & obtain a single plastic to access this fund at any time of the day when the need arises. This implies that unused funds are always in the banking system that helps to facilitate economic growth Ibid (2004).

2.6.3.3 Banking the un-Banked

While the electronic banking infrastructure is diversified, payroll for employees can be handled through this system. Besides creating ease & connivance, both for the employer as well as the employee, it enables the individuals to enter to the banking system which they may not be interested otherwise Dawd (2009).

2.6.3.4 Increasing the potential for hard currency generation

Especially in developing economies, earning of hard currency is very essential to manage a country's balance of payment. The payment card system can bring a good potential of enabling economies to earn more foreign currency. This can be realized by attracting tourists & by encouraging them to spend more. In today's world, availability of E-banking infrastructure is one of the criteria that tourists set while they decide which country to visit. As a result, countries that maintain a developed E-banking system have a better potential of being visited by tourists than those which do not establish the E-banking infrastructure. Hence more tourists and increased hard currency as a result of diversifying payments card business Dawd (2009).

2.7 The theoretical concept of Adoption

2.7.1 Definition of Adoption

- **Adoption:** is the acceptance & continued use of a product, service or idea. According to Rogers & Shoemaker (1971), consumers go through "a process of knowledge, decision, persuasion & confirmation" before they are ready to adopt a product or service.

Therefore, the stages through which a technological innovation passes are:

a) **Knowledge:** socio economic characteristics, personality variables & communication behavior all relate to innovativeness. Innovativeness is the degree to which an individual or adoption unit is relatively early in adopting new ideas compared to other members of a system Rogers (1995).
b) **Persuasion:** The potential adopter's attitude towards the innovation is formed in this stage. By anticipating & predicting future use of satisfaction & risk of adoption the potential adopter develop positive or negative attitudes to the innovations Rogers, (1995).
c) **Decision:** An individual engages in activities that lead to adoption or rejection of the innovation.
d) **Implementation:** Mental information processing & decision making come to an end, but the behavioral change begins.
e) **Confirmation:** After adoption of innovations, the adopter keeps evaluating the results of his /her decision. If the level of satisfaction is significant enough, the result of innovation will continue; however, it is also possible that the rejection occurs after adoption.

2.8 Theoretical frame work for the adoption of E-banking

2.8.1 Social Psychology

The raw power of computer technology continues to improve, making sophisticated applications economically feasible. As technical barriers disappear, a pivotal factor in harnessing this expanding power becomes the ability to create applications that people are willing to use. Therefore, practitioners & researchers require a better understanding of why people resist using information technologies in order to advise practical methods for evaluating technologies ,predicting how users will respond them, and improving user acceptance by altering the nature of technologies & the process of by which they are implemented Swanson (1982).

Therefore, many researchers have been used different theoretical frame works in the study of adopting new technological innovation. Among frameworks that have been developed based on the past studies includes, the Technology-organization-Environment framework (TOE) Tornatzky & Fleischer (1990), which identifies three basic determinants for the adoption of technological innovation, i.e., technological factors, organizational and environmental factors.

Technology Acceptance Model (TAM) Davis (1989), which put forward the two sets of beliefs, i.e., perceived ease of use (PEOU) and perceived usefulness (PU) to determine individual's acceptance of a technology.

PEOU refers to the degree to which an individual believes that using a particular system would be free of physical and mental effort, PU on the other hand is related to users' perception of the degree to which using a system will be beneficial Alsabbagh & Molla (2004). Theory of Reasoned Action(TRA) Fishbein & Ajzen(1975), Theory of Planned Behavior (TPB) Ajzen (1991), which deals with the intention of adopting and the factors that affect the use of technology such as attitude, subjective norms and perceived behavioral control and the Unified Theory of Acceptance and Use of Technology (UTAUT) Venkatesh, Morris & Davis (2003).

The theoretical frameworks are discussed briefly as follows:

2.8.1.1 Technology- Organization- Environment (TOE) framework

TOE framework was proposed by Tornatzky and Fleischer; it is designed for studying the likelihood of adoption success of technology innovations. This framework is a comprehensive and well received framework in the context of innovation adoption by organizations and has been used in many studies Salwani, et al, & Ellis (2009); Chang et al 2007, Zhu & Kraemer (2006). According to Tornatzky and Fleischer (1990), technology adoption within an organization is influenced by factors pertaining to the technological context, the organizational context, and the external environment. The environmental context refers to the external environment in which an organization operates and its condition for supporting the development of E-banking services, while the organizational context refers to the organization’s characteristics that influence its ability to adopt and use of E-banking. The technological context refers to adopter’s perception of E-banking attributes. Each factor will be discussed as follows:

a) Technological Factors

Technological context describes both the internal and external technologies relevant to the firm. This includes current practices and equipment internal to the firm (Starbuck 1976), as well as the set of available technologies external to the firm Thompson (1967), Khandwalla (1970), Hage (1980).

Typical characteristics of technology considered in technology adoption studies are based on Roger's diffusion of innovation theory Rogers (2003) which include relative advantages (perceived benefits), and relative disadvantages (perceived risks).

Technological factors should consider both perceived benefits & perceived risks as shown below:

- **Perceived benefits**: - Perceived benefits of E-banking cover both direct and indirect benefits for the banking industry as well as for the consumers. Direct benefits include the savings on operational cost, improved organizational functionality, productivity gain, improved efficiency 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 (2007); Kuan (2001) & Iacovou (1995).
- **Perceived risks**: - One of the important risks faced by banking institutions in offering E-banking services is the customers' resistance to use the services which significantly hinder the growth of E-banking Zhao (2008) & Laforet (2005). Issues related to security have always been a concern when dealing with technologies related to online transactions such as E-banking Chang (2007) & Rogers (2003). Therefore, the perception of the risks regarding E-banking is expected to influence the adoption and further growth.

b) Organizational Factors

Organizations are different in their preference to adopt innovation technology Iacovou (1995) & Grover (1993) influenced by a number of factors, like firm size, top management support and financial and human resources. In the framework for this study, researcher will use two basic organizational factors as discussed below.

- **Firm Size**: - Firm size has been widely recognized as an important factor determining an organization's ability to adopt a new innovation as well as capitalizing on its benefits Salwani (2009); Andersen (2003) & Stockdale (2006). Typically, large organizations have the resources and skills to adopt new technologies and have enough business volume to justify the investment. Therefore, it is also expected to affect the adoption of E-banking by banking institutions.
- **Financial and human resources:** - Financial resources are an important factor in facilitating innovation adoption for any organization and they are often correlated with the firm size Kuan (2001) & Iacovou (1995).Therefore, it is expected that the availability of financial resources within the adopting firms is important for E-banking adoption. These resources enable banking institutions to obtain human related resources including the required skills and expertise to develop and support provision of E-banking services.

c) Environmental Factors

The three factors relevant for E-banking adoption are included in the theoretical framework as briefly stated below:

- **Competitive pressure**: - Competitive pressure can strongly influence any bank to develop and adopt E-banking initiatives and it may affect the bank's perception towards E-banking services. As implied in previous studies Quaddus & Hofmeyer (2007); Gibbs et al (2003).
- **Legal Frameworks**: - The existence and maturity of E-Commerce legal frameworks within a country influence the diffusion of online transactions including E-banking as demonstrated in various studies Tan(2002); Martinson & Trappey(2001).
- **The National IT infrastructure**: - National IT infrastructure is a major factor that supports the adoption of E-banking as the case for other E-commerce initiatives. Without an adequate development level and quality of a nation's IT infrastructure, E-banking adoption and use cannot do well Efendioghu (2004) & Scupola (2003).

2.8.1.2 The Theory of Reasoned Action (TRA)

The Theory of Reasoned Action is a widely studied model from social psychology, which concerned with the determinants of consciously intended behaviors Ajzen & Fishbein,(1980);

Fishbein & Ajzen(1975). It is composed of attitudinal, social influence, and intention variables to predict behavior.

According to this theory, an individual's intent to adopt an innovation is influenced by his attitude toward the behavior and subjective norm. Subsequently, a person's behavior is determined by his intention to perform the behavior. The attitude toward performing the behavior is an individual's positive or negative belief about performing the specific behavior. In fact, attitudes are comprised of the beliefs a person accumulates over his lifetime. These beliefs are created from experiences, outside information, or from within the self. Only a few of these beliefs, however, actually influence attitude.

Subjective norm is beliefs about what others will think about the behavior; in other words, the perceived influences of social pressure on an individual to perform or not perform the behavior. "The person's belief that specific individual or groups think he should or should not perform the behavior and his motivation to comply with the specific referents Ghobadian & Jones et al. (2004).

2.8.1.3 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior is one of the most widely used models in explaining and predicting individual Behavioral Intention (BI) and acceptance of information technology. This theory is derived from the Theory of Reasoned Action (TRA).TPB added a perceived behavioral control construct to the TRA. Ajzen (1991) argued that behavioral intention can find expression in behavior only if the behavior in question is under volitional control, (e.g. if the person can decide at will to perform or not to perform the behavior). In many instances behavior would be influenced by non-motivational factors such as availability of resources Ajzen (1991).

The Theory of Planned Behavior & the Theory of Reasoned Action have many similarities .In both models behavioral intention is a key factor in the prediction of actual behavior. Both theories assume that human beings are basically rational & make systematic use of information available to them when making decisions.

2.8.1.4 Technology Acceptance Model (TAM)

Ideally one would like a model that is helpful not only for prediction but also for explanation, so that researchers & practitioners can identify why a particular system may be unacceptable

& pursue appropriate corrective action. A key purpose of TAM, therefore, is to provide a base for tracing the impact of external factors on beliefs, attitudes & intentions.

For this reason, many researchers and practitioners have widely used the Technology Acceptance Model (TAM) to help to predict and make sense of user acceptance of information technologies Haghighinasab, K (2009).

TAM was developed by Davis (1986) to explain the computer-usage behavior. According to the model, in explaining the adoption of any information system, perceived ease of use (PEOU) and perceived usefulness (PU) are the two most important determinants.

- **Perceived Usefulness**: - According to Davis (1989) perceived usefulness is defined here as the degree to which a person believes that using a particular system would enhance his or her job performance. This follows from the definition of the word "useful": "capable of being used advantageously. In an organizational context, people are generally reinforced for good performance by raises, promotions, bonuses & other rewards Pfeiffer (1982); Vroom (1964). In many instances, there is also extensive research in the Information System (IS) community that provides evidence of the significant effect of perceived usefulness on usage intention. The proposed relationship between perceived usefulness and behavioral intention is based on the theoretical argument found that perceived usefulness has a positive effect on behavioral intention to use the internet banking. In simple words, perceived usefulness has a significant relation on behavioral intention. That is perceived usefulness and perceived ease of use significantly determine behavioral intention. (I.e. Guriting & Nelson (2006); Venkatesh & Morris (2000); and Venkatesh & Davis (1996) to name a few.
- **Perceived Ease of Use**: refers to the degree to which a person believes that using a particular system would be free of effort. This follows from the definition of "ease":"freedom from difficulty or great effort". Extensive research over the past decade provides evidence of the significant effect of perceived ease of use on usage intention, either directly or indirectly through its effect on perceived usefulness Venkatesh,(2000); Venkatesh & Morris(2000); Agarwal & Prasad(1999); Davis *et al.*, *(*1989).

2.9 Review of Empirical Studies in Adopting E-Banking System

According to Tan Tao (2000), Studied on "The Factors Influencing the Adoption of Internet banking", some of the factors were relative advantage, internet experience, complexity, government support, technology support, social norms and so on. The results revealed that attitudinal & perceived behavioral control factors, rather than social influence play a significant role in influencing the intention to adopt internet banking .In particular, perceptions of relative advantage, compatibility, trial ability and risk toward using the internet were found to influence intentions to adopt internet banking services. In addition, confidences in using internet banking as well as perceptions of government support for electronic commerce were also found to influence intentions.

Another Studies conducted by Sathe (1999), on "The Adoption of Internet banking by Australian" used security, awareness of the service & its benefits, resistance to change & availability of infrastructure as a basic factors in the study. The result shows that security concerns and lack of awareness about internet banking and its benefits stand out as being the obstacles to the adoption of internet banking in Australia.

The study of Eriksson et al (2004) on "Customer Acceptance Internet banking in Estonia" using the factors of trust, perceived usefulness & its uses applied the model of technology acceptance. The findings suggest that internet banking use increases in so far as customers perceive it as useful. The theory of perceived usefulness is central because it determines whether the perceived ease of internet bank use will lead to increased use of the internet bank. Put differently, a well designed and ease to use internet bank may not be used if it is not perceived as useful. They conclude that the perceived usefulness of internet banking is for banks, a key construct for customer use.

Another study made by wang (2003) on "Determinants of Users Acceptance of Internet banking, based on the factors of trust, perceived usefulness ,ease of use & computer self efficiency. The result Provides evidence of the significant effects of the individuals' difference variable that is computer self efficiency on behavioral intention through perceived ease of use, perceived usefulness and perceived creditability.

The research studied by Suh Han (2002) shown" The Effects of Trust on Customer Acceptance of Internet banking "found that trust is one of the most significant beliefs in explaining a customer's attitudes towards using internet banking. As suggested by the Technology Acceptance Model, customer perception of the usefulness and ease of use also

affect attitude significantly. This result implies that customers rely on trust in online environments that are processing sensitive information.

Gardachew (2010) also conducted a research on "The Opportunities and Challenges of E-banking in Ethiopia. The aim of his study was focused on analyzing the status of electronic banking in Ethiopia and investigates the main challenges and opportunities of implementing E-banking system. The author conducted a survey on the existing operating style of banks and identifies some challenges of using E-banking system, such as, lack of suitable legal and regulatory frame works for E-commerce and E- banking, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks.

2.10 Research Gap

The contributions of this study are listed as follows:

- The acceptance of E-Banking is a new topic in Ethiopia and so it is useful to conduct this study, whose result could be used to improve the banking sector and enhance the quality of E-Banking services in Ethiopia for the future.
- E-Banking has been studied in developed countries .Few studies have been done in developing countries and it has not been investigated in Ethiopia.
- Helping the top management of banks to identify barriers and benefits for the adoption of E-banking in order to increase the use of E-Banking services, as well as to encourage the general acceptance of new technological innovations like E-banking system in Ethiopian context.
- This study would help other researchers who are interested to conduct further study in adopting E-Banking system in Ethiopia.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Approach

The research approach in this study is chosen based on the purpose and the research questions set out to be addressed. According to Creswell (2003, p.6-13) There are three basic types of research approaches, quantitative, qualitative, and Mixed approach.

3.1.1 Mixed Research Approach

Mixed research method or realistic world view is not committed to any one system of philosophy and reality. In this approach, inquirers draw liberally from both quantitative and qualitative assumptions. In order to achieve the objective of this study and to answer the research questions the researcher has been followed mixed research approach (both qualitative & quantitative), because the basis of such an approach helps to neutralize or cancel the limitations of applying any of a single approach.

3.2 Research Strategy

According to yin (1994), the most important condition for differentiating among various research strategies is to identify the research question being asked.

The research questions depend on the characteristics of the stated research question. The main goal of this study is to find the barriers & benefits of adopting E-banking in Ethiopia. This study focuses on contemporary events that do not require control over behavioral events & the research questions of this study is in the form of What, so that the most appropriate strategy is Survey.

3.3 Study Area

This section describes the banking environment in Ethiopia with respect to the policy and legal framework under which the banking industry operates. The banking industry in Ethiopia is controlled by the National Bank of Ethiopia (NBE) acting as the central bank of the country. There are 19 commercial banks registered under the NBE[1] which comprises 3 government owned banks and 16 private commercial banks. It should be noted that since the researcher is planned to use purposive sampling, three sampled banks are purposely selected for the reason that the researcher has got willingness and cooperative banks & their staffs who can assist in providing the relevant information on electronic banking services that are

[1] website (www.nbe.com)

found in the capital city of the country, Addis Ababa. Therefore, among these two broad categories Commercial Bank of Ethiopia, Dashen Bank and Abay Bank are selected as a sample for this study.

3.4 Research Method

This study is intended to examine the main barriers and benefits of adopting E-Banking in Ethiopia in three purposely sampled banks of both government owned and private commercial banks. To undertake this research, the specific methods of data collection were survey, semi-structured interview and document sources. Survey for the quantitative strategy is used through distributing self-administered questionnaires to 90 respondents of purposely sampled banks.

3.4.1 Survey Design

Since the research questions mainly focus on "what" questions; it is justifiable rationale for conducting descriptive and exploratory study and it is more likely to favor survey than others Yin(1989; pp. 17-18). Survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. Its purpose is to generalize from a sample to a population so that inferences can be made and it is also economical and rapid turnaround in data collection Creswell, (2003; pp.153-154).

The questionnaire is divided into three parts. Part I, covers basic personal information of the respondents such as age, employer, salary & educational back ground, and part II comprised information about the nature of the barriers in the adoption and usage of E-banking. The last part tries to determine the perceived benefits of using E-banking system in Ethiopia.

3.4.2 Sample Size and Design

Sampling is the process of choosing, from a much large population, a group about which wish to make generalized statements so that the selected part represent the total group Leedy (1989; pp. 158).

The population is purposely sampled from Banks found in Addis Ababa. The banking industries in Ethiopia were divided in to two parts: Three government owned banks, and sixteen privately owned commercial banks which would be totally nineteen banks found in our country. Of which three banks are purposely used as a sample that is based on the manager's responsibility for E-banking system. Which was ten branches selected from each proposed banks & three respondents were participated for this study. Therefore, a total of

90(10 x3x3) respondents on the selected bank staffs that is 30 respondents from each banks were sampled to see their intention on the benefit and barriers of adopting E-banking system in Ethiopia. The researcher chooses to take three banks; one government owned bank (Commercial Bank of Ethiopia) and two private banks (Dashen bank & Abay bank) as a sample, because it is often impossible or too much expensive to collect data from all the potential units. Hence samples are chosen to represent the relevant attributes of the whole population. According to Graziano & Raulin (1997) the samples are not perfectly representative of the population from which they are drawn, therefore the researcher unlikely to be able to generalize the conclusions to the entire population.

3.5 Method of Data Collection and Data Source

For this research paper, to achieve the objectives of the study both primary and secondary sources of data are used. Primary data are collected from bank employees through questionnaire and interviews, where as secondary data was collected from different websites, annual reports, case studies, journal articles, magazines and different books that are reviewed in the area of E-Banking. The most important use of this secondary data source is to corroborate and increase evidences from other sources Yin (1989; pp. 86) and describe the environment in which the selected industry operates. Thus, the document examination helps to support the patterns that evolved from the data collected via questionnaires and interview, so that the validity of the findings could be enhanced.

3.5.1 Questionnaire Method

The respondents of purposely selected three commercial banks are included in the survey. Questionnaires were distributed to 90 respondents of purposely sampled commercial banks. Questions present in the form of affirmative statements, relating to the concepts on E-banking and to identify their intention on the barriers and benefits of adopting electronic banking system, in such a way to enable measurement of the respondent's opinions. The respondents were asked to indicate their level of agreement on a five point likert scale with the following ratings. "5" Strongly agree, "4" agree, "3" moderate or neutral, "2" disagree, and "1" strongly disagree. The questionnaire is a close ended questionnaire to get guided responses and for easy analysis and to obtain additional information, the respondents also requested to forward any suggestions so as to provide open-ended responses if they have opinions which they feel the researcher would find useful.

3.5.2 Interview Method

To gather the necessary data and also provide deep insight into the topic of E-Banking, the researcher considers interview to be the most suitable way to gather valid and reliable data that is relevant to the research question Denscombe (2000). The techniques of personal interviewing is undertaken in order to reach the objectives since it is the most versatile & productive method of communication which enables spontaneity & provide with "The skill of guiding the discussion back to the topic outlined when discussions' are unfruitful while it has the disadvantages of being very costly, time consuming & can introduce bias through desires of the respondents to please the interviewer" Aaker & Day (1990).

For the purpose of this research, semi-structured interview had been conducted with two managers from Dashen bank and Abay Bank of the three purposely chosen banks to have sufficient information regarding the research problem. The major purpose of this interview is to support certain facts that the investigator already thinks have been established Yin (1989; pp. 89). Therefore, the semi-structured interview was conducted to enhance and supplement the results of questionnaires.

3.6. Data Analysis Method

For the purpose of achieving the objectives of this study, the researcher analyzed the collected data through questionnaires with descriptive statistics using statistical package for social scientists (SPSS: Version 20.0). Furthermore, Creswell (2003; pp. 182), suggested that qualitative research is fundamentally interpretative i.e. the researcher makes an interpretation of the data by using percentages, ratios and other statistical methods. Thus, the data that are collected from the interview and reviews of documents were interpreted qualitatively. Generally, the analysis of quantitative data and interpretation of qualitative data combines to seek convergence among the results Creswell (2003, pp. 222).

3.7. Ethical Considerations

There is an important ethical concern connected with the collection and validity of data. In fact ethical issues are not only important during the data collecting phase, but throughout the whole research process including during the phase of data analysis and dissemination of findings to ensure that the final thesis report provides an honest, fair and unbiased account and does not negatively affect those who might have participated in this research. To ensure that the interest of all parties have been protected and respondents were informed about the objective of the interview prior to each interview. Validity of data is another concern. This is achieved by checking one interview transcript against other interviews to assess the level of consistency and contacting respondents if necessary to check the accuracy or meaning of statements.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

As it was indicated in the methodology, there are three (3) government owned banks and sixteen (16) private commercial banks operating in Ethiopia. Of the total of these nineteen (19) banks the researcher purposely selected three (3) banks as a sample from the two broad categories which provide E-banking services currently.

Therefore, among these two broad categories Commercial Bank of Ethiopia, Dashen Bank and Abay Bank were selected as a sample for this research. These three (3) banks are purposely selected for the reason that the researcher has got willing and cooperative individuals who can assist in providing the relevant information on E-Banking services.

4.2 Results Obtained from the Questionnaires

As it was stated earlier 90 respondents were participated in the questionnaire, of which 84 questionnaires filled by respondents were collected and analyzed by Statistical Package for Social Science (SPSS Version 20.0).

4.2.1 The Barriers of adopting E- banking system in Ethiopia

4.2.1.1 Barriers to the Technology

Table 1 Barriers to the Technology

S/No	Description		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
1	Lack of trust is considered as barriers for the adopting of E-banking in Ethiopia	Frequency	33	47	2	1	1
		Valid percent	39.3	56	2.4	1.2	1.2
2	Lack of security is considered as barrier for the adopting of E-banking in Ethiopia	Frequency	36	43	1	3	1
		Valid percent	42.9	51.2	1.2	3.6	1.2
3	Our bank customers fear risk in using E-Banking	Frequency	33	40	5	4	2
		Valid percent	39.3	47.6	6.0	4.8	2.4

The result shown on the above table indicated that among the respondents 33(39.3%) strongly agree, 47(56%) agree, 2(2.4%) neutral, 1.2 % or one respondent for each disagree or strongly disagree on the issue. This leads that the largest portion of the respondents agreed that lack of trust on the use of new technological innovations of E-Banking provided by bank can be considered as a factor that can hinder the adoption of technological innovation by Ethiopian banking industries. This result confirms with the finding of Sathye (1999) which suggests; the greatest challenge among the electronic banking sector is winning the trust of customers in the issue of security or perceived security risk as a key inhibitor in the adoption of online banking.

The outcome of respondents in the above table revealed that lack of security is considered as barrier for the adopting of E- banking in Ethiopia, were 36(42.9%) of the respondents strongly agree, 43(51.2%) agree, 1(1.2%) neutral, 3(3.6%) disagree and the rest 1.2% or one respondent strongly disagree. It is possible to say that majority of the respondents indicated that technological barriers, such as security risk is a hindrance factor for the adoption of E-banking in our country. This result is consistent with the study of Garadachew (2010) stated that E-banking system must also take into account multilateral security keys i.e. security needs of all participating parties in the E-banking system .An E-Banking system that is not secured may not be trusted from its users .

The result presented in the above table shows that, the respondents asked whether bank customers fear risk in using E-Banking and the result gives 33(39.3%) strongly agree, 40(47.6%) agree, 5(6%) neutral, 4(4.8%) disagree and 2(2.1%) of the respondents strongly disagree, that means the largest number of respondents were agreed on the issue. Therefore, fear of risk is one of the factors that hinder adoption of E-banking system in Ethiopia.

4.2.1.2 Barriers to the Organization

Table 2 Barriers to the Organization

S/No	Description		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4	Insufficient government support will affect	Frequency	24	53	0	4	3
		Valid percent	28.6	63.1	0	4.8	3.6

	Banks willingness to adopt new technologies in Ethiopia						
5	Skilled Manpower problem to implement E-banking system	Frequency	22	59	1	2	0
		Valid percent	26.2	70.2	1.2	2.4	0
6	E-Banking is costly to do banking tasks than traditional bank services	Frequency	11	15	7	28	23
		Valid percent	13.1	17.9	8.3	33.3	27.4

Source: Own survey

The basic issue related with organizational barriers is, the availability of financial as well as skilled manpower to implement the system. The result on the above table Question #5 revealed that 22(26.2%) of the respondents strongly disagree, 59(70.2%) agree, 1(1.2%) neutral, 2(2.4%) disagree but no respondent was strongly disagree on the issue. This means lack of technical and managerial skills on the use of new technological innovation and lack of skilled manpower to implement E-banking system are considered as barriers for the adoption of E-banking system in our country.

The above results on the issue whether E-Banking is costly to do banking tasks than traditional bank services Were 11(13.1%) respondents strongly agree,15(17.9%) agree, 7(8.3%) neutral, on the other hand, 28(33.3%) disagree and 23(27.4%) of the respondents strongly disagree on the matter. Which indicated that majority of the respondents agreed that as compared with traditional banking system, using different E-Banking technological innovation in banking industry is used to perform banking activities at lower costs. This finding is consistent with the finding of Rasoulina & Javaheri(2006) which suggests, cost, infrastructure, Socio-cultural, time, information, legislation and regulation and economic as the most effective issues affecting the electronic banking activities. These issues can be either benefits or barriers. For instance, if a country has managed to achieve a cost reduction greater than the investment made in adoption of new technology, then the cost factor can be considered as a benefit rather than as barrier.

In general, using of E-banking service such as internet banking, mobile banking and others is not expensive when compared with traditional banking system. On the other hand lack of social awareness or lack of familiarity with different technology and lack of sufficient skills

to use and implement E-banking system were considered as barriers to adopt E-banking system in Ethiopia.

4.2.1.3 Barriers to the Environment

Table 3 Barriers to the Environment

S/No	Description		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
7	Lack of available ICT network infrastructure	Frequency	26	55	2	0	1
		Valid percent	31.0	65.5	2.4	0	1.2
8	Lack of government regulation & legal frame works regarding in adopting new E-Banking systems in Ethiopia	Frequency	28	48	4	3	1
		Valid percent	33.3	57.1	4.8	3.6	1.2
9	Lack of self competition among local banks and foreign banks	Frequency	30	50	4	0	0
		Valid percent	35.7	59.5	4.8	0	0
10	Customers may not willing to accept E-banking service	Frequency	9	10	6	39	20
		Valid percent	10.7	11.9	7.1	46.4	23.8

Source: Own survey

The result depicted on the table deals with whether there is lack of available ICT infrastructure in our country were 26(31%) strongly agree,55(65.5%) agree, 2(2.4%) neutral, and 1.2% or one strongly disagree and none of the respondent is disagreed on the issue. It indicates that more of the respondents agreed at there is lack of ICT network infrastructure in Ethiopia. It is known that our government is working to improve the internet infrastructure, but it is still inadequate. It is supported by the study of Wondwossen and Tsegai (2005) stated that lack of sufficient telecommunication infrastructure is one of the basic obstacles in the development of E-banking in Ethiopia.

The above table result shows that 30(35.7%) of respondents strongly agree, 50(59.5%) agree, 4(4.8%) neutral but no respondent is disagreed or strongly disagreed at all for the issue whether the Ethiopian banks lacks of self competition with foreign banks. This means majority were agreed with the idea that lack of competition between Ethiopian banking sector and foreign banks is considered as barrier for the adoption of E-banking system. Therefore, Ethiopian banking industry did not consider about competition with foreign banks and such policies could discourage banking sector of the country from the adoption of E-banking system.

The result for the case that Customers may not willing to accept E-banking service is 9(10.7%) of the respondents strongly agree, 10(11.9%) agree, 6(7.1%) neutral, on the other hand 39(46.4%) disagree and 20(23.8%) of respondents were disagreed strongly, it implies that unwillingness of customers to accept new E-banking system is not considered as barrier for the adoption of technological innovation.

4. 2.2 The Benefits of Adopting E-banking System

4.2.2.1 Perceived Ease of Use

Table 4 Perceived Ease of Use

S/No	Description		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
11	E-banking service is more accessible to users than visiting a bank physically	Frequency	48	34	1	1	0
		Valid percent	57.1	40.5	1.2	1.2	0
12	Using E-payment system (like debit card, ATM or visa card) simplify the activity of workers to deliver service to customers.	Frequency	50	32	1	1	0
		Valid percent	59.5	38.1	1.2	1.2	0
13	In the case of mobile banking, our customers can simply	Frequency	49	32	2	0	1
		Valid percent	58.3	38.1	2.4	0	1.2

	use banking service by using their cell phone						
14	E- banking services are adopted to disable & elder people who are lacking computer knowledge	Frequency	0	2	9	42	31
		Valid percent	0	2.4	10.7	50	36.9

Source: Own survey

As shown in the above table in the subject matter, if E-banking service is more accessible to users rather than going to the bank physically to get services ,the result of respondents were 48(47.1%) agreed strongly, 34(40.5%) agree, 1.2% or one respondent for each is neutral and disagree but none of them is strongly disagreed on the matter. This implies that the highest number of the respondents verify that E-Banking is more accessible for users anywhere with no need of visiting the bank physically.

The result for using E-payment system like debit card, ATM or visa card simplifies the activity of bank workers to deliver services to customers is 50(59.5%) of the respondents strongly agree, 32(38.1%) agree, 1.2% or one respondent for each is neutral or disagreed but none of the respondent is strongly disagreed on the issue. It implies that majority of respondents agreed with the idea that E-Banking simplifies the activities of bank employees, which is a good factor for the ability to adopt E-banking system. This idea is supported by Giglio (2002) suggests that adopting online banking services reduces the workload over the banking staff and it's easy to have more satisfied customers.

As the above table depicts, 49(58.3%) of the respondents agreed strongly,32(38.1%) agree, 2(2.4%) neutral, 1.2% or one respondent is strongly disagreed & no one is disagreed in the issue whether customers of the bank can access banking services by using their cell phone to obtain mobile banking services. Therefore, the highest portion of the respondents see eye to eye that mobile banking can simplifies banking activities.

The result of the respondents for which E- banking services are adopted to disable & elder people who are lacking computer knowledge were none of them is strongly agreed, only 2.4% or two respondents agree, 9(10.7%) neutral, on the other hand, 42(50%) disagree & 31(36.9%) strongly disagreed on the issue. This revealed that E-banking services are not

adopted for disabled & elders who in need of support or lacks computer knowledge to use E-banking services.

4.2.2.2 Perceived Usefulness

Table 5 Perceived Usefulness

S/No	Description		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
15	E- banking is convenient, in terms of 7 days and 24 hours services	Frequency	43	37	1	2	1
		Valid percent	51.2	44.0	1.2	2.4	1.2
16	Improve customer service.	Frequency	44	39	0	1	0
		Valid percent	52.4	46.4	0	1.2	0
17	Reduce number of customers come to the banking hall	Frequency	53	27	4	0	0
		Valid percent	63.1	32.1	4.8	0	0
18	E-Banking Increases the productivity of the bank	Frequency	47	36	1	0	0
		Valid percent	56.0	42.9	1.2	0	0
19	Internet banking is convenient, in terms of time saving	Frequency	50	33	0	0	1
		Valid percent	59.5	39.3	0	0	1.2
20	Customers think that using E-Banking service saves their time & money	Frequency	40	41	2	1	0
		Valid percent	47.6	48.8	2.4	1.2	0

Source: Own survey

The result shown in the table whether E-Banking is convenient in terms of 7 days & 24 hours services were 43(51.2%) of respondents strongly agree,37(44%) agree,1.2% or one respondent is neutral, 2(2.4%) disagree & 1.2% or one respondent is also strongly disagreed in the issue. As most of the respondents agreed that internet banking is more convenient in terms of saving time and delivering of bank service to customer 24 hours a day and 7 days a

week in which E-banking service is not limited by time. It is supported by the study of Devamohan (2002) give explanation as there is no time & place restriction to get the services of E-Banking. The customers need not to visit a branch for each & every transaction and no need to wait in the long queue. By this they can save their time. The customers can gain 24 hours a day and 7 days a week access to banking services at anywhere. With the help of E-Banking, the easy access to the banks will be another advantage to the customers. Thus the E-Banking provides sophisticated services to the customers.

The outcome of respondents concerning E-banking helps for the improvement of customer service were, 44(52.4%) strongly agree, 39(46.4%) agree, 1.2% or one respondent disagree but no one is neutral or strongly disagree on the issue. It implies that by using the E-banking system banks can improve customer satisfaction. The above result is consistent with Kuan (2001) & Iacovou (1995) explained that one of the indirect benefits of E-Banking includes 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.

The result shown on the table revealed that 53(63.1%) strongly agree,27(32.1%) agree, 4 (4.8%) neutral but none of the respondents are disagreed or strongly disagreed in which E-banking can reduce number of customers coming to the bank hall as compared to traditional banking system.

The above table revealed whether E-banking increases the productivity of banks is that 47(56%) strongly agree,36(42.9%) agree,1.2% or one respondent neutral but none of them were disagreed or strongly disagree in the subject matter. This means most of the respondents agreed that E-Banking has a benefit to increase the productivity or profitability of banks.

The response of respondents in terms of E-banking is convenient for time saving were, 50(59.5%) strongly agree, 33(39.3%) agree, no one respondent is neutral or disagree and only 1.2% or one of them is strongly disagreed on the matter. It means that the largest number of respondents agreed that using E-banking such as internet banking, mobile banking, ATM and other services enables users to complete banking activities more quickly and easily. As it was stated by Devamohan, (2002) banks can also save time & hence they can increase the number of transactions & businesses as well.

The result of respondents whether customers think that using E-Banking service save their time & money were,40(47.6%) strongly agree,41(48.8%) agree, 2(2.4%) neutral ,1.2% or one

them disagreed but none of the respondent is strongly disagreed in the issue. This finding is consistent with the previous studies of Dawd (2009), in which the majority of the respondents found time saving & cost minimization as important factors of the benefits of electronic banking services.

4.4 The Supports of the Ethiopian Government for the Adoption of E-banking

Table 6 Supports of the Ethiopian Government for the Adoption of E-banking

S/No	Description		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4	Insufficient government support will affect Banks willingness to adopt new technologies	Frequency	24	53	0	4	3
		Valid percent	28.6	63.1	0	4.8	3.6
8	Lack of government regulation & legal frame works regarding in adopting new E-Banking systems in Ethiopia	Frequency	28	48	4	3	1
		Valid percent	33.3	57.1	4.8	3.6	1.2

Source: Own survey

As shown in the table above , respondents were asked whether, insufficient government support will affect banks willingness to adopt new technologies in Ethiopia and the outcome of the respondents were 24(28.6%) strongly agree,53(61.1%) agree, 4(4.8%) disagree, 3(3.6%) strongly disagree but no respondent is neutral. This means greater parts of the respondents were agreed with the idea that lack of government support affects adoption of E-banking system in Ethiopia. This can be agreed with the study of Nigeria (2010) indicated that efforts made by the Nigerian Government and other financial & ICT stakeholders to move Nigeria's payment system from cash dependent platform to the global acceptance

electronic-driven alternative ways is impeded by shortage of well developed telecommunication infrastructure and frequent electric power interruption.

The result for the topic being short of government regulation & legal frame works regarding in adopting new E- Banking systems in Ethiopia revealed that 28(33.3%) of respondents strongly agree,48(57.1%) agree, 4(4.8%)neutral, 3(3.6%) disagree & 1.2% or one respondent is strongly disagreed on the subject matter. This shows that most of the respondents be of the same opinion in the issue. This confirms to the study of Gardachew (2010) revealed that lack of legal frame work is one of the challenges for E-banking system in Ethiopia. The finding of this study were also consistent with the study of Tan and Ouyang (2002), they found that lack of legislation is an initial barrier that influences E-banking adoption in china.

4.3 Results Obtained from Interview

The interview is conducted for two respondents. Respondent" A" who is working as a division head in Dashen bank. She has been working in Dashen bank for around ten years in different position within the bank. Respondent "B" is a Branch manager in Abay Bank. He has been working for more than four years as a branch manager. The researcher also tried to include the staffs of National Bank of Ethiopia in the interview so as to get current information concerning legal & regulatory frame works with respect to E-Banking but they are not voluntary to be interviewed.

The result of the interview could be summarized as follows:

- What are the reasons & objectives of adopting E-Banking in Ethiopia? This is to obtain the reasons why banks involved in such a business & what benefits they get from the service.

  Both respondents mentioned that by giving different options to customers like ATM,POS, Mobile banking & SMS banking, banks can attract customers to use the E-banking facilities because E-banking service offers substantial advantage to customers in the form of convenience ,time saving & easy access to the banking services. They also stated that it makes life easy for people by providing 24*7 accesses to banking without the need to carry voluminous amount of physical cash. Respondent "B" also added that E-Banking can eliminate the problems of printing cash notes, cheques & waiting in the queues for hours like traditional banking services.

- What are the major challenges faced in adopting E-Banking in Ethiopia? This focuses regarding ICT infrastructure, security, Government support, legal & regulatory frame work & socio-cultural issues concerning E-Banking.

Respondent "A" explained that a proper infrastructure is very necessary to provide a quality service with E-Banking system and the availability of proper infrastructure can attract customers to perform online transactions and use electronic banking services. She also added that electronic based banking services needs to be reliable and secure so that people can use it without any frustration .In addition, this respondent mentioned that most of the time customers faced a frequent problem related to the interruption of internet connectivity and electric power problem..

Respondent "B" said that the infrastructure of internet service is very poor which is becoming the major hindrance against the development of E-Banking system in Ethiopia. Because in our country Ethio Telecom which is the one and only government owned organization that provides these services in the country .He also added, the cost of being associated to internet service is very high as compared to other countries in the world. So, customers are not willing to carry out business over mediums of E-Banking that requires internet connection.

Both respondents stated that in our country there is no proper policy for deployment of E-Banking services .In this regard; National Bank of Ethiopia (NBE) will be responsible to develop regulatory frameworks for the successful implementation of E-Banking system. And this law can protect customers & the bank from fraudulent risks that might arise from E-Banking services.

- What is the pull factors or opportunities in the future to provide the service effectively & efficiently? This question will help to assess the main factors for the attractiveness of the business.

  Both respondents agreed that E-banking provides banks the opportunity to broaden their customer base and helps to mobilize a substantial amount of deposits and to generate hard currency from tourists.

- What products or services do you plan to introduce in to the E-Banking for the future?

  Respondent "A" said that Dashen bank is already in the process to provide a new service called AMEX, which is a short form for American Express.

- What kind of feedback do you receive from your customers on E-Banking service?

Respondent “A” said that most customers provide a feedback concerning banks do not provide technical assistance online that can help customers and no continuous training of E-Banking customers to increase the customer awareness.

Also respondent “B” stated that some customers complain that since bank employees are very busy in their own work so that they could not give adequate time to customers when customers needs further explanation concerning E-Banking services.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major Findings

The study carried out to identify the barriers and benefits of adopting E-Banking in Ethiopia in three purposely selected banks (Commercial Bank of Ethiopia, Dashen Bank and Abay bank) found in Addis Ababa. The researcher used the review of the related literatures, questionnaires and interviews with the purposely selected banks mentioned earlier.

- The result of these questionnaire & interviews conducted by the researcher indicates that banks faced challenges related to lack of awareness on benefits of newly adopted E-Banking technologies, fear of risk, and lack of training and a tendency of looking for better new E-Banking technologies.
- A comprehensive legal framework is a crucial prerequisite for the growth of E-Banking system, Ethiopia has not yet set a comprehensive legal framework for E-Commerce in general and for E-Banking in particular. According to the information obtained from the respondents, the reason for not yet establishing a legal framework for E-Commerce and E-Banking in particular is mainly the inexistence of large pool of E-Commerce activities in our country.
- The findings of the study have shown adopting E-Banking have many benefits both for banks, customers and for the development of the economy. For banks, E-Banking helps to attract more number of customers and tackle the competition from other banks and to enhance the customer satisfaction through sophisticated services. The benefits of E-Banking for customers can be explained in the form of convenience, time saving and easy access to the banking services. The customer can transact at any time & any where throughout the country or outside the country. There is no time & place restriction.
- Some of the economic development benefits of E-banking are: a reduction of the cost for printing cash notes and its related distribution, enhancement of aggregate deposit, Banking the un-Banked for those employees who received their monthly salary through banks but not regular customers of the bank and increasing the potential for hard currency generation. E-Banking has its barriers in adopting E-banking like the security, infrastructure, regulatory and legal frame works, and socio- cultural challenges and so on.

- The study reveals that the benefits of E-banking technological innovation are well known to the banks & act as a driving force for the adoption of E-banking system in Ethiopia. In general perceived ease of use is one of the basic benefits for E-banking in which it enables banks & customers to perform banking activities in simple way. The other benefit for the adoption of E-banking is perceived usefulness, in which, it is used for time saving & cost reduction. These benefits which are identified in the study were considered as a great potential for banks to improve their public image.
- The study also revealed that the infrastructure required for successful adopting & implementation of E-banking system is under developed. In this regard, especially, the telecommunication infrastructure found to be poor to perform E-banking based transactions & this becomes a serious problem for the development of E-banking in Ethiopia. Due to this, the study shows that there is a very slow internet connection & low distribution of internet network in our country.
- The result of the analysis identified that infrastructure of internet service is very poor which is becoming the major hindrance against the development of E-Banking system in Ethiopia because Ethio-Telecom which is the one and only government owned organization that provides these services in the country .The cost of being associated to internet service is very high as compared to other countries in the world. So, customers are not willing to carry out business over mediums of E-Banking that requires internet connection.
- The study recognized as there is no proper policy for deployment of E-Banking services in Ethiopia .In this regard; National Bank of Ethiopia (NBE) will be responsible to develop regulatory frameworks for the successful implementation of E-Banking system. And this law can protect customers & the bank from fraudulent risks that might arise from E-Banking services.

5.2 Conclusion

To undertake this research, both descriptive & exploratory study was conducted by using purposive sampling method for which both primary and secondary sources of data are used. Primary data are collected from bank employees through questionnaire and interviews, where as secondary data was collected from different sources. The analysis was done using Statistical Package for Social Scientists (SPSS: Version 20.0)

This study is aimed to respond the proposed research questions .These is to identify the barriers and benefits of adopting E-banking system in Ethiopia. Information technology is

considered as the key driver for the changes taking place around the world. Due to a constant and steadily growth of information and communication technology, the world banking industry is entering into new phenomena of unique form of competition supported by modern information and communication infrastructure. The Ethiopian banking system is very much behind compared to the rest of the world. To achieve the main objectives of this study, the researcher tries to use two basic frame works, these are Technology-Organization-Environment (TOE) and Technology Acceptance Model (TAM). The researcher also used both quantitative & qualitative (mixed) research approach. The study revealed that lack of trust, fear of risk, insufficient government support for the adoption of E-Banking, lack of ICT infrastructure, lack of suitable legal and regulatory framework, lack of competition between local banks & foreign banks, skilled manpower problem, resistance to changes in technology among customers and staff, frequent power interruption and security issues are the main barriers for developing E-banking in Ethiopia. In addition, the study revealed that National Bank of Ethiopia (NBE) is the responsible body to develop legal and regulatory frameworks for the successful implementation of E-Banking system. And this law can protect customers & the bank from fraudulent risks that might arise from E-Banking.

On the other hand, the study reveals that the benefits of technological innovation are well known to the banks and represent a force to drive adoption of the E-Banking system. In general perceived Ease of use is one of the basic benefits for E-banking, in which it enables employees of the bank to perform E -banking activities in a simple way & it is more accessible to users without visiting the bank branches physically. The other main benefit for the adoption of E-banking system is perceived usefulness, in which, it is used for time saving, cost reduction and helps the bank to improve its productivity or profitability. This and the other benefit identified in the study were considered as a very great potential for banks to improve their public image.

Generally, the findings of this study offer additional alarming into the current E-banking adoption situation and its implications. Furthermore, it is valuable to all banking industries of the country to increase their awareness and understanding of E-banking benefits. The understanding of the barriers to E-banking adoption identified in this study may help to identify the best course of actions to promote the development E-Banking system in Ethiopia.

5.3 Recommendation

- Creating continuous social awareness about E-banking services by emphasizing its advantages like time saving, low cost and convenience through different forms of media advertizing such as leaflets, brochures, web pages, etc.
- Banks should build always to guarantee reliability or dependability of online transactions in order to build customer confidence and to improve the trustworthiness reputation of banks.
- Effective cooperation among banks has to be developed. The value of E-Banking will be increased by linking one activity with other both within banks & outside with suppliers, channels & customers.
- The government should support to regulate the banking industry with respect to E-Banking services. The Ethiopian government should be encouraged to initiate suitable steps to remove legal & regulatory barriers for adopting E-Banking services.
- Ethio-Telecom should make every effort in improving internet services in order to increase E-banking services and also it increases the confidence of the adopters of E-Banking system in Ethiopia.
- All E-banking operated banks in Ethiopia should have to make an association of E-banking so that efficiency will be achieved & used to create common clearing & settlement system. Banks also should develop policy and procedure to oversight the risks of E-banking services.
- To ensure security & control, a top management group of each bank should have to give priority & install security awareness throughout the bank.
- The Ethiopian government should have to minimize the problem of frequent power interruption. In addition, banks have to solve continuous system failures.

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APPENDIX

QUSTIONNAIRE AND INTERVIEW

St. Mary's University

School of Graduate Studies

Questionnaire to be filled by Bank Employees

Dear respondent:

The objective of this questionnaire is to secure the necessary and relevant first hand information that may be helpful to conduct a research on the topic of "Barriers & Benefits of Adopting E-banking in Ethiopia" in partial fulfillment of the requirement for MBA in Accounting & Finance.

Here I kindly request you to attempt all the questions in the questionnaire to meet the aim of the study. Whatever information is provided will be treated with confidentially and strictly to be used for academic purpose only. There is no need to write your name. Please try to make a thick mark [√] in the appropriate box.
I thank you in advance

Endale Genie Tiruneh

(Graduating student)

PART I-Personal information of the respondent:

- **Gender** : Male [ ] Female [ ]
- **Age:** 18-30 [ ] 31-40 [ ] 41-50 [ ] 51-60 [ ] Above 60 [ ]
- **Education:** Diploma /TVET [ ] BSC/BA [ ] Masters [ ] Doctorate Degree & Above [ ]
- **Employer** : Government owned Bank [ ] Private Bank [ ]
- **Work Experience**: 1-2 Yrs [ ] 2-5 Yrs [ ] 6-10 Yrs [ ] 11-15 Yrs [ ] Above 15 Yrs [ ]
- **Salary:** birr1000- 3000 [ ] 3001-5000 [ ] 5001-7000 [ ] 7001-9000 [ ] Above 9000 [ ]

		Strongly Agree "5"	Agree "4"	Neutral "3"	Disagree "2"	Strongly disagree "1"
I	**BARRIERS OR RISKS OF ADOPTING E-BANKING**					
A	Technological factor					
1	Lack of trust is considered as barriers for the adopting of E-banking in Ethiopia	[ ]	[ ]	[ ]	[ ]	[ ]
2	Lack of security is considered as barrier for the adopting of E-banking in Ethiopia	[ ]	[ ]	[ ]	[ ]	[ ]
3	Our bank customers fear risk in using E-banking	[ ]	[ ]	[ ]	[ ]	[ ]
B	Organizational factor					
4	Insufficient government support will affect Banks willingness to adopt new technologies	[ ]	[ ]	[ ]	[ ]	[ ]
5	Skilled Manpower problem to implement E-banking system	[ ]	[ ]	[ ]	[ ]	[ ]
6	E-Banking is costly to do banking tasks than traditional bank services	[ ]	[ ]	[ ]	[ ]	[ ]
C	Environmental Factor					
7	Lack of available ICT infrastructure	[ ]	[ ]	[ ]	[ ]	[ ]
8	Lack of government regulation & legal frame works regarding in adopting new E- Banking systems in Ethiopia	[ ]	[ ]	[ ]	[ ]	[ ]
9	Lack of self competition among local banks and foreign banks	[ ]	[ ]	[ ]	[ ]	[ ]
10	Customers may not willing to accept E-banking service	[ ]	[ ]	[ ]	[ ]	[ ]
II	**BENEFITS OR USEFULNESS OF E-BANKING**					
D	perceived Ease of use					
11	E-banking service is more accessible to users than visiting a bank physically	[ ]	[ ]	[ ]	[ ]	[ ]
12	Using E-payment system (like debit card, , ATM or visa card) simplify the activity of workers to deliver service to customers.	[ ]	[ ]	[ ]	[ ]	[ ]
13	In the case of mobile banking, our customers can simply use banking service by using their cell phone	[ ]	[ ]	[ ]	[ ]	[ ]
14	E- banking services are adopted to disable & elder people who are lacking computer knowledge	[ ]	[ ]	[ ]	[ ]	[ ]
E	Perceived Usefulness					
15	E- banking is convenient, in terms of 7 days and 24 hours services	[ ]	[ ]	[ ]	[ ]	[ ]
16	Improve customer service	[ ]	[ ]	[ ]	[ ]	[ ]
17	Reduce number of customers come to the banking hall	[ ]	[ ]	[ ]	[ ]	[ ]
18	E-Banking Increases the productivity of the bank	[ ]	[ ]	[ ]	[ ]	[ ]
19	Internet banking is convenient, in terms of time saving	[ ]	[ ]	[ ]	[ ]	[ ]
20	Customers think that using E-Banking service saves their time & money	[ ]	[ ]	[ ]	[ ]	[ ]

Anysuggestions

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Appendix

St. Mary's University

School of Graduate Studies

Interview for Bank Employees

Dear respondent:

The objective of this interview is to secure the necessary and relevant first hand information that may be helpful to conduct a research on the topic of "Barriers & Benefits of Adopting E-banking in Ethiopia" in partial fulfillment of the requirement for MBA in Accounting & Finance.

Here I kindly request you to attempt all the questions in the interview to meet the aim of the study. Whatever information is provided will be treated with confidentially and strictly to be used for academic purpose only.
I thank you in advance

Endale Genie Tiruneh

(Graduating student)

1. What are the reasons & objectives of adopting E-Banking in Ethiopia? This is to obtain the reasons why banks involved in such a business & what benefits they get from the service.
2. What are the major challenges faced in adopting E-Banking in Ethiopia? This focuses regarding ICT infrastructure, security Government support, legal & regulatory frame work & socio-cultural issues concerning E-Banking.
3. What are the pull factors or opportunities in the future to provide the service effectively & efficiently? This question will help to assess the main factors for the attractiveness of the business.
4. What products or services do you plan to introduce in to the E-Banking for the future?
5. What kind of feedback do you receive from your customers on E-Banking service?

DECLARATION

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

_____ _____

Name Signature

St.Mary's University, Addis Ababa June, 2015

ENDORSEMENT

This thesis has been submitted to St.Mary's university, school of graduate studies for examination with my approval as a university advisor.

_____ _____

Advisor Signature

St. Mary's University Addis Ababa June, 2015