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College of Business and Economics
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**Factors Influencing Adoption of Electronic Banking: The case of
commercial banks in Addis Ababa**

By

Meseret Kiflu

June, 2017

Addis Ababa, Ethiopia

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commercial banks in Addis Ababa**

A Thesis Submitted to the School of Graduate Studies of Addis Ababa
University School of Commerce to Partial Fulfillment for the Award of
Masters of Arts degree in Marketing Management

By
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Advisor:
Mulugeta Gebremedhin (PhD)

June, 2017

Addis Ababa, Ethiopia

Declaration and Confirmation

I, the under signed, declare that this submission is my own work, prepared under the supervision of Dr. Mulugeta Gebremedhin. To the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

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Signature

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Statement of Certification

This is to certify that the thesis entitled “Factors influencing adoption of electronic banking: the case of commercial banks in Addis Ababa” submitted by Meseret Kiflu to Addis Ababa University School of Commerce towards partial fulfillment of the requirements for the award of the degree of Master of Arts in Marketing Management is a genuine record of the work carried out by her under my supervision and guidance.

Dr. Mulugeta Gebremedhin

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Factors Influencing Adoption of electronic banking: The case of commercial banks in Addis Ababa

By: Meseret Kiflu

Approved by the Board of Examiners

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LIST OF ABBREVIATIONS

ATM	Automated Teller Machine
CBE	Commercial Bank of Ethiopia
DB	Dashen Bank
E-banking	Electronic banking
E- Payments	Electronic Payments
ICT	Information and Communications Technology
NBE	National Bank of Ethiopia
POS	Point of Sales Machines
SMS	Short Message Service
SPSS	Statistical Package for Social Science
TOE	Technology Organization Environment
TAM	Technology Acceptance Model
TOE	Technology Organization Environment
WWW	World Wide Web

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ABSTRACT

The purpose of this study was to investigate factors that influence customers adoption of e-banking in Addis Ababa. Data was collected using questionnaire distributed to a sample of 384 with response rate of 81% from customers of the two selected banks. The chosen banks were Commercial bank of Ethiopia and Dashen bank which have a better e-banking service. Quantitative research approach was used to answer research questions. The collected data was analyzed using SPSS version 20.0 for descriptive analysis and inferential analysis. The relationship and influence of the factors was analyzed using Pearson correlation and multiples regression. The findings of the study showed that perceived ease of use, ICT infrastructure, security perception and information about e-banking have significant positive effect on the adoption of electronic banking except perceived risk which has significant but negative effect. Strategies are also recommended to enhance the e-banking services including formulating security policies and guidelines, making websites more user-friendly, reducing users risk concerns and the role of government in terms of improving ICT infrastructure. Finally, in order to bring about sustainable adaptation of e- banking services by financial institutions which best serves the customer needs, more research works are suggested to be done to further analyze the contribution of e-banking services to the larger economic transactions.

Key words- e- banking, adoption, Commercial bank of Ethiopia, Dashen bank

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Nowadays, the electronic technology is playing a major role for the world of business especially in banking activities. Electronic banking (e-banking) is the newest delivery channel for banking services which make Competition between banks and forced them to find new market to expand (Daniel,1999). Hence, banks have begun to offer electronic banking services to improve the effectiveness of distribution channels through reducing the transaction cost and increasing the speed of services. Recently, electronic banking has become the way for the development of banking system, and the role of electronic banking is increasing in many countries. It offers opportunities to create services processes that demand few internal resources, and therefore, lower cost. As well as it provides wider availability and possibility to reach more customers (Mian and Rizwan, 2013).

Many studies have made attempts to define electronic banking in the different ways. In this study the researcher refers to electronic banking as conventional banking services that banks use the electronic technologies to render services to their customers without the presence of physical interactions between the customer and bank employees.

An online or electronic banking system gives everybody the opportunity for easy access to their banking activities. From the customers' point of view, electronic banking allows customers easier access to financial services and time saving in managing their finance (Almazari and Siam, 2008; Ayrga, 2011; Tan and Teo, 2000). These banking activities may include viewing account balance, creating payment requests, transferring funds in a simple and efficient manner, retrieving an account history, etc. Banks and other financial institutions have moved to e-banking

in their efforts to minimize costs while maintaining reliable customer service (Kolodinsky and Hogarth, 2001).

Information and communication technologies are playing a very important role in the advancement of banking by introducing electronic banking which include Automated Teller Machine (ATM), mobile and Internet (online) banking, electronic funds transfer, direct bill payments and credit card (Gikandi and Bloor, 2010) to ease the banking activities. Among these e-banking facilities, the Automated Teller Machine (ATM) is the first well known and widely adopted system that was introduced to facilitate the access of the user to his/her banking activities (Nyangosi et al. 2009; Claessens et al., 2002) .

The occurrence of electronic banking has prompted many banks to rethink their IT strategies in order to stay competitive. Customers today are demanding much more from banking services. They want new levels of convenience and flexibility (Birch and Young, 1997; Lagoutte, 1996).

Despite the growth of e-banking worldwide, commercial banks in Ethiopia continue to conduct most of their banking transactions using traditional teller based methods (Yitbarek & Zeleke, 2013). Banking operations are still under developed due to low level of infrastructural development, lack of suitable legal and regulatory framework, high rates of illiteracy, frequent power interruption and security issues (Gardachew, 2010). Gardachew (2010) also indicated that even though electronic banking has been widely used in developed nations and is rapidly expanding in developing countries, in Ethiopia cash is still the most dominant medium of exchange, and electronic payment systems are at an emergent stage. He also stressed that 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.

Moreover, electronic banking is a new technology in Ethiopia which needs a lot of effort and resources to be easily adopted by customers. Hence, in order to help banks improve electronic banking adoption by their customers, it is necessary to examine factors that influence customers' intention to adopt electronic banking service channels. So the main purpose of this study is to examine the factors affecting customers' intention to adopt this service.

1.2 Statement of the problem

Among the various ICT applications introduced in the last decade, e-banking has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space (Turban 2008). Customers will also benefit from the convenience, speed and round-the-clock availability of online banking services.

However, despite the fact that online banking provides many advantages (Kalakota and Whinston, 1997), it is not clear whether all customers want or are comfortable with electronic banking (Daniel & Storey, 1997). Technology is changing at a rapid speed making it difficult for both the customer and the bank to determine the best approach. It is for these reasons that academic research is needed in this newly emerging delivery channel (Daniel & Storey, 1997). In order to encourage further e-banking adoption in developing countries, a better understanding of the barriers and drivers impacting e-banking adoption is critical (Zhao et al. 2008).

In the developed world there are several research works on customers' intention to adopt e-banking (Lassar, 2005; Kolodinsky and Hogarth, 2004; Pikkarainen et al, 2004; Karjaluoto, 2002; Daniel, 1999; Lichtenstein & Williamson, 2006; Sathye, 1999; Yiu et al, 2007; Chan & Lu, 2004; Suh & Han, 2002). Different frameworks and theories are also used in different studies like Technology-Organization-Environment frame work (TOE) proposed by Tornatzky & Fleischer (1990) and technology acceptance model (TAM) developed by Davis (1989).

However, in Ethiopia there are some published works in the area of e- banking like (Wondwossen and Tsegai, 2005: e-payment challenge and opportunity in Ethiopia; Gardachew,2010 : Electronic Banking in Ethiopia practice ,opportunities and challenges ; Ayana, 2012: Adoption of Electronic banking system in Ethiopian Banking industry: Barriers and Drivers; Yitbarek & Zeleke, 2013: Analysis of factors influencing customers' intention to the adoption of E- banking service channels in Bahir dar city: an integration of TAM,TPB and PR).

Therefore, more studies and inquiries particularly from the customers' perspectives are still essential to better understand what to do to enhance e- banking services in Ethiopia. This research makes efforts to combine views of both users and non-users of e- banking services. As a result this research is intended to contribute towards filling up the gap in terms of understanding factors that influence e-banking adoption and how these factors influence users in individual selection of e-banking services in order to provide appropriate and more precise recommendations for successful e-banking adoption strategies.

1.3 Research Objectives

1.3.1 General Objectives

The general objective of this study is to investigate factors that influence adoption of e-banking in the Ethiopian banking industry.

1.3.2 Specific objectives

The specific purposes of this study are as follows:

1. To examine the influence of perceived ease of use on customers adoption of e-banking.
2. To determine the influence of perceived risk on customers adoption of e-banking.
3. To investigate the influence of ICT infrastructure on customers adoption of e- banking.
4. To examine the influence of security perception on customers adoption of e-banking.
5. To investigate the influence of information about e-banking on customers adoption of e-banking.

1.4 Significance of the study

The major contribution of this study is to identify the factors that would influence consumers' adoption of electronic banking services in Addis Ababa. This study determined the most important factors that are associated with the adoption of electronic banking services. This will benefit banks to reformulate a better strategy to attract their customers to adopt and retain the use of electronic banking services. Besides, it will also benefit the banks as they are able to identify the factors, strengths, weaknesses, threats and opportunities to improve their services. Understanding factors influencing the adoption of electronic banking services will help banks to improve their service performance, it will also strengthen the relationship between banks and customers in order to provide better services, and contribute to future developments. This study also enables banks to strategically plan their product and service offerings. This study will significantly contribute to further researches that will be conducted in Ethiopia in relation to the banking industry.

1.5 Scope of the study

The study will be conducted in two purposefully selected commercial banks customers in Addis Ababa. The banks are Commercial Bank of Ethiopia and Dashen bank, representing private and government owned banks.

These banks are selected under the assumption that, their delivery or application of electronic banking services is relatively better than other commercial banks in Ethiopia, they are physically closer to the researcher and easy access of information.

1.6 Limitation of the Study

In conducting the research, certain limitations may arise such as the sampling procedure and sampling size. The first limitation of the study relates to the sampling procedure i.e. convenience sampling, which limits the generalizability of the research findings. The second limitation relates to the sample size for primary data sources; the number of participants included in the sample may not be good representative of the population. In spite of these limitations, the researcher has taken all possible measures to achieve the best possible result.

1.7 Organization of the study

This research paper has five chapters. The first chapter contain introduction; which consists of background of the study, statement of the problem, research question, objective of the study, significance of the study, and scope of the study. Chapter two contains related literature review which has a detailed literature related to the content of the study. In chapter three the research design and methodology is present. Data presentation, analysis and discussion are presented on chapter four. Final chapter of the study which is chapter five has summary of findings, conclusion, recommendation, and area of further investigation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Concepts of electronic banking

E-banking is the abbreviation of Electronic Banking. The term electronic banking can be described in many ways. In a very simple form, it can mean the provision of information or services by a bank to its customers, via a computer, television, telephone, or mobile phone and it is a high-order construct, which consists of several distribution channels. It should be noted that electronic banking is a bigger platform than just banking via the Internet (Daniel, 1999). This implies it is the transactions that take place through electric system like web. Due to the introduction of technology many banking sector use e-banking for the purpose of information source as well as transaction, as the results e-Banking users can perform many banking transaction like balance inquiry, paying of bill, checks writing transfer of funds from one account to another (Mian and Rizwan, 2013).

E-Banking provides facility to their customers and to fulfill customer's expectation about this service. Electronic banking systems provided easy access to banking services. The interaction between user and bank has been substantially improved by deploying ATMs, Internet banking, and more recently, mobile banking (Claessens et al. 2002).

Electronic banking (E-banking) reduces the transaction costs of banking for both Small and Medium Enterprises (SMEs) and banks. SMEs need not visit banks for banking transactions, providing round the clock services (Cheng, 2006). Customers prefers e-banking for conveniences, speed, round the clock services and access to the account from any parts of the world (Cheng, 2006). E-banking offers benefits to banks as well. Banks can benefit from lower transaction costs as E-banking requires less paper work, less staffs and physical branches

(Cheng, 2006). E-banking leads to higher level of customers' satisfaction and retention (Poatoglu & Ekin, 2001).

2.2 Definition of e-banking

Different researchers define e- banking in different ways, the following section show some of these definitions:

E-banking is a form of banking service where funds are transferred through an exchange of electronic signal between financial institutions, rather than exchange of cash, checks, or other negotiable instruments (Kamrul, 2009).

E-banking, also known as electronic funds transfer (EFT), is simply the use of electronic means to transfer funds directly from one account to another, rather than by check or cash (Malak, 2007).

The definition of electronic banking varies among researchers, because electronic banking refers to several types of services through which bank customers can request information and carry out most retail banking services via computer, television or mobile phone (Daniel, 1999).

Banks have used electronic channels to do banking operations with both domestic and international customers. Currently, banks are mostly using electronic channels to receive instructions and deliver their products and services to their customers. Although the range of services provided by banks over the electronic channel varies widely in content, this form of banking is generally referred to as electronic banking (Azouzi, 2009).

E-banking can also be defined as 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 with other financial service provider remotely via a telecommunications network (Yang, 1997).

Another definition of E-banking is that, it is a variety of platforms such as internet banking or online banking, TV-based banking, mobile phone banking, and PC (personal computer) banking (or offline banking) whereby customers access these services using an intelligent electronic device, like PC, personal digital assistant (PDA), ATMs, POS, kiosk, or touch tone telephone (Alagheband, 2006).

2.3 Different forms of e-banking

Among the many e-banking delivery channels to provide banking service to customers, ATM ,internet banking, POS, Mobile banking and agency banking are the most widely used and discussed below:-

AUTOMATED TELLER MACHINES (ATM)

It is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry (Fenuga, 2010). ATM is same as teller point but it run automatically through identity like card and password. It does not need any slip or Check but it is very much based on account holder's ATM card and it's Password. Generally, ATM machines provides the same services, such as money withdrawal, fund transfer, balance enquiry, mini statement, and money transfer from one account to the other.

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 any of 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, 2012).

POINT-OF-SALE TRANSFER TERMINALS (POS)

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

MOBILE BANKING

Mobile banking also known as M-Banking is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or PDA. The earliest mobile banking services were offered over Short Message Service (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 unbanked. 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 et al., 2007).

AGENCY BANKING

Agency Banking is a service outlet contracted by financial institution or mobile network operator to process client's transactions rather than a bank teller. It is the owner or an employee of the retail outlet who conducts the transaction and lets its client deposit, withdraw and transfer funds, pay their bills, inquire about an account balance, or a direct deposit from their employer, or receive government benefits. Banking agents can be pharmacies, super markets, conveniences stores, lottery outlets, post offices etc. (Ivatury & Layman, 2006)

2.4 E-banking system in Ethiopian banking industry

The appearance of E-banking in Ethiopia goes back to the late 2001, when CBE introduced the service for local users with its eight ATMs located in Addis Ababa (Gardachew, 2010).

Then after Dashen Bank comes to the picture in the year 2006 with its ATMs that provide service for local Dashen Visa Card holders and international Visa Cardholders coming to Ethiopia.

United Bank S.C is the first to introduce tele -banking - including text messages or SMS by the end of 2008. Currently, United Bank starts to deliver E banking services like ATM, internet, mobile and agent banking. (United Bank SC web report, 2015)

Wegagen Bank is introducing a Core Banking System as of July 2000 that helps to connect its Head Office & all branches through network. Through its versatile ISO Standard Core Banking System, the Bank is now delivering more efficient services to its customers. The system has also enabled the Bank to provide technology-based banking services such as Card payment services (through ATM & POS), internet banking as well as mobile banking services. (Wegagen Bank SC web report, 2015)

Zemen Bank has launched prepaid bank cards which can be used without opening a deposit account at the bank. The cards will have preloaded funds, which can be withdrawn from ATMs or used to make purchases from POS terminal. The prepaid cards will be given to the cardholders with a PIN to withdraw the cash. The prepaid cards can be used as gift cards or employee salary or expense cards, which can avoid the need to carry around a large amount of cash. The cards can be preloaded with a minimum of 100 Br. And a maximum of 50,000.00 Br. and reloaded after the previous funds have been fully utilized. The bank will take a commission each time a card is loaded (Fortune, 2012).

Currently, there are only a few agreements in place to share ATM resources. The first was the Premium Switch Solutions (PSS), which was established by three banks in 2009 namely Awash

International Bank S.C., Nib International Bank S.C and United Bank S.C., with a capital of 165 million Br, and now has six member banks, including Awash International Bank S.C., United Bank S.C., Nib International Bank S.C., Berhan International Bank S.C., Addis International Bank S.C and the Cooperative Bank of Oromia S.C. It is the first certified Third Party Payment Processor by the regulatory party, National Bank of Ethiopia and starts its operations in July 2012. Moreover, PSS has made its system certified by VISA, Master Card and Union pay. Hence, members connected to PSS network can issue and acquire cards with these brands. Per the plan of PSS, there will be one ATM at every branch of the consortium banks, all domestic airports serviced by commercial service, shopping complexes and merchants. The agreement is the first significant cooperation between competing banks in Ethiopia, which others should be encouraged to follow as there is no single bank in Ethiopia that can afford to provide extensive geographical coverage and access (Ayana,2012).

2.5 Adoption of e- banking

Adoption is the acceptance and continued use of a product, service or idea. According to Rogers and Shoemaker (1971), consumers go through “a process of knowledge, persuasion, decision, implementation and confirmation” before they are ready to adopt a product or service. So the stages through which a technological innovation passes are:

1. Knowledge
2. Persuasion
3. Decision
4. Implementation
5. Confirmation

A potential adopter passes through certain stages before decision is made on whether to adopt or reject an innovation. Rogers has been one of the number of researchers who has focused upon

the adoption process, which he defines as the “the process through which an individual or other decision-maker unit passes from first knowledge of an innovation, to forming an attitude toward the innovation to a decision or rejection to implementation of the new idea, and to confirmation of this decision” (Frambach, 1993).

The innovation adoption process defined by Rogers is the process through which an individual or other decision making unit passes from knowledge of an innovation, to forming an attitude towards the innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision. There are five stages in innovation decision process. These are:

1. **Knowledge:** Socio-economic characteristics, Personality variables and communication behavior all relate to innovativeness. Innovativeness is the degree to which an individual or other adoption unit is relatively early in adopting new ideas compared to other members of a system (Rogers, 1995). According to Rogers early adopters have more formal education than later adopters and are more likely to be (socio-economic characteristics).

2. **Persuasion:** The potential adopter’s attitude towards the innovation is formed in this stage. By anticipating and predicting future use satisfaction and risk of adoption, the potential adopter develop positive or negative attitudes to the innovation, which play important role of modifying the final decision. Perceived attitudes of an innovation as its relative advantage, compatibility and complexity are especially important here (Rogers, 1995).

3. **Decision:** The decision stage occurs when an individual engages in activities that lead to adoption or rejection of the innovation. In this stage the adopter starts to actively seek out information about the innovation that assists the decision making.

4. **Implementation stage:** In this stage, mental information processing and decision making come to an end, but the behavioral change begins.

5. **Confirmation stage:** After the adoption of innovations, the adopter keeps evaluating the results of his / her decision. If the level of satisfaction is significant enough, the use of innovation will continue; however, it is also possible that the rejection occurs after adoption. In

the latter case, the reverse of previous decision is called “discontinuance”. The time frames for adopting an innovation can be compressed or fairly lengthy. For example, awareness of an innovation may precede the decision to adopt by months or years. So we can briefly define adoption: Adoption is the acceptance and continued use of a product, service or idea. According to Rogers and Shoemaker (1971), consumers go through “a process of knowledge, persuasion, decision and confirmation” before they are ready to adopt a product or service.

Many researchers have been used different 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 Factors for the adoption of technological innovation, i.e., technological factors, organizational and environmental factors. Technology Acceptance Model(TAM) (Davis, 1989), which posit 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 (Alsabbagh & Molla, 2004).

2.5.1 Technology- Organization- Environment 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 technological factor refers to adopter’s perception of E-banking attributes. Typical characteristics of technology considered in technology adoption studies are based on the

assumption of Rogers' diffusion of innovation (Rogers 2003), Which include relative advantages (perceived benefits), and relative disadvantages (perceived risks). While the organizational factor refers to the organization's characteristics that influence its ability to adopt and use of E-banking system. The environmental factor refers to the external environment in which an organization operates and its condition for supporting the development of E-banking services. For each context, various factors have been identified from the literature but only those that are considered relevant for E-banking adoption are included in the framework. Details of factors considered in this study are discussed below.

2.5.1.1 Technological Factors

Different researchers described technological factors differently Hart O. et al, (2012) for example explained that adoption depends on the pool of technologies both inside and outside the firm as well as the application's perceived relative advantage (gains), complexity (learning curve), compatibility (both technical and organizational), observability (visibility/imagination), trialability (pilot test/experimentation). Salwani (2009) also explained technology competence covering the existing technology infrastructure and skills that enables to utilize the technology. Tornatzky and Fleischer (1990) considered characteristics of technologies and availability while Kvin Z. et al. (2004) described technological context as both external and internal technologies relevant to a firm, which includes existing technologies inside the firm as well as in the market.

2.5.1.2 Organizational factors

Organizational factor captures firm's business scope, organizational culture, top management support, complexity of organizational structure measured in terms of centralization, vertical differentiation, and formalization, the quality of human resource, and size related issues such as specialization and internal slack resources (Jeyaraj A. Et al, 2006). Iacovou (1995) and Grover (1993) also argued that organizations influenced by a number of factors, like firm size, top management support and financial and human resources in their preference to adopt technological innovation. As per Kvin Z. et al. (2004) and Tornatzky and Fleisher (1990) it is defined in terms of several descriptive measures: firm size and scope; the formalization, centralization and complexity of its managerial structure; the quality of its human resources and the amount of internally available slack resources.

2.5.1.3 Environmental factors

Environmental factors mainly relates to different facilitating and inhibiting factors in areas of operations (Al-Qirim, 2006). The area in which a firm conduct its business in adopting technological innovations; its industry, competitors, access to resources supplied by other externals and dealings with government are claimed to be covered under environmental contexts (Kvin Z. et al. 2004).

2.5.1.4 Technology Acceptance Model (TAM)

According to Davis (1989) TAM assume two sets of beliefs, i.e. Perceived Ease of Use (PEoU) and Perceived Usefulness (PU) to look at individual's technology acceptance. TAM proposes perceived usefulness (PU) and perceived ease of use (PEOU) as fundamental determinants of technological adoption where an individual's intention to use an application is predicted and explained by once perception of the technological usefulness and its simplicity (Hart O. et al, 2012).

2.5.1.5 Demographic characteristics

Demography is the study of human population statistics, including age, sex, race, location, occupation, income, education, and other characteristics. Each of these characteristics influences the nature of consumer needs and wants; ability to buy products; the perceived importance of various attributes or choice criteria used to evaluate alternative brands; and attitudes towards and preference for different products (Loudon and DellaBitta, 1993).

Marketers often segment markets on the basis of demographic information because it is widely available and often relates to consumers buying and consuming behavior. Only with a clear understanding of major consumer characteristics can the implications of environmental and individual determinants of consumer behavior begin to be appreciated (Du Plessis and Rousseau, 1999). Age, education level, income and occupation are the most influential demographic variables affecting Internet usage. Typical internet banking users tend to be well educated, relatively young and are high income earners. It has been widely recognized that demographic factors have a great impact on consumer attitudes and behavior towards internet banking (Karjaluoto, 2002). The consumer demographic factors relevant to this study are therefore age, education level, income and occupation. These are discussed in the following sections.

Age

The goods and services people buy varies during the different stages of their lives. For example the kind of food that appeals to youths is unlikely to be the choice of adults. Furthermore people's taste in clothes, furniture and recreation are also age related (Kotler, 2000). People in different age groups often share distinctive values, meanings, and behaviors. Karjaluoto, et al. (2002) show that age has an impact on the use of internet banking. Therefore this study undertakes to determine whether age has an impact on consumer acceptance of internet banking.

Education level

Education level is defined as a means by which access to a particular occupation is granted (Kotler & Armstrong, 2000). According to Polatoglu and Ekin (2001) affluent and highly educated groups generally accept changes more readily, making them the most likely group of consumers to adopt electronic banking.

Income

Income has a major effect in the adoption of internet banking (Karjaluoto, 2002). Internet banking users had much higher incomes than non-users did.

Occupation

Marketers try to identify the occupational groups that have above-average interest in their products and services. A company can even specialize their products for certain occupational groups (Kotler, 2000). Demographic variables are often used as a basis to describe different types of consumers. Karjaluoto (2002) relates this to internet banking , occupation has an impact on the adoption of electronic banking.

2.6 Benefits of adopting e-banking system

It is essential for the banks to have the official bank website providing the possibility to do transactions so that banks can be qualified as providing the online banking services (Pikkarainen et al., 2004). According to Giglio (2002) and Robinson (2000) in delivering banking products the cheapest way can be done only through the Online Banking. According to Karjaluoto et al. (2002) with the help of online banking services, the branch networks of banks have reduced and also the staff for working in banks and customers are satisfied to use the online banking services as it will save a lot of time and effort to go to branch of bank and perform these transactions. So the main reason behind accepting the E-banking system is that the service is the time and cost saving and freedom from the place (Polatoglu and Ekin 2001).

Business organizations are trying to uncover the new technologies coming from the E-commerce applications which has a lower transaction cost resulted to eliminate association in distributing channels (Salman & Kashif, 2010).

The cost can be reduced to zero in some services like information and manufactured goods information. Transaction of low cost and easiness provides to adopt the new trend of technology to trade information among different groups and business parties. Information and

Communication technology adoption transformed business to go from local and global. However, it has been said that E-banking is vital in the banking sector of developing countries (Polatoglu & Ekin ,2001).

The online payment system is quite new in banking institutions and dispersion of these innovations can result in more competent online banking systems which resulted in lots of changes in the technologies of the banking sector.

Polatoglu and Ekin (2001) argued that early adopters and heavy users of E-banking services were more satisfied with the services compared to the other customer groups. According to Joseph and Stone (2003), the ability of delivering services via technology appears to be correlated with high satisfaction with services deemed most important to customers. Furthermore, Joseph & Stone (2003) emphasized that human and technology based delivery channels were greatly linked with the customers perceptions of how these bank services were delivered to them and pointed out that these perceptual outcomes would affect the level of bank customer satisfaction, retention, and switching. Before the shift of technology, customers were facing a lot of problems like handling a lot of money and transferring of that money, submission of utility bills and waiting in a long queue as there was no online transferring facility, and there was no information about new services offered by banks and mostly deposit holders were unaware of how to get benefits from bank products and services like bank loans, credit cards, ATM cards etc.

2.6.1 Benefits of e-banking for banks

It should be noted that e-banking can bring about various benefits for banks and their customers as well. It is obvious that cost savings, efficiency, gaining new segments of customers, improvement of the banks reputation and better customer services and satisfaction are primary benefits to banks (Jayawardhena & Foley, 2000). In addition, Jayawardhena & Foley (2000) noted that setting up a specialized E-banking infrastructure costs about US \$1 to \$2 million, which is much lower than setting up a banking branch. In addition, the authors conclude that costs for running a traditional bank account for 50% to 60% of its revenues.

Under the view of Robinson (2000), relevant costs for conducting a banking transaction via online are much lower than via a brick and mortar branch. Moreover, Sheshunoff (2000) contends that one of the most important factors influencing the adoption of E-banking by banks is the need to build up strong barriers to customer exiting. Under the view of the author, once customers become familiar with the utilization of full service E-banking, it is unlikely that they will change to another financial institution. Such an argument can be supported by the consumer behavior theory that switching costs are often very high in terms of time and efforts by consumers. Finally, the author emphasizes that the implementation of E-banking can bring about many competitive advantages for banks in today's highly competitive banking market.

A research on E-banking has been carried out in Denmark by Mol's (1998). The author argues that E-banking can play an important role in enhancing cross-selling and price differentiation. Banking can make favorable conditions for banks to provide customers numerous services 24 hours a day and 7 days a week. e-banking can improve customer satisfaction with the bank due to the fact that it makes customers less price sensitive, and improve their intention to repurchase, and more loyalty to the bank via providing more positive words of mouth about the bank than other bank customers.

2.6.2 Benefit of e-banking for Customers

It should be noted that E-banking is not only brings about benefits to banks but also to their customers. Thanks to the emergence of the Internet, banking transactions are no longer limited to time and geography. It is very easy for consumers throughout the world to access to their bank accounts 24 hours per day and seven days a week. Customers can enjoy a variety of services, especially services which are not provided by traditional bank branches (Pham, 2010). It is argued that one of the greatest benefits that e-banking brings about is that it is not expensive or even free for customers to utilize E-banking products/services.

However, some people believe that prices appear to be one factor that is impedimental to the diffusion of E-banking (Sathye, 1999). The price debates often revolve around geographical

differences and disparities between costs of Internet connections and telephone call pricing. It has also been believed that E-banks have been changing to respond to customers increasingly changing demands (Pham, 2010). There has been a tendency that customers don't want to travel to or from a bank branch to conduct some banking transactions. In other words, they want to utilize E-banking to save time and money. E-banking can bring about convenience and accessibility, which will have positive effects on customer satisfaction and loyalty (Pham, 2010).

It is totally possible for customers to manage their banking transactions whenever they want and to enjoy improved privacy in their interactions with the bank. In addition, customers can enjoy more benefits at lower cost levels by utilizing E-banking (Mol's, 1998). It is contended by Turban (2008), that E-banking is really beneficial to customers in terms of cost savings, no limit on time and space, quick response to customer complaints, and better services/products. Such benefits are believed to elevate customer satisfaction.

2.7 Empirical review of the study

Pikkarainen et al. (2004) studied on consumer acceptance of online banking: an extension of the technology acceptance model and found strong relationship between perceived ease of use and electronic banking adoption in their studies and they show positive relationship between perceived ease of use and adoption of e-banking . Pikkarainen et al. (2004) also found security and privacy to have relatively weak relationship with adoption in Finland.

Howcroft (2002) also identified concerns over risk and fears over the likelihood of errors as the most important discouraging factors for consumers' adoption of telephone and internet banking on his research of consumer attitude and the usage and adoption of home-based banking in the united kingdom.

Polatoglu & Ekin (2001) conducted a research on an empirical investigation of Turkish consumer acceptance of internet banking and mention reliability as the prime factor in their finding for the adoption of new technological innovations, reliability consists of security and privacy in Internet Banking transactions.

An empirical investigation conducted by Sathye (1999) on the adoption of Internet banking by Australian consumers also identified, information about electronic banking is a key factor in adoption of electronic banking and the use of electronic banking services is fairly new experience to many people, low awareness of electronic banking is a major factor in causing people not to adopt internet banking. Sathye (1999), found that consumers were unaware about the possibilities, advantages/disadvantages involved with internet banking.

Wondwossen and Tsegai (2005) studied on the challenges and opportunities of e-payments in Ethiopia; their objective was studying of e-payment practices in developing countries, Africa and Ethiopia. The authors found that, the main obstacles to the development of e-payments are lack of customers trust in the initiatives, Unavailability of payment laws and regulations particularly for e-payment, Lack of skilled manpower and frequent power disruption.

Gardachew (2010) conducted 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- payments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks. According to Gardachew (2010), Opportunities offered by ICT through e-learning programs and Commitment of the governments on development of ICT infrastructures is considered as drivers of using e-commerce and E-payment systems.

Ayana (2012) explored in his study on “Adoption of Electronic banking system in Ethiopian Banking industry: Barriers and Drivers” that E-banking system, such as ATM, mobile banking, internet banking and others were not well adopted by Ethiopian banking industry. This is due to low level of ICT infrastructure and lack of legal frame work at NBE, which can initiate banking industry to implement the system. In addition to the above two basic factors affecting adoption of E banking in Ethiopia, result of the study also shows that security risk and lack of trust on the use of technological adoption are other major barriers for the system. The level of security risk

associated with E-banking product or service, such as ATM, internet banking, mobile banking and others, pose different challenges to different banks. Improvements are required to ensure client confidence. Lack of competition among local and foreign banks is also another challenge for the adoption of E-banking in the country. Technical and managerial skills available in Ethiopian banks for the adoption of E-banking are also limited.

Yitabarek and Zeleke(2013) conducted research to analyze factors that influence customers' intention to adopt e-banking service channels in Bahir Dar city. The study used variables from Theory of Planned Behavior and Technology Acceptance Model. The findings revealed that attitude; subjective norm, perceived behavioral control, perceived usefulness and perceived ease of use and perceived risk were significant in affecting users' intention to use e-banking service channels.

2.8 Major Factors influencing customers to adopt e-banking service

This study examines factors that influence customers in their adoption of electronic banking based on empirical review. The following five factors discussed based on different research frameworks, reviews and objectives of the research: perceived ease of use, ICT infrastructure, perceived risk, security perception and information about e- banking.

2.8.1 Perceived ease of use

Perceived ease of use in this study is the extent to which the individual believes that using E banking services would be free of effort. The quality, effectiveness and success of a system can only be validated by the level which its users accept it through its ability to satisfy their needs (Pikkarainen et al., 2004). Prior studies have found positive relationship between perceived ease of use and adoption of e-banking (Amin et al., 2008; Pikkarainen et al., 2004; Poon, 2008). However, in consideration of technology advancement in E banking service, trainings for better know how of the service and existing manpower skill is necessary.

2.8.2 Perceived risk

Perceived risk in the field of e-banking can be defined as the potential for loss in the pursuit of a desired outcome of using e-banking services (Featherman & Pavlou, 2002). This study considers individuals' subjective feelings of certainty and degree of trust in the consequences of using E banking services. Several researchers have added perceived risk to the set of factors important to adoption (Aldas-Manzano et al., 2009; Chong et al., 2010; Howcroft et al., 2002; Poon, 2008; Sathye, 1999). Howcroft et al. (2002) have found security concerns to be the major factor discouraging the adoption of electronic banking services. Studies have also identified lack of trust as one of the main impediments to customers' usage of online financial application (Flavian et al., 2006).

2.8.3 ICT infrastructure

ICT infrastructure is a major factor that supports the adoption of e-banking system as the case for other initiatives. Without an adequate development and quality of ICT infrastructure, e-banking adoption and use cannot do well (Efendioghu 2004 & Scupola 2003).

2.8.4 Security perception

Security is one of the very important factors in determining the decision of consumers to use electronic banking. According to Polatoglu and Ekin, (2001), security comprises of three dimensions: reliability, safety, and privacy. Consumers' concerns about security, which arise from the use of an open public network, have been emphasized as being the most important factor inhibiting the adoption and use of internet banking (Sathye, 1999; Daniel, 1999; Hamlet and Strube, 2000; Tan and Teo, 2000; Cox and Dale, 2001, Polatoglu and Ekin, 2001, Black et al., 2002, Giglio, 2002; Howcroft et al.,).

2.8.5 Information about e- banking

The important factor that consumers consider before adopting is the amount of information they have about electronic banking. In this context, Sathye (1999) has identified it as a major factor impacting the adoption. According to Sathye (1999), while the use of electronic banking services is fairly new experience to many people, low awareness of electronic banking is a major factor in causing people not to adopt internet banking. Sathye (1999), found that consumers were unaware about the possibilities, advantages/disadvantages involved with internet banking. Guiltinanand Donnelly (1983) identify "information about the benefits of using a product/service" as an essential service/product promotion strategy.

Hence, for adoption of electronic banking, it is necessary that the banks offering this service make the consumers aware about the availability of such a product and explain how it adds value relative to other products of its own or that of the competitors. For example, marketing efforts, Radio and TV advertisements, Website, branches and other promotional tools suggests that marketing communications will have a positive effect on consumer adoption of online banking.

In order to achieve the research objective the conceptual framework will be explained by the dependent and independent variables of factors influencing the adoption of e- banking.

2.9 Conceptual Framework

In order to achieve the research objective the conceptual framework will be explained by the dependent and independent variable of factors influencing the adoption of e-banking.

2.9.1 Dependent variable

The dependent variable is the variable that is the effect or is the result or outcome of other (independent) variables (Neumann, 2007). In this study the dependent variable is the adoption of e- banking service by the customers of commercial banks.

2.9.2 Independent Variables

The independent variables are the cause variables or the one that identifies forces or conditions that acts on something else (Neumann, 2007). For this study the independent variables are Perceived ease of use, perceived risk, ICT infrastructure, security perception and information about e-banking.

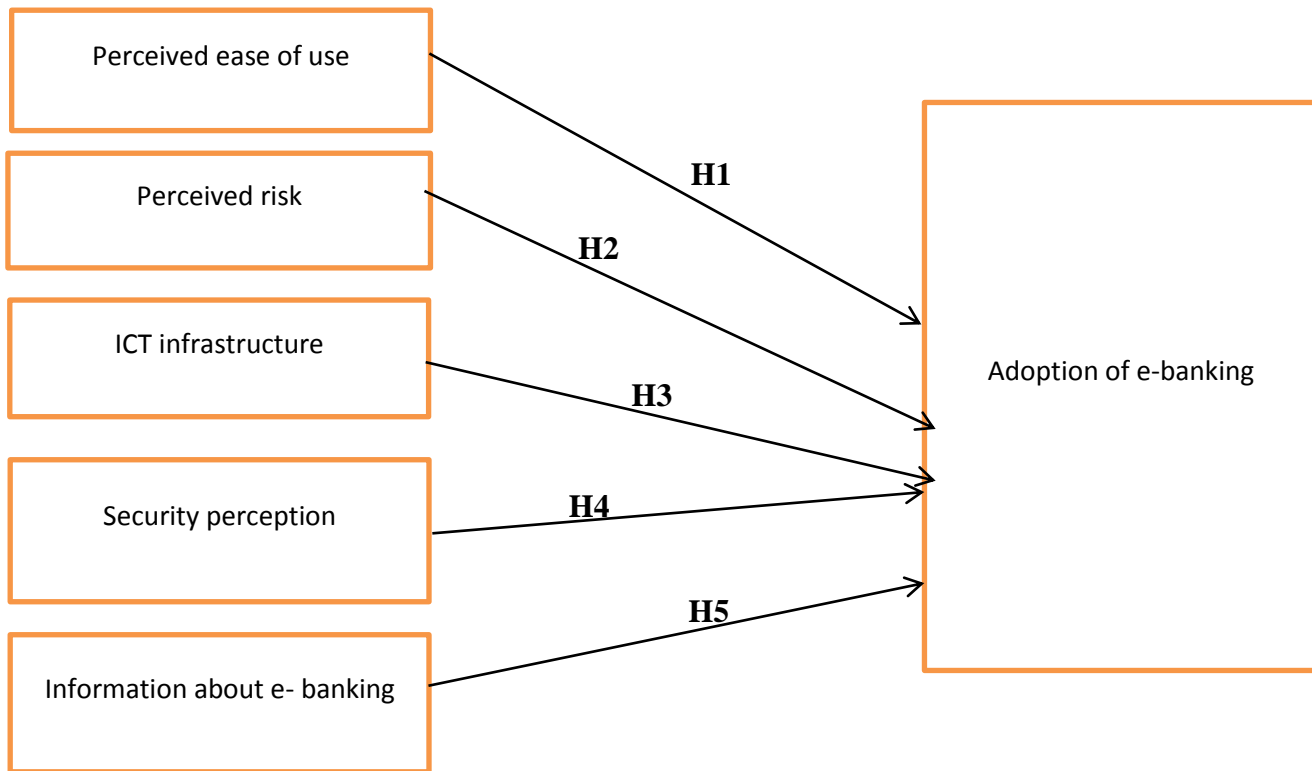


Figure 2.1 Conceptual Framework

Source: modified by the researcher

The model is:

$$\text{Adoption} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$$

Where; X1 = Perceived ease of use

X2= perceived risk

X3= ICT infrastructure

X4=Security perception

X5=Information about e-banking

2.10 Hypotheses development

Hypothesis is the tentative statement of fact that is yet to be verified by the research (Frank, 1979). The study proposes the following hypotheses based on the empirical review of the study.

H1: Perceived ease of use has a positive effect on customers' adoption of e- banking.

H2: Perceived risk has a negative effect on customers' adoption of e- banking.

H3: ICT Infrastructure has a positive effect on customers' adoption of e- banking.

H4: Security perception has a positive effect on customers' adoption of e- banking.

H5: Information about e-banking has a positive effect on customers' adoption of e- banking

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter a research methodology and data collection instruments are discussed in detail to be employed in the research process. It includes; Study Area the Research Approach, Research Design, Population and Sampling, Sources of Data, Method of Data Collection, Data Analysis Methods, Validity and Reliability, and Ethical issues are addressed.

3.2 Study area

The study was conducted in customers of two selected commercial Banks in Addis Ababa namely, Commercial bank of Ethiopia and Dashen bank. These banks are chosen because of relatively better provision of various e-banking facilities or products including ATM services, mobile banking, internet banking etc. In addition, proximity to where the researcher lives and, they ease of access to information are considered.

3.3 Research Approach

The researcher adopted quantitative research approach which involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion (Kotari, 2004). Among various sub categories of quantitative approach inferential approach is adopted. The purpose of inferential approach to research is to form a data base from which to infer characteristics or relationships of population. This usually means survey research where a sample of population is studied to determine its characteristics, and it is then inferred

that the population has the same characteristics (Kotari, 2004). Because of these reasons the researcher chooses quantitative research approach.

3.4 Research design

In this study the researcher used descriptive and explanatory designs. The descriptive is used to describe factors influencing the adoption of electronic banking in commercial banks in Addis Ababa. The explanatory design used to explain the relationship among the variables of the study. The researcher tried to explain the relationship between independent and dependent factors by using multiple regression analysis.

3.5 Population and sampling

Target population

In research methods, population is the entire aggregation of items from which samples can be drawn. The populations of this study consist of customers of purposely selected banks based on relatively better application of electronic banking than other commercial banks.

Sampling method

For this study convenience sampling will be used due to the practical difficulties in obtaining the sampling frame and since it enable the researcher to collect data more effectively and quickly. Convenience sampling involves selecting haphazardly those cases that are easiest to obtain for your sample (Saunders et. al., 2009). It involves selecting participants from the part of the population which is close to hand.

Sample size

The sample size determination was based on the unknown population formula.

According to Kotari (2004) on a sample size when estimating a percentage or proportion the precision and the confidence level shall have to be specified and then work out the sample size.

$$n = \frac{z^2 p \cdot q}{e^2}$$

Where p= sample proportion, q=1-p p=0.5 and q=(1-0.5)=0.5

Z=the value of the standard variate at given confidence level and to be worked out from table showing area under Normal Curve; in this case it is 1.96 under 95 % confidence level ;

n= size of sample

e= desired level of precision;

$$n = \frac{z^2 p \cdot q}{e^2}$$

$$n = \frac{(1.96)^2 0.5(0.5)}{(0.05)^2} = 384$$

3.6 Method of data collection

In this study, survey is used as data collection method. The questioners were translated into Amharic in order to be understood better by customers. The researcher with the collaboration of friends distributed questionnaires to the selected bank customers physically in order to collect data.

3.7 Source of Data

There are two types of data which is usually used in researches, primary and secondary data. Primary data does not actually exist until and unless it is generated through the research process as part of the consultancy or dissertation or project. It will often be collected through techniques such as experimentation, interviewing, observation and surveys. On the other hand Secondary data is information which already exists in some form or other but which was not primarily collected, at least initially, for the purpose of the consultancy exercise at hand. In fact, secondary data is often the start point for data collection in as much as it is the first type of data to be collected (Creswell, 2009).

This study used primary and secondary source of data. In order to collect the primary data the researcher distributed structured questionnaires to relevant participants. In order to strength the result and findings of the study the researcher examined different articles, academic journals, useful academic books and banks' reports as secondary data.

3.8 Data analysis method

The data collected from respondents through a questionnaire is analyzed through descriptive and inferential statistics. The descriptive statistical analysis describes respondents' background as well as factors that influence customers' adoption of e-banking. Regression and correlation analysis are used in order to statistically analyze the relationship of factors that described as independent and dependent variables. To do such kinds of analysis the researcher used software called Statistical Package for Social Science (SPSS) version 20.

3.9 Validity and reliability

Validity determines whether the measuring instrument truly measures what it was intended to measure or how truthful the research results are. To assure validity, questionnaires were designed on the basis of previous studies' questionnaires' and review of related literatures.

Reliability is measures of internal consistency that concerned with items' responses consistent across constructs and indicates scores are stable over time when the instrument is administered (Creswell, 2009). In order to measure the reliability of the instrument the researcher used a 0.70 Cronbach's coefficient alpha to measure the consistency of the instrument. The result of this test is presented in chapter four.

3.10 Ethical considerations

In doing the research the researcher upheld and respected the participants' right to privacy, anonymity, fair treatment and protection from discomfort and harm (Neuman, 2003). Ethics is the code of moral principles and values that governs the behavior of an individual or group with respect to what is right or wrong (Bartton and Gold, 2000).

In this research, ethical issues have got especial consideration. The researcher discussed the purpose of the research clearly to the participants during data gathering stage of the research. As a matter of confidentiality, the participants were not required to write or tell their names. Furthermore, the participants were assured that their responses for the questionnaire as well as the interview are used for the intended purpose only and wiped out their responses as no more required after completing the research.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the results of the study based on the empirical analysis of the data collected from the research respondents and discussion of results. Statistical Package for the Social Sciences (SPSS) software is used to analyze the research findings. In this chapter, both descriptive and inferences on the data analysis and procedures are presented. It started with a description of the demographic and general characteristics of the participating respondents. The results of Cronbach's coefficient alpha for reliability were examined, Correlation analyses for the research variables were discussed and the result of hypothesis tested through regression analysis.

4.2 Data screening and data cleaning

Data screening is the process of inspecting data for errors and correcting them prior to doing data analysis and data cleaning is the process of detecting and correcting (or removing) corrupt or inaccurate records from a record set, table, or data base and refers to identifying incomplete, incorrect, inaccurate or irrelevant parts of the data and then replacing ,modifying, or deleting the dirty or coarse data(Wu,2013). As a result a total of 384 questionnaires were distributed to the customers of the commercial bank of Ethiopia and Dashen bank proportionally in order to collect data. Out of the total, 319 questionnaires were returned, yielding 83 % response rate. However, some of the questionnaires returned were discarded for not being completed properly. For this reason, the number of questionnaires used for data analysis, were 311, which represent 81 percent response rate.

4.3 Reliability Test

The Reliability Statistics show that the scale exhibits a high degree of reliability. A Cronbach's Alpha coefficient of 0.70 is a commonly suggested threshold of reliability test. According to George & Mallery (2003), the value of alpha should be greater than 0.7 in order to accept the instrument. The researcher pre tested the questionnaires and found the following reliability test result.

Case Processing Summary: Ease of use

		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

- a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.818	5

Case Processing Summary: Perceived risk

		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

- a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.731	5

**Case Processing Summary:
Infrastructure**

	N	%
Valid	30	100.0
Cases Excluded ^a	0	.0
Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.857	5

**Case Processing Summary:
Security perception**

	N	%
Valid	30	100.0
Cases Excluded ^a	0	.0
Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.822	4

**Case Processing Summary:
Information about e-banking**

	N	%
Valid	30	100.0
Cases Excluded ^a	0	.0
Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.963	5

**Case Processing Summary:
Adoption of e-banking**

	N	%
Valid	30	100.0
Cases Excluded ^a	0	.0
Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.852	7

Case processing Summary: Over all

	N	%
Valid	30	100.0
Cases Excluded ^a	0	.0
Total	30	100.0

- a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.825	31

Table 4.1 Cronbach's Alpha coefficients (Reliability test)

Variable	Cronbach's Alpha	No of Item
Ease of use	0.818	5
Perceived risk	0.731	5
Infrastructure	0.857	5
Security perception	0.822	4
Information	0.963	5
Adoption	0.852	7
Over all reliability	0.825	31

Source: own survey (2017)

Therefore, the scales used in this study demonstrate high reliability as well as it indicates the acceptability of the scale for further analysis.

4.4 Characteristics of Demographic Profile of Respondents

The demographic profile of the respondents is shown in Table 4.2. The respondents were classified according to their age group, gender, educational level ,occupation and monthly income.

Table 4.2 Demographic profile of respondents

Variable	Classification Of variable	Frequency	Percent	Valid percent	Cumulative Percent
Gender of respondents	Male	162	52.1	52.1	52.1
	Female	149	47.9	47.9	100.0
	Total	311	100.0	100.0	
Age of respondents	20-30	83	26.7	26.7	26.7
	31-40	109	35.0	35.0	61.7
	41-50	92	29.6	29.6	91.3
	51-60	21	6.8	6.8	98.1
	Above 60	6	1.9	1.9	100.0
	Total	311	100.0	100.0	
Educational level	Primary school	10	3.2	3.2	3.2
	Secondary school	27	8.7	8.7	11.9
	Diploma holder	65	20.9	20.9	32.8
	Masters degree	177	56.9	56.9	89.7
	Above masters	4	1.3	1.3	100.0
	Total	311	100.0	100.0	
Occupation of respondents	Gov. employee	130	41.8	41.8	41.8
	Private employee	112	36.0	36.0	77.8
	Private business	42	13.5	13.5	91.3
	Student	9	2.9	2.9	94.2
	Other	18	5.8	5.8	100.0
	Total	311	100.0	100.0	
Monthly Income of respondents	Less than 2000	13	4.2	4.2	4.2
	2001-3000	27	8.7	8.8	13
	3001-4000	50	16.1	16.2	29.2
	4001-5000	62	19.9	20.1	49.4
	Above 5000	156	50.2	50.6	100.0
	Total	308	99		
	No response	3	1.0		
	Total	311	100.0		

Source: own survey(2017)

As is shown in the above table 4.2, 162 of the respondents were male which represent 52.1% of the total respondents, while the 149 were females which are 47.9% of the total respondents.

Considering the age groups of the respondents, the higher number of respondents was in the range of 31-40 years, which represent 35%, followed by age groups 41-50 years which represent 29.6% and 20-30 which represent 26.7% .The respondents which are in the age of 51-60 and above 60 are low which represent 6.8% and 1.9% respectively.

Out of the total participants, 177 of the respondents have bachelor Degrees, 65 have Diploma, 28 have Master's degree and 4 of the respondents have degrees above masters. The participants lower than Diploma levels were 37 out of which 10 have attended only primary school.

In terms of occupation of the participants, the higher numbers of the respondents were government employees who represented 41.8% of the total response.

When we see the income level of the respondents, majority of the target study were with the income level above 5,000 ETB per month followed by respondents with the income level between 4001-5000 ETB per month. It suggests that banks have to promote e-banking to increase potential customers of the service as there are many able and potential customers that can afford to use e-banking services.

4.5 Descriptive Analysis

As shown below in table 4.3, 54% of the respondents were from Commercial bank of Ethiopia and 46% were from Dashen bank. 49.5% of the respondents are user of electronic banking and the rests 50.5% of the respondents are non-users of electronic banking. From user of electronic banking 80.6% of respondents use ATM machine, 1.3% of respondents use POS machine and, 15.5% of respondents use Mobile banking and 2.6% of respondents use Internet banking.

Table 4.3 Descriptive result of respondents

Questioners	Category	Frequency	Valid percent
In which bank do you have an account	CBE	168	54%
	Dashen bank	143	46%
Do you use e-banking?	Yes	154	49.5%
	No	157	50.5%
Which type of electronic banking service do you use more?	ATM	125	80.6
	POS	2	1.3%
	Mobile banking	24	15.5%
	Internet banking	4	2.6%

4.6 Correlation Analysis

A correlation is a measure of how strongly two variables relate to each other. Correlation coefficients are frequently used to describe data because they are relatively easy to use and provide a great deal of information in just a single value (Mooi & Sarstedt, 2011).

Karl Pearson's coefficient of correlation or simple correlation is the most widely used Method of measuring the degree of relationship between two variables (Kotari, 2004). The calculated value of the correlation coefficient ranges from -1 to 1, where -1 indicates a perfect negative relation (the relationship is perfectly linear) and 1 indicates a perfectly positive relationship. A correlation coefficient of 0 indicates that there is no correlation (Mooi & Sarstedt, 2011).

Table 4.4 Pearson Correlation

		Correlations					
		Adoption	easeofuse	prcievedrisk	infrastructure	security	information
Adoption	Pearson Correlation	1	.605**	-.234**	.355**	.504**	.391**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	337	337	337	337	337	337
easeofuse	Pearson Correlation	.605**	1	-.314**	.328**	.592**	.366**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	337	337	337	337	337	337
prcievedrisk	Pearson Correlation	-.234**	-.314**	1	.266**	-.274**	-.080
	Sig. (2-tailed)	.000	.000		.000	.000	.141
	N	337	337	337	337	337	337
infrastructure	Pearson Correlation	.355**	.328**	.266**	1	.294**	.287**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	337	337	337	337	337	337
security	Pearson Correlation	.504**	.592**	-.274**	.294**	1	.398**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	337	337	337	337	337	337
information	Pearson Correlation	.391**	.366**	-.080	.287**	.398**	1
	Sig. (2-tailed)	.000	.000	.141	.000	.000	
	N	337	337	337	337	337	337

** . Correlation is significant at the 0.01 level (2-tailed).

4.6.1 Relationship between Ease of use and Adoption of e-banking

The relationship between the two variables has moderate relationship at $r=.605^{**}$. The above Pearson correlation shows that ease of use has significant impact on adoption of e-banking. This implies ease of use has positive correlation with adoption of e-banking.

4.6.2 Relationship between perceived risk and Adoption of e-banking

As shown in Table 4.4 there is a significant relationship between perceived risk and adoption of e-banking. Further because $r=-.234^{**}$ they are correlated negatively. This implies the two variables influence each other negatively.

4.6.3 Relationship between ICT infrastructure and Adoption of e-banking

According to table 4.4 the correlation result of the independent and dependent variable is $r=.355^{**}$ which implies that there is moderate relationship between infrastructure and adoption of e-banking.

4.6.4 Relationship between Security perception and Adoption of e-banking

The correlation result for Security as independent variable and adoption of e-banking as dependent variable is $.504^{**}$, this implies the two variables are also positively related.

4.6.5 Relationship between information about e-banking and Adoption of e-banking

The above table (table 4.4) determines Information about e-banking and adoption of e-banking are significant positively correlated with $r=.391^{**}$.

From the above results it can be concluded that the independent variables and dependent variables are significantly correlated.

4.7 Assumptions of Regression Analysis

There are some assumptions that are required to provide valid results in regression analysis.

4.7.1 Sufficient Number of Observation

If you want to test the overall relationships between the independent and dependent variable, there is a rule of thumb that the number of observations is at least $50 + 8k$ (where k are the number of independent variables) (Mooi & Sarstedt, 2011). In this case the minimum number of observation required to perform regression analysis is $50 + 8 \cdot 5 = 90$. So, 311 observations are beyond the requirement.

4.7.2 Testing Multicollinearity

collinearity is relatively easy to detect by calculating the tolerance or VIF (Variance Inflation Factor). A tolerance of below 0.10 indicates that (multi) collinearity is a problem. The VIF is just the reciprocal value of the tolerance. Thus, VIF values above ten indicate collinearity issues (Mooi and Sarstedt, 2011). As shown below on table 4.5 none of the variables tolerance level is below 0.10 and their VIF above ten. So, there is no a multicollinearity problem with the variables.

Table 4.5 Collinearity Statistics

Coefficients^a

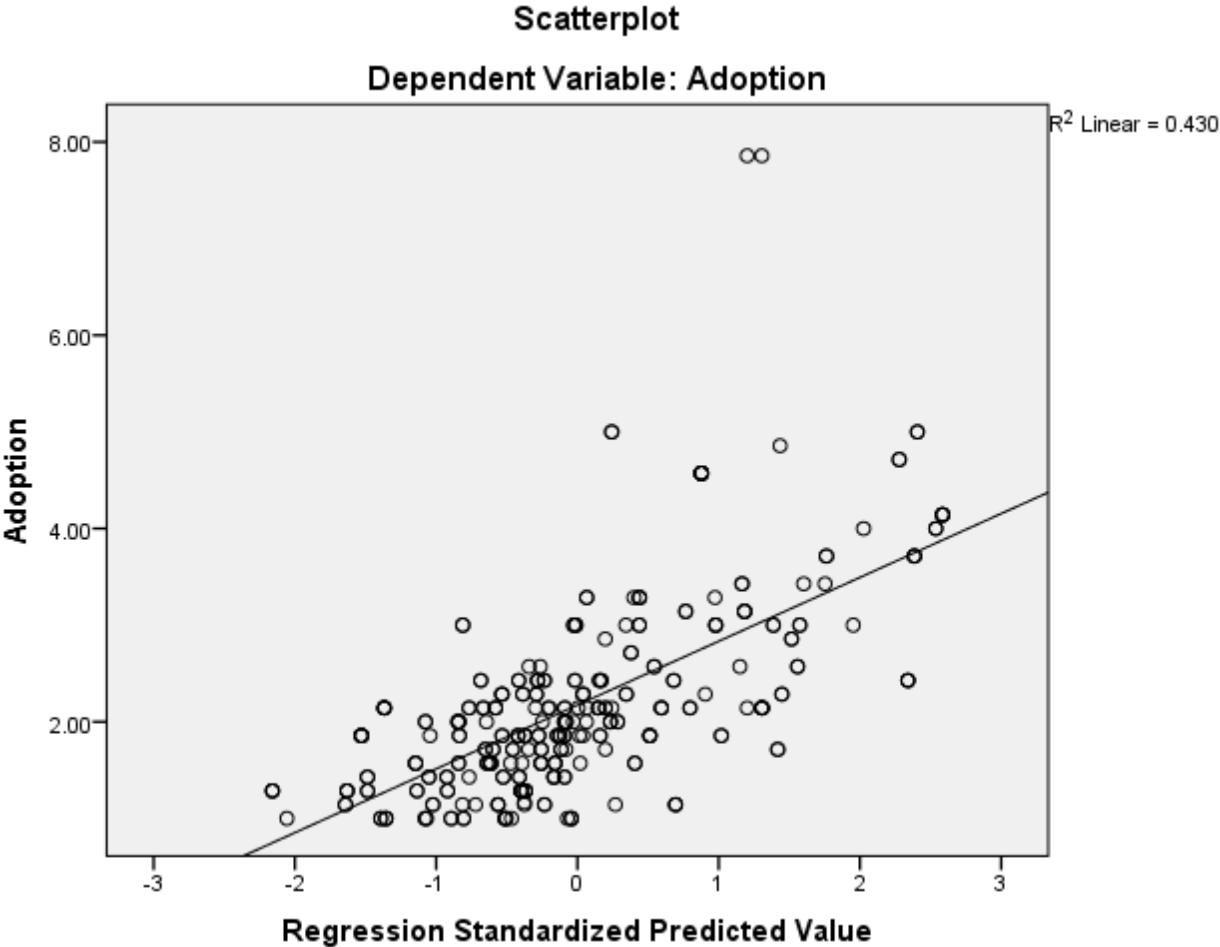
Model	Collinearity Statistics		
	Tolerance	VIF	
1	Easeofuse	.557	1.796
	percivedrisk	.731	1.369
	Infrastructure	.715	1.400
	securityperception	.592	1.689
	Information	.798	1.253

a. Dependent Variable: Adoption

4.7.3 Checking for Linearity

The regression model can be expressed in a linear way. Checking the linearity between y and x variables can be done by plotting the independent variables against the dependent variable (Mooi & Sarstedt, 2011). As figure 4.1 below shows the relationship of independent variables with the two dependent variables are linear.

Figure 4.1 Scatterplot for Adoption of e-banking

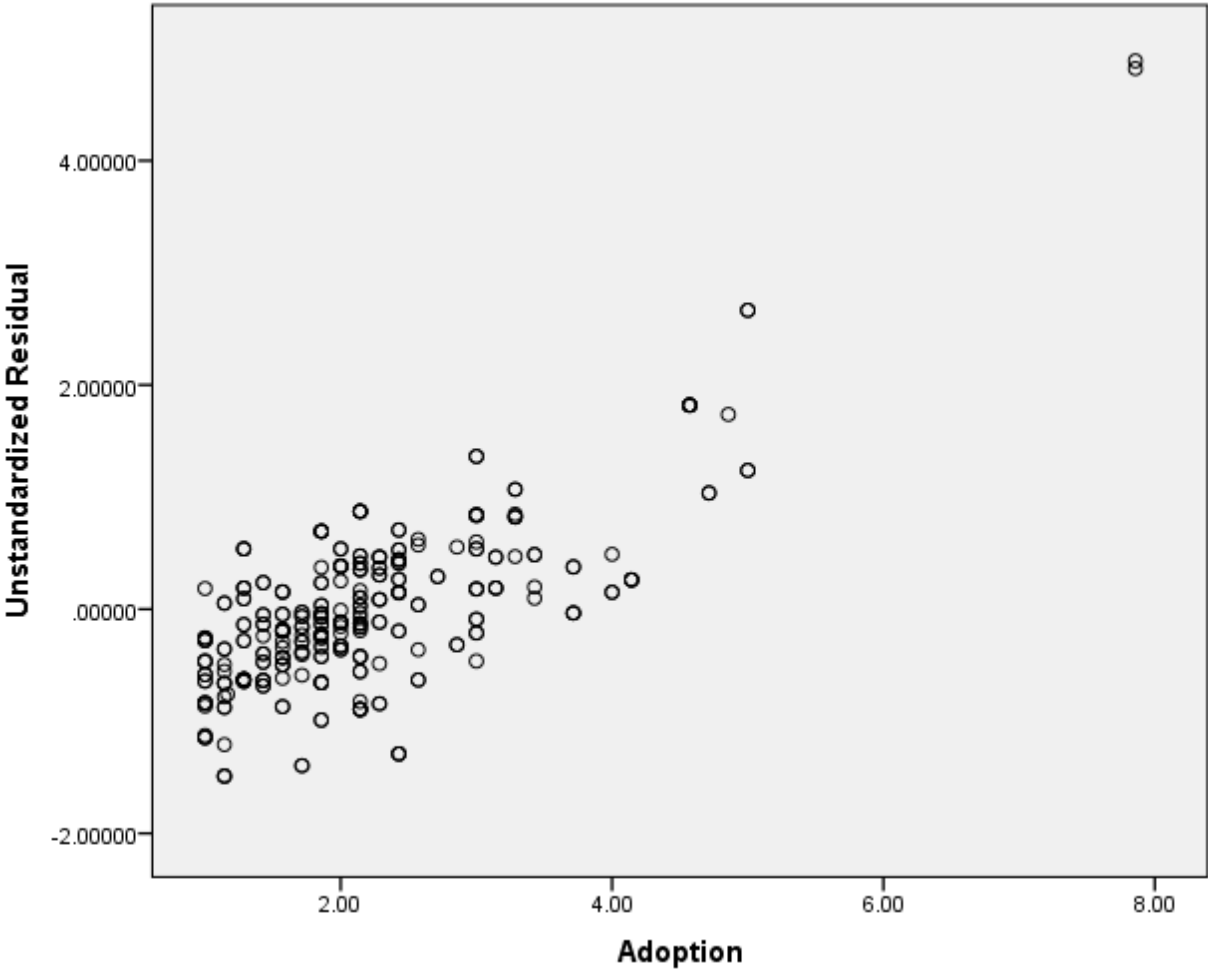


4.7.4 Homoscedasticity

It refers the variance of the errors which should be constant. To test for this, we plot the errors against the dependent variable (Mooi & Sarstedt, 2011).

For the dependent variable the plot in Figure 4.2 indicates the responses seem concentrated in a specific area with some outliers. This show the errors are constant throughout the observations

Figure 4.2 Scatterplot for Homoscedasticity Test (Adoption)



4.8 Regression Analysis

Regression analysis is one of the most frequently used tools in market research. In its simplest form, regression analysis allows market researchers to analyze relationships between one independent and one dependent variable. In marketing applications, the dependent variable is usually the outcome we care about, while the independent variables are the instruments we have to achieve those outcomes with. It can also help make predictions (Mooi and Sarstedt, 2011).

The following tables are excerpted from SPSS in order to perform a regression analysis between independent variables (perceived ease of use, perceived risk, ICT infrastructure, security perception and information about e-banking) and dependent variable adoption of e-banking.

Table 4.6 Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Information, perceived risk, Infrastructure, security perception, Ease of use ^b	.	Enter

a. Dependent Variable: Adoption

b. All requested variables entered.

Source: own survey(2017)

Table 4.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656 ^a	.430	.421	.76606

a. Predictors: (Constant), Information, perceivedrisk, Infrastructure, securityperception, Easeofuse

The model for this regression is: **Adoption = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + e**
From the model summary result we can see that independent variable explain the dependent variable with a percentage of 43.

ANOVA table provides similar information with the model summary table .Depending on the ANOVA table, overall significance/acceptability of the model from a statistical perspective can be determined. As the significance value of F statistics shows a value (.000), which is less than $p < 0.05$ the model is significant. The interpretation of the sum of square column of the table is similar with the results of R square. It display information about how much of the variation in adoption of e- banking is accounted by the predictor variables and how much is not. ANOVA test was also conducted as shown below.

Table 4.8 ANOVA for Adoption of e-banking

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	135.138	5	27.028	46.056	.000 ^b
	Residual	178.988	305	.587		
	Total	314.126	310			

a. Dependent Variable: Adoption

b. Predictors: (Constant), Information, perceivedrisk, Infrastructure, securityperception, Easeofuse
source: own survey(2017)

The table below shows the constant, beta, and significance level of each variable. It indicates that all variables have effects on adoption of e- banking significantly. As the constant and B values are known the model will be:

$$\text{Adoption} = 0.108 + 0.436X1 + -0.142X2 + 0.260X3 + 0.137X4 + 0.163X5 + 0.05$$

Table 4.9 Multiple Regression for adoption of e- banking

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.108	.264		.411	.681
	Easeofuse	.436	.066	.382	6.597	.000
	Perceivedrisk	-.142	.061	-.118	-2.338	.020
	Infrastructure	.260	.078	.171	3.344	.001
	Securityperception	.137	.060	.129	2.300	.022
	Information	.163	.059	.133	2.759	.006

a. dependent Variable: Adoption

Source: own survey (2017)

4.9 Hypotheses Testing

In this section the suggested hypothesis are tested and the result is presented. The hypotheses were:

H1: Perceived ease of use has a positive effect on customers' adoption of e- banking.

H2: Perceived risk has a negative effect on customers' adoption of e- banking.

H3: ICT Infrastructure has a positive effect on customers' adoption of e- banking.

H4: security perception has a positive effect on customers' adoption of e- banking.

H5: Information about e-banking has a positive effect on customers' adoption of e- banking.

H1: PERCEIVED EASE OF USE HAS A POSITIVE EFFECT ON CUSTOMERS' ADOPTION OF E- BANKING

The output of the regression analysis of ease of use with adoption of e-banking shows that ease of use has a positive significant effect on adoption of e-banking with a sig. value of 0.000. When there is a single unit change in ease of use adoption of e-banking will be affected by 0.436. This result supports the first hypothesis.

H2: PERCEIVED RISK HAS A NEGATIVE EFFECT ON CUSTOMERS' ADOPTION OF E-BANKING

The result of regression analysis shows that perceived risk has a significant negative effect on adoption of e-banking (sig.020). When perceived risk is increases by a single unit adoption of e-banking will be decrease by 0.142 (with the negative beta value of -0.142) and vice versa thus, the second hypothesis is supported with this result.

H3: ICT INFRASTRUCTURE HAS A POSITIVE EFFECT ON CUSTOMERS' ADOPTION OF E-BANKING

ICT infrastructure has a significant positive effect on adoption of e-banking (sig.001). When ICT infrastructure is changed by a single unit adoption of e-banking will be affected by 0.260 this result supports the hypothesis.

H4: SECURITY PERCEPTION HAS A POSITIVE EFFECT ON CUSTOMERS' ADOPTION OF E-BANKING

The output of the regression analysis shows that security perception has a significant positive effect on adoption of e-banking with a sig. value of 0.022. A single unit change in security perception will affect adoption of e- banking by 0.137. Thus, the fourth hypothesis is supported.

H5: INFORMATION ABOUT E-BANKING HAS A POSITIVE EFFECT ON CUSTOMERS' ADOPTION OF E-BANKING

For the last independent variable the result of regression analysis shows that information about e-banking has a significant positive effect on adoption of e- banking (sig.0.006). When information about e-banking is changed by a single unit adoption of e-banking will be affected by 0.163. Thus the fifth hypothesis is supported with this result.

4.10. Summary of Hypotheses Test

The following table shows hypothesis of the study, method used to test proposed hypothesis and its outcome.

Table 4.10 Summary of Hypothesis Test

Hypotheses	Description	Analysis Method	Remark
Hypothesis 1	Perceived ease of use has a positive effect on customers' adoption of e-banking.	Regression	Supported
Hypothesis 2	Perceived risk has a negative effect on customers' adoption of e-banking.	Regression	Supported
Hypothesis 3	ICT Infrastructure has a positive effect on customers' adoption of e-banking.	Regression	Supported
Hypothesis 4	Security perception has a positive effect on customers' adoption of e-banking.	Regression	Supported
Hypothesis 5	Information about e-banking has a positive effect on customers' adoption of e-banking.	Regression	Supported

Source: own survey (2017)

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents major findings, conclusions and recommendations obtained from the analysis and interpretations made in chapter 4. It also presents limitations and implications for further research.

5.2 Summary of Findings

The descriptive part of the analysis shows that less than half of the respondents are non-user of e-banking. Among the users of e-banking services 80.6% of the respondents use only ATM machine. The rest of the services such as, mobile banking, internet banking and POS machine are at a very infant stage and are not yet sufficiently adopted by the customers. The major reasons of respondents for their individual selection of ATM machine much more than other services is related to being easy to use and the fact that it doesn't require, both network connection and availability of internet.

Through correlation and regression analysis, the following five major factors were identified for having significant effect on the customers' adoption of e-banking.

- Perceived ease of use has positive and significant effect on adoption of e-banking services. The result of this finding is in line with previous studies, Amin et al. (2008) Pikkarainen et al. (2004), Poon (2008), Yitbarek et al. (2013).

- Perceived risk has negative and significant effect on adoption of e-banking service. The outcome of this finding reinforces the previous studies, Howcroft et al. (2002) Featherman & Pavlou (2002), Yitbarek et al. (2013), Ayana (2012).
- ICT infrastructure has positive and significant effect on adoption of e- banking service. The effect of this finding strengthens previous studies, Efendioghu (2004) & Scupola (2003).
- Security perception has positive and significant effect on adoption of e- banking service. The result of this finding supports previous studies, Tan and Teo (2000), Polatoglu and Ekin, (2001), Sathye(1999), Daniel(1999) Hamlet and Strube (2000).
- Information about e- banking has positive and significant effect on adoption of e-banking service. The outcome of this finding in line with previous studies, Sathye (1999).

Regression analysis was used to test the hypothesis and all the independent variables (perceived ease of use, perceived risk, ICT infrastructure, security perception and information about e-banking) have all effect on the dependent variable (adoption of e-banking).

5.3 conclusions

The objective of this study was to investigate factors influencing adoption of e-banking by customers in Addis Ababa. The results showed that all the factors considered (perceived ease of use, perceived risk, ICT infrastructure, security perception and information about e-banking) have significant effect on adoption of e-banking. Based on the statistical analysis and the results of the study, a number of conclusions can be drawn.

- The first result of the study revealed that perceived ease of use has a positive and significant effect on adoption of electronic banking services. This means there is higher chance of using e-banking when customers perceived that the services are easy to use.

- The second result shows that perceived risk has negative and significant effect on the adoption of electronic banking services. This means when customers assume that there is high risk, they refrain from using electronic banking services.
- The third result indicates that ICT infrastructure has positive and significant effect on the adoption of electronic banking. This suggests that if the ICT infrastructure is in place and efficient in implementation, customers will enhance the use of the services.
- The fourth result of the study show that security perception has a positive and significant effect on the adoption of electronic banking services. Therefore providing security guarantee and working towards building customers confidence is a crucial step to enhance the service.
- The fifth result of the study determines that having information about e- banking has a positive and significant effect on adoption of electronic banking services. This implies that having enough information and updated skills how to use the service by customers is essential in order to achieve a higher rate of adoptions of electronic banking services.

5.4 Recommendations

Based on the findings, the researcher makes the following recommendations:

- Since perceived risk has influence on customer adoption of electronic banking services, banks need to come up with risk reducing strategies that could minimize the customers' concerns about the use of e- banking services depending on the type of various products. These can be done not by mere assurance of banks but by formulating security policies and guidelines in order to enhance customers' confidence of using e- banking services.
- Banks should make electronic banking services more efficient and reliable. This means they should focus on the full functionality of the systems in order to meet various e-banking needs of users. They could supplement this by increasing the

customers' awareness of at least the obvious benefits of using electronic banking services through the use of media outlets and other options.

- Banks should focus on better website designs to make it more user-friendly since customers should enjoy and perceive the ease of use through training the users how to comfortably use electronic banking services.
- The electronic banking services are usually promoted and can be obtained by customers when they arrive in the banks. Since both customers and banks benefit from these services, banks should not wait until the customers come to them. The banks rather should implement the outreach programs to deliver the service to customers where they are. This means going to different institutions where they can find group of potential customers and promoting the service is strongly recommended to be done more frequently.
- Government should also improve ICT infrastructure because electronic banking services cannot be used unless there is efficient and reliable network and internet connection.
- Finally the researcher strongly believes that if the above listed recommendations are implemented, the adoption of e- banking services will experience a great leap forward.

5.5 Further Research Implications

- This research identified five factors that may influence customers' adoption of electronic banking. However, there might be more factors that can influence the adoption of electronic banking services in Ethiopia depending on indigenous contextual frame works. So additional empirical research is required to identify and examine other factors that can impact on customers' adoption of electronic banking services.

- This research is focused on factors influencing adoption of e-banking from customers' point of views. It is however imperative that e-banking will be sustainably adopted only if it remains profitable to the service providing financial institutions and serves the customer needs. Therefore more research works are suggested to analyze the contribution of e-banking services towards the profit of banks and its contribution to the larger economic transactions.

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Appendices

Addis Ababa University School of Commerce

Department of Marketing Management

Questionnaire on factors influencing adoption of e-banking

Dear Respondents,

This questionnaire is designed to gather information about factors influencing the adoption of e-banking service. All responses will be used to conduct a study for the partial fulfillment of Master of Art in Marketing Management. I would like to assure you that you will be guaranteed confidentiality as I do not ask your name here and your responses will be used only for the intended purpose. Besides, this survey should only take about 10 minutes of your time. I am grateful for your cooperation in advance!

Meseret kiflu

MA in Marketing management

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Section I: Demographic profile of respondents

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

1. Gender: Male Female
2. Age: 20-30 31-40 41-50 51-60 above 60
3. Educational level: Primary school Secondary school
Diploma holder First degree holder
Master's degree Above Masters
- 4 Occupation: Government Employee Private Employee
Private Business Student Other please specify _____
4. Monthly income (in Eth. Birr): Less than 2000 2001-3000
3000-4000 4000-5000 Above 5000

Section II: Questionnaires related with factors influencing adoption of Electronic banking

2.1. Basic questions

Please indicate the following by ticking ($\sqrt{\quad}$) on the spaces in front of the response options:

1. In which bank do you have an account?

Commercial bank of Ethiopia

Dashen bank

2. Do you use E- banking?

Yes

No

If yes, please answer question number 3 and 4.

3. Which type of electronic banking services do you use more?

ATM

POS

Mobile banking

Internet banking

4. Why do you prefer to use the service (s) you mentioned above?

It is easy to use

It is more secure

Doesn't require network connection

low risk

Other please specify _____

5. If your answer for question No 2 is no, what is your reason for not using the available e-banking services?

I do not know how to use it

I do not have internet access

Electronic banking is not safe

There is a problem in network connection

I have not heard about electronic banking

Other please specify _____

2.2 Questionnaires related to factors influencing adoption of electronic banking.

The following are questionnaires related to factors influencing the adoption of electronic banking. Please indicate whether you agree or disagree with each of the statements by ticking (√) on the spaces that specify your choice from the options that range from "strongly agree" to "strongly disagree". Each choice is identified by numbers ranging from 1 to 5.

Note: SA- Strongly Agree = 5, A- Agree = 4, N- Neutral = 3, DA- Disagree = 2, SD- Strongly Disagree = 1

No	Perceived ease of use	SA (1)	A (2)	N (3)	D (4)	SD (5)
1	E -banking system makes it easier to do banking activities					
2	It is easy to use ATM machine to accomplish banking tasks					
3	Using mobile banking is easy to do banking activities from any where					
4	The website of the bank is easy to understand by customers using the internet banking.					
5	Using POS machine is easy to make various payments					
No	Perceived risk	SA (1)	A (2)	N (3)	D (4)	SD (5)
6	Security risk affects the decision of using e-banking system.					
7	Using Internet banking is not safe because of difficulty of network connection.					
8	In mobile banking system, there is risk to transfer money.					
9	Using ATM machine has no guarantee for financial loss.					
10	There may exist exposing personal information in using of POS machine					
No	ICT infrastructure	SA (1)	A (2)	N (3)	D (4)	SD (5)
11	e-banking services are not easily available by the banks					
12	ATM machine always perform properly for 24 hours.					
13	Using internet banking is difficult due to low internet access in Ethiopia					
14	Mobile banking services may not perform well because of network problems					
15	Banks provide necessary orientation /training on how to use POS machine provided to customers					

No	Security perception	SA (1)	A (2)	N (3)	D (4)	SD (5)
16	Personal and transaction information are secure while using e-banking services					
17	The website of the bank restricts an authorized access while using internet banking					
18	E- Banking service protects customer's private data					
19	ATM machine has rigorous security control					
No	Information about e- banking	SA (1)	A (2)	N (3)	D (4)	SD (5)
20	The decision of using e- banking is influenced by media outlets					
21	Customers of the bank are not familiar with services provided through Internet banking					
22	Mostly banks give training and updates on how to use ATM machine					
23	POS is widely known payment machine					
24	There is enough information given to customers about the use of mobile banking for transferring money					
No	Adoption of e-banking	SA (1)	A (2)	N (3)	D (4)	SD (5)
25	Deciding to use e-banking system is a wise idea					
26	There is a great possibility of using e-banking in my near future.					
27	I plan to use e-banking system such as Mobile banking, internet banking, POS and ATM.					
28	If there is a possibility of internet access I intend to use internet banking system.					
29	Using ATM machine is a pleasant idea.					
30	Using the electronic banking system enables me to accomplish banking activities more quickly.					
31	I will strongly recommend others to use the electronic banking system					

Thank You!!

አዲስ አበባ ዩኒቨርሲቲ የንግድ ሥራ ትምህርት ቤት
የማርኬቲንግ ሥራ አመራር ድህረ ምረቃ ፕሮግራም

ባንኮች የሚሠጡትን የኤሌክትሮኒክ ባንክ አገልግሎት የበለጠ ለማላመድ በሚያደርጉት ጥረት ላይ ተፅዕኖ የሚያሳድሩ ጉዳዮችን ለማጥናት የተዘጋጀ መጠይቅ ነው።

መግቢያ

ይህ መጠይቅ የተዘጋጀው ባንኮች በኤሌክትሮኒክ ዘዴ የሚሰጡትን የባንክ አገልግሎት የበለጠ ለማላመድ በሚያደርጉት ጥረት ላይ ተፅዕኖ የሚያሳድሩ ጉዳዮችን ለማወቅ የተዘጋጀ ነው።

በዚህ ጥናት መሰረት የሚገኙ ግብዓቶች በሙሉ በአዲስ አበባ ዩኒቨርሲቲ በንግድ ስራ ኮሌጅ ገበያ አመራር የትምህርት ክፍል ለሚጠበቅብኝ የማስተርስ ዲግሪ ማሟያ ጽሁፍ የሚወልድ ሲሆን የምትሞሉት መጠይቅ ስም እንድትገልፁ የማይጠይቅ በመሆኑ ምላሻችሁ በሙሉ ሚስጥራዊነታቸው የተጠበቀ እንደሆነ እና ከላይ ለተጠቀሰው ዓላማ ብቻ የሚወልድ መሆኑን አረጋግጣለሁ።

ይህ መጠይቅ በ10 ደቂቃ ውስጥ መሞላት የሚችል ሲሆን ጊዜያችሁን ሰወታችሁ ላደረጋችሁልኝ ድጋፍ በቅድሚያ የአክብሮት ምስጋናዬን አቀርባለሁ።

መሰረት ክፍሉ

በአዲስ አበባ ዩኒቨርሲቲ ንግድ ስራ ት/ቤት

የገበያ አመራር ት/ት ክፍል የ2ኛ ዓመት የማስተርስ ዲግሪ ተማሪ

ስልክ :- 0911-640443

E-mail:- meseret.kilu@gmail.com

ሚያዝያ 2009

ክፍል 1 :- የግል ሁኔታ

እባክዎን ከሚከተሉት ሳጥኖች ውስጥ ስለእርስዎ ትክክል በሆነው ላይ ይህንን (✓) ምልክት ያድርጉ።

1. ያታ ወንድ ሴት
2. ዕድሜ 20 — 30 31 — 40 41 — 50
3. የት/ደረጃ 1ኛ ደረጃ 2ኛ ደረጃ
 ዲፕሎማ የመጀመሪያ ዲግሪ
 ማስተርስ ዲግሪ ማስተርስ በላይ
4. ስራ የመንግስት ተቀጣሪ የግል ተቀጣሪ
 የግል የንግድ ስራ ተማሪ
 ሌላ መልሶ ሌላ ከሆነ ይግለጹ _____
5. ወርሃዊ ገቢ በኢትዮጵያ ብር
 ከ2000 በታች ከ2000 — 3000 ከ3000 — 4000
 ከ 4000 — 5000 ከ5000 በላይ

ክፍል 2 :- ባንኮች የኤሌክትሮኒክ ዘዴን በመጠቀም የሚሰጡትን አገልግሎት የበለጠ ለማስለመድ በሚደረገው ጥረት ላይ ተፅዕኖ ስለሚያሳድሩ ጉዳዮች የቀረቡ ጥያቄዎች

2.1 :- መሰረታዊ ጥያቄዎች

1. ከሚከተሉት ውስጥ የየትኛው ባንክ ተጠቃሚ ነዎት?

የኢትዮጵያ ንግድ ባንክ

ዳሽን ባንክ

2. የኤሌክትሮኒክ ባንኪንግ አገልግሎት ተጠቃሚ ኖዎት?

አዎ

አይደለሁም

መልስዎ አዎ ከሆኑ ቀጣዮቹን ከተራ ቁጥር 3 — 5 ያሉትን ጥያቄዎች ይመልሱ።

3. የየትኛውን የኤሌክትሮኒክ ባንኪንግ አገልግሎት በበለጠ ይጠቀማሉ?

ኤቲኤም

ፖስ

የሞባይል ባንኪንግ አገልግሎት

የኢንተርኔት አገልግሎት

ሌላ

ሌላ የሚለውን ከመረጡ ይግለጹ _____

5. ከላይ የመረጡትን የኤሌክትሮኒክ ባንኪንግ አገልግሎት ዓይነት ለመጠቀም ለምን ወሰነ

አጠቃቀሙ ቀላል ስለሆነ

የበለጠ አስተማማኝ ስለሆነ

የኔትዎርክ መኖርን ስለማይጠይቅ

የሚያሳድረው ስጋት አነስተኛ በመሆኑ

ሌላ ሌላ ካሉ ምክንያቶቹን ይግለጹ _____

6. ከላይ በተራ ቁጥር 2 ለተመለከተው ጥያቄ መልስዎ አይደለም ከሆነ የማይጠቀሙበትን ምክንያት(ቶች) ይግለጹ

አጠቃቀሙን ስለማላወቅ

የኢንተርኔት አገልግሎት-ስለማላገኝ

የኤሌክትሮኒክ የባንክ አገልግሎት አስተማማኝ ባለመሆኑ

የኔትዎርክ ችግር ስላለ

ስለ ኤሌክትሮኒክ ባንኪንግ አገልግሎት ስላልሰማሁ

በሌላ ምክንያት(ቶች)

በሌላ ምክንያት(ቶች) የሚለውን ከመረጡ ምክንያቱን(ቶቹን) ይግለጹ

2.2. ቀጣዮቹ ጥያቄዎች በኤሌክትሮኒክ ባንኪንግ አገልግሎት ዙሪያ ላይ ተፅዕኖ ስለሚያሳድሩ ጉዳዮች የቀረቡ ሲሆኑ አማራጮቹ ደግሞ ከእስማማለሁ እስከ ፈፅሞ አልስማማም በቅደም ተከተል የተቀመጡ በመሆናቸው ትክክለኛ ነው በሚሉት ላይ ይህንን(✓) ምልክት በማድረግ እንዲመልሱ በአክብሮት እጠይቃለሁ። አማራጮቹ እንደሚከተለው ተብራርተዋል።

- 1 በጣም እስማማለሁ
- 2 እስማማለሁ
- 3 አስተያየት የለኝም
- 4 አልስማማም
- 5 ፈፅሞ አልስማማም

ተ.ቁ	የአጠቃቀም ቅለት	1	2	3	4	5
1	ኤሌክትሮኒክ ዘዴ የባንክ አገልግሎትን ቀላል አድርጎታል።					
2	የባንክ አገልግሎትን በኤቲኤም ማሸን መጠቀም ቀላል ነው።					
3	የሞባይል ባንኪንግ አገልግሎት ከየትኛውም ቦታ ሆኖ ሂሳብ ለማንቀሳቀስ ቀላል ነው።					
4	የባንኮች ድረ-ገፅ የኢንተርኔት ባንኪንግ አገልግሎትን በቀላሉ ለመጠቀም የሚያስችል ነው።					
5	የተለያዩ ክፍያዎችን ለመፈፀም ፖዘ ማሸንን መጠቀም ቀላል ነው።					
ተ.ቁ	በአገልግሎቱ ላይ ያለ ስጋት	1	2	3	4	5
6	የኤሌክትሮኒክ ባንኪንግ አገልግሎት አስተማማኝነቱ ላይ ስጋት መኖሩ አገልግሎቱን ለመጠቀም መወሰን አስቸጋሪ ነው					
7	የኢንተርኔት ባንኪንግ አገልግሎት ለመጠቀም የኔትዎርክ ችግር ስላለ አስተማማኝ አይደለም					
8	ገንዘብ በሞባይል ባንኪንግ አማካኝነት ማስተላለፍ አስጊ ነው።					
9	በኤቲኤም ማሸን መጠቀም ገንዘብ ሊያሳጣ ይችላል					
10	ፖዘ ማሸንን መጠቀም የግል ሚስጥርን ሊያሳይ ይችላል።					

ተ.ቁ	የአይ ሲ ቲ አቅርቦት	1	2	3	4	5
11	የኤሌክትሮኒክ ባንኪንግ አገልግሎት በስፋት አይገኝም					
12	የ ኤቲኤም ማሽን ሁሌም ለ 24 ሰዓታት አገልግሎት ይሰጣል					
13	የኢንተርኔት አገልግሎት እንደልብ ካለመኖሩ የተነሳ የኢንተርኔት አገልግሎት መጠቀም ከባድ ነው					
14	የሞባይል ባንኪንግ በኔትዎርክ ችግር ምክንያት እንደልብ ላይሰራ ይችላል					
15	ባንኮች የ ፖዝ ማሽን አጠቃቀምን አስመልክቶ ለደንበኞች በቂ መረጃና ስልጠና ይሰጣሉ					
ተ.ቁ	የአገልግሎቱ ደህንነት አጠባበቅ በተመለከተ	1	2	3	4	5
16	የኤሌክትሮኒክ ባንኪንግ አገልግሎት የግል የገንዘብ ዝውውር እና መረጃው ሚስጥርነቱ የተጠበቀ ነው።					
17	የባንኮች ድረ-ገፅ ያልተፈቀደለትን ሰው ስለማያስተናግድ ኢንተርኔት ባንኪንግ አገልግሎት መጠቀም አስተማማኝ ነው					
18	የኤሌክትሮኒክ ባንኪንግ አገልግሎት የደንበኞችን የግል ሚስጥር ይጠብቃል					
19	የኤቲኤም ማሽኖች አስተማማኝ የሆነ ተከታታይ የደህንነት ፍተሻ ይደረግላቸዋል					
ተ.ቁ	ስለ አገልግሎቱ ያሉ መረጃዎችን በተመለከተ	1	2	3	4	5
20	የኢንተርኔት ባንኪንግ አገልግሎት ለመጠቀም መወሰን የመገናኛ ብዙኃን አስተዋፅኦ የጎላ ነው					
21	ባንኮች የሚሰጡት የኢንተርኔት ባንኪንግ አገልግሎት በደንበኞች አልተለመደም					
22	አብዛኛዎቹ ባንኮች የኤቲኤም አገልግሎትን በተመለከተ ወቅታዊ ትምህርትና ስልጠና ይሰጣሉ					
23	የፖስ ማሽን ክፍያን ለመፈፀም የሚያገልግል መሆኑ በስፋት ይታወቃል					
24	የሞባይል ባንኪንግ አገልግሎት ገንዘብ ለማስተላለፍ እንደሚረዳ ባንኮች ለደንበኞቻቸው					

	በቂ መረጃ ሰጥተዋል					
ተ.ቁ	የኤሌክትሮኒክ ባንኪንግ አገልግሎትን ከመላመድ አንጻር	1	2	3	4	5
25	የኤሌክትሮኒክ ባንኪንግ አገልግሎት መጠቀም ብልህነት ነዉ.					
26	በቅርቡ የኤሌክትሮኒክ ባንኪንግ አገልግሎት የመጠቀም ዕድሌ ሰፊ ነዉ.					
27	የኤሌክትሮኒክ ባንኪንግ አገልግሎቶችን ማለትም የሞባይል፣ የኢንተርኔት ፣ የኤቲኤም እና የፖዝ ባንክ አገልግሎቶችን ወደፊት ለመጠቀም አስባለሁ.					
28	የኢንተርኔት አገልግሎት የመጠቀም ዕድል ካለ የኢንተርኔት ባንኪንግ አገልግሎትን የመጠቀም ፍላጎቱ አለኝ					
29	ኤቲኤም ማሽን ለተለያዩ የባንክ አገልግሎት መጠቀም አስደሳች ነዉ.					
30	የኤሌክትሮኒክ ባንኪንግ አገልግሎት መጠቀሜ የባንክ አገልግሎትን በፍጥነት እንዳከናወን አድርጎኛል					
31	ሌሎች የኤሌክትሮኒክ ባንኪንግ እንዲጠቀሙ አበክሬ እመክራለሁ					

አመሰግናለሁ!!