



**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**FACTORS INFLUENCING ADOPTION OF ONLINE BANKING SERVICE
IN FIVE GRADE FOUR BRANCHES UNDER NORTH DISTRICT IN
COMMERCIAL BANK OF ETHIOPIA**

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Acronyms

1. ANOVA - Analysis of Variance
2. ATM - Automated Teller Machine
3. CBE - Commercial Bank of Ethiopia
4. CS - Customer Support
5. NBE - National Bank of Ethiopia
6. OB - Online Banking
7. PEU-Perceived Ease of Use
8. POS -Point of Sale
- 9.PU- Perceived Usefulness
10. PR - Perceived Risk
11. SPSS- Statistics Package for Social Science
12. TAM - Technological Acceptance Model

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ABSTRACT

The purpose of this research was to examine the factors that influence the adoption of online banking in 5 grade four branches of Commercial Bank of Ethiopia. To support the study relevant theoretical and empirical literatures were reviewed. The study was based on TAM (Technology Acceptance Model), which has been used extensively in similar studies, with the extension of other models derived from different writers related to this study. To achieve the objectives of this study, data was collected through self-administered questionnaire from a sample of 307 customers. These respondents were selected using probability sampling technique. The reliabilities of the scales used in the data was checked by Cronbach's Alpha and reassured the reliability of the data. Descriptive statistics Mean Score, Standard Deviation and inferential statistics like Multiple Regression analysis are used in order to address the initial research objective of the study. The results of this study indicate that all independent variables except perceived risk positively influence customer adoption of online banking service. Furthermore, the four independent variables explain 54.5% of effect on customer adoption of online banking and the rest of 45.5% is due to other independent variables not included in the model. It is recommended that, bank should take some consideration to apply online banking by delivering the information in an easiest way, provide more usefulness and benefits and also minimize the fraud as providing more security and privacy. This will help the bank to increase profit by reducing its cost, time saving and retain more potential users.

Keywords::Online Banking, Technology Acceptance Model, Multiple Regression

CHAPTER ONE

INTRODUCTION

Chapter Introduction

In this introductory chapter background of the study, statement of the problem, research objectives of the study, research hypothesis, significance of the study, scope of the study, and organization of the study, are discussed.

1.1. Background of the Study

The Ethiopian banking industry is one of the service industries essential to the growth of its economy. Banking plays an important role in capital mobilization and granting of financial facilities for business development and growth. According to the NBE March 2016 report, there are nineteen commercial banks operating in Ethiopia of these sixteen are private banks while the rest are state owned banks. Among the banks, Commercial Bank of Ethiopia (CBE) is a pioneer bank in introducing most of e-banking services like ATM, Mobile Banking, Internet Banking, POS, and Agent Banking, all in the attention of enhancing customers comfort. (CBE: Company profile dated 30 June, 2016).

These Technological innovations play a crucial role in creating value for the bank and customers; it enables customers to perform banking transactions without visiting bank (Turban, 2008). E-banking has also converted traditional banking practices to the extent that it has been found to create a model shift in marketing practices resulting in positive performance in the banking sector (Gonzalez, 2008; Maholtra & Singh, 2000)

According to, Salehi and Zhila (2008) e banking involves an electronic connection between bank and customer in order to prepare, manage, and control financial transactions of the customer via the bank. E-banking includes internet banking, mobile banking, automated teller machine, Telephone banking, and TV-based banking etc..

The definition of online banking varies amongst researchers partially because OB refers to several types of services through which a bank customer can request information and carry out most retail banking services via computer Daniel and Sathye (1999). According to, (Karjaluoto, 2002) online banking is a Web based services, which provide the customers

with the bundle of easily accessible and manageable service. An electronic payment system allows customers of the bank to transfer from one individual account to another account order a checkbook; view detail information about their account and download periodic account statements. The terms internet banking and online banking are often used in the literature to refer the same things. Currently, the Internet is the main channel for electronic banking. Internet banking offers many benefits to the bank and their customers.

For users, convenience was the key benefit of internet banking (Dassanayake, 2003). OB is extremely beneficial to customers because of the saving in costs, time, freedom it offers, its quick response to complaints, and its delivery of improved services, all of which benefits make easier banking (Turban ,2000).

However, despite all the benefits stated above the majority of consumers are still not using online banking channel. They still pay their bills, withdraw money, check balances, and deposit checks, transfer money, get their bank statement and foreign exchange rate at their bank counters much as the traditional way (Jayasiri and Weerathunga,2008).

These clearly show that customers are resisting the service. Therefore, a research must be done, so that the reason behind can easily be identified. Many researchers have tried to conduct the factors affecting the adoption of online banking worldwide.

According to,Rakesh and Ramya (2014) Internet banking adoption in India, is highly influenced by Perceived reliability, Perceived ease of use and Perceived usefulness.

Sara (2007) in Iran also concluded that attitude, perceived behavioral control, usefulness, ease of use and trust significantly influence customers intention toward using online banking.

According to, Perkins and Annan (2013) examined the factors in Ghana. The study was based on Technology acceptance model. Primary data were collected from randomly selected customers and was analyzed by using multiple regression analysis in SPSS. The results showed that the original constructs of technology acceptance model. I.e. perceived usefulness, perceived ease of use as well as the extensions of government support; trust and security were all significant to customers' intensions to adopt online banking.

In our country, Bisrat (2015) investigated the factors that hinder customers from using online-banking services and he concluded that perceived usefulness, perceived ease of use, culture, attitude, and perceived risk had significant effects on behavioral intention to use online banking.

Therefore, this research has focused on examining factors influencing customer adoption of internet banking service in 5 grade four branches under north district, that functions with major problems such as internet connection problem, customer support and service quality. Hence, studying these problems will bring about significant results to achieve the intended objective in general and it is very important to the bank that plan and promote new forms of banking in the current competitive market.

1.2. Statement of the Problem

Commercial bank of Ethiopia made a huge investment and introduced Online-banking service in 2012, so that customers enjoy the merit of the service. Moreover, use the service at their convenience. The bank implements different methods to address the launching of this service to customers. The bank even hires marketing officers for the promotion. Even with all of this effort number of customers who use online banking is very low comparing to other service of the bank. (CBE: Company profile dated 30 June, 2016).

From the researcher observation, customers resist the service due to lack of awareness, security and privacy issues, service quality, accessibility issue, information quality, start-up take time, lack of government policies, regulations and ecommerce laws, Moreover, customers expect 24/7 support and services from the bank.

To the extent of the researcher knowledge, there are very few or limit published works that tried to investigate the factors affecting the adoption of Internet banking by customers in Ethiopia. Most of the research works focused on analyzing factors affecting the adoption of e-banking service in our country. Even though studying on the title of factors influencing customer adoption of e- banking is good, and achieve the intended objective, studying the factors on several e banking will not give us the chance to study the problem in depth manner because our resource, time and effort will be divided on several e-banking platforms. But when the research focus on one type of e-banking platforms will give a chance to see the effect of factors on online banking in detailed manner so that resources can be utilized effectively moreover to conclude and give recommendation and find the most influential factor on customer adoption of online banking service.

The only available research paper the researcher found in this topic is Bisrat(2015). He focused on three selected banks namely Dashen bank, Commercial bank of Ethiopia, and

United bank. He studied from external customers' point of view and used quantitative research approach. He added culture as a factor other than TAM model.

Therefore, to evaluate the customer's adoption of online banking service, an investigation on the influential factors need to be undertaken. Thus, the researcher is motivated to conduct the study on online banking in a detailed manner.

1.3. Research Objectives

1.3.1. General Objective of the Study

The researcher aimed to examine the factors influencing customer adoption of online banking service in the case of CBE, five grade four branches under north district.

1.3.2. Specific Objective of the Study

The specific objectives of this study are as follow:

1. To identify the effect of perceived usefulness on customer adoption of online banking service.
2. To determine the effect of perceived ease of use on customer adoption of online banking service.
3. To determine the effect of perceived risk on customer adoption of online banking service.
4. To assess the effect of customer support on customer adoption of online banking service.

1.4. Research Hypothesis

Ho1: Perceived usefulness will not have a positive and significant effect on consumers' adoption of online banking service.

Ho2: Perceived ease of use will not have a positive and significant effect on customers' adoption of online banking service.

Ho3: Perceived risk will not have a positive and significant effect on customers' adoption of online banking service.

Ho4: Customer support will not have a positive and significant effect on customers' adoption of online banking service.

1.5. Significance of the Study

The result of this study may help the Bank to have a new strategy to increase online banking users. Moreover, this research can serve as a starting-point for upcoming research in the area of factors influence customer from using online banking service in CBE with more sample size, time, scope, & resource assigned. Customers benefited from this study because the researcher will forward recommendation, which will improve online banking service quality, accessibility, customer support, etc.

1.6. Scope of the Study

The geographical scope of the study is CBE customers in Addis Ababa city. The bank has four districts, under each district, there are many branches, which the bank categorizes them as grade two, three, and four, and it is practically impossible for the researcher to study all the customers in these branches. For these reason, the study focused on 5 grade four branch customers under north district, namely, Addis Ababa, Arat Kilo, Selassie, Theodros and Arada Giorgis. The researcher chooses this particular district and five of grade four branches due to their large number of customers, number of online banking user, transaction, and location. Conceptually, the research focuses on online banking and the factors that influence customers from using the service. E-banking includes numerous and emerging types of electronic banking such as Automated teller machine (ATM), internet banking, mobile phone banking, debit cards, E-switch telephone banking, SMS banking, home banking, point of sales banking and network banking just to mention a few. However, four of the several electronic banking is currently available in the bank. Which are online banking, mobile banking, automated teller machine, and POS. Online banking service is studied among other E banking platforms because there is limited study on the subject.

1.7. Organization of the Study

The study contains five chapters. The first chapter is introductory part that contains background of the study, statement of the problem, research hypothesis, and research objectives of the study, significance of the study, and finally scope. The second chapter presents literature review that contains theoretical review, empirical review and the conceptual framework of the study. Then third chapter deals with methodology that specifies research approach, research design, sampling design, research instrument, methods of data

collection, procedures of data collection, data analysis methods, validity, reliability and research ethics. In chapter four, data analysis, & discussion of result are included. In chapter five conclusion, limitations of the study, direction of future research and recommendation are presented.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Chapter Introduction

The second chapter discusses the literature review. This chapter comprises of four sections. These are definitions of online banking, types of online banking ,service offered by online banking ,advantage of online banking to customer and to the bank, disadvantage of online banking for customers, customer adoption, technological acceptance model (TAM) and other models, previous studies and finally conceptual framework.

2.1. Theoretical Literature

2.1.1. Online Banking

According to, Daniel and Sathye (1999) online banking is define as the automated delivery of new and traditional banking services directly to customers through electronic, interactive and communication channels. Online banking includes the systems that enable financial institution customers, individuals, or businesses, to access to their accounts and the general information on bank services through the use of bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations. Online banking/Internet banking which is the use of the Internet as a remote delivery channel for banking services (Furst and Nolle 2002, p.5)

Online banking is the use of a computer to retrieve and process banking data (statements, transaction details, etc.) and to initiate transactions like payments, transfers, requests for check book, etc... directly within the bank via a telecommunications network (Yang, 1997, p.2).

2.1.2. Types of Online Banking

According to, Aladwani (2001) there are two forms of online banking: web-based banking and dial-up banking.

Web-based banking: In this type of banking, customer can access his or her account with internet.

Dial-upbanking: in this type of banking, a customer to dial-up to a bank's server to get access to his or her account information uses a modem. Dial-up banking has a special type, which called an 'Extranet'. It is a private network between a bank and its corporate customers (Safeen et al., 2010).

According to Thulani et al.,(2009), Yibin (2003) and Diniz (1998) and Safeena et al., (2010), describe three types or functional levels of online banking that are utilized in the market which are: Informational, Communicative and Transactional.

1. Informational: This is the first level of online banking. Generally, the bank has the marketing information regarding bank's services on a standalone server.
2. Communicative/Simple transactional: This is the second level or type of online banking. It permits interaction between the bank's systems and the customers to some extent. The interaction confined to e-mail; account enquiry, credit application, or static file updates (name and address changes). Transfer of funds is not allowed in this type of e-banking.
3. Advanced Transactional: This is the third level of online banking. It allows bank customers to execute transactions i.e. electronically transfer funds to and from their personal accounts, pay different bills and carry out other banking transactions online.

2.1.3. The Services Offered by Online Banking

According to CBE profile, Online-banking service provides the following services for both personal and corporate customers.

- Account balance
 - ✓ View Real-time balance
 - ✓ View / download (csv or html format) account statement.
 - ✓ Search account statement by given date.
- Create/view and cancel standing order
- Automatic fund transfer to given beneficiary account on a predefined regular basis
- Create/view and delete beneficiary define your own beneficiary
- LMTS(Local Money Transfer)
- Fund Transfer
 - ✓ Own account transfer (same bank customer ID)
 - ✓ To other CBE account holder.

- ✓ To predefined beneficiary.
- Order/view cheque status.
- Messages sent to/ from the bank which allows sending and receiving messages securely.
- Setting:
 - ✓ Change static password
 - ✓ Login history
- Bulk payment
e.g. salary payment
- Letter of Credit(LC)
- Setup / reverse sweep account:-In this menu customer can set up a limit on account beyond which the balance are automatically transferred to beneficiary account.

2.2. Advantages of Online Banking

It provides a lot of benefits both to the customer and the bank itself.

2.2.1. Advantage to the Bank

Several studies indicate that online banking is the most profitable and wealthiest segment to banks (Mols, 1998 and Robinson, 2000). The single most important driving force behind the implementation of full service internet banking by bank is the need to create powerful barriers to customer exiting (Sheshnoff, 2000). He argues that once a customer started using online banking service, the likelihood of that customer moving to another financial institution is significantly lessen. According to, Brogdon (1999) and Jayawardhena et al .,(2000) The main benefits of online banking to the bank are cost saving, reaching new segments of the population, increases operational efficiency, enhancement of the bank's reputation and better customer service and satisfaction.

The other advantages of online banking for the banks:

- Online banking will allow banks to reduce customer service staff,
- Electronic payment will replace checks and costs of processing these checks will decrease,
- E-mails will replace mails, and electronic applications will replace paper ones,

- Consumers can open new account online, in addition they can apply for financial services from their homes and the result will be less data entry by the bank's personnel,
- Acquisition of new customers and increase of sales,
- The use of the website to advertise and sell financial services,
- Development of new products and services through internet banking,
- Retention of customers,
- Reach more customers via internet banking,
- Reduce density in branches,
- Faster response to the market assessment,
- Ease of the marketing of product and customer relationship opportunities,
- The provision of more effective customer service,
- Increasing customer loyalty.

Bank should monitor the developments of internet banking around the world for maintaining their presence in the banking sector and complying the competitive advantage. In addition, banks should regulate their services continuously and improve strategy based on the technology and innovations with new requirements.

2.2.2. Advantage to the Customer

From the consumer's perspective, online banking provides a very convenient and effective approach to manage one's finances as it is easily accessible 24 hours a day, and seven days a week. Besides, the information is current. With the help of the internet, banking is no longer bound to time or geography. For users, convenience was the key benefit of online banking (Dassanayake, 2003). OB is Therefore, time and cost savings and freedom from place have been found the main reasons underlying online banking acceptance (Polatoglu and Ekin, 2001; Black et al., 2002; Howcroft et al., 2002).

The other advantages of online banking for customers:

- Speed of banking transaction,
- Minimize the use of traditional branch banking,
- Easy verification of transactions,
- Real time up gradation of customers' data ,

- User-Friendliness,
- Global connectivity.

2.2.3. Disadvantages of Online Banking for Customers

The disadvantages of online banking are listed as stated by (Ozelman, 2012).

- Start-up may take time: Bank for online program registration, and to ensure the identity of a bank branch is probably going to have to sign a form,
- Bank site changes: Even the big banks adding new features in unfamiliar places, periodically upgrade their online programs. In some cases, you may need to re-enter your account information, and the service might be temporary available,
- Security: To ensure ease of access to internet technology, many customers believe that is open and therefore not safe,
- Learning curve: Banking sites can be difficult to navigate at first glance. A little time and / or investment plan is needed to read tutorials for virtual lobby to be relaxed,
- The trust thing: For many people, the biggest hurdle to online banking is learning to trust,
- Dissatisfaction with the low speed of internet banking response,
- Complex web sites: You can find a very complex and time-consuming customer banking websites.

2.3. Customer Adoption

The definition of customer adoption as recommended by Manser(1986) in Macmillan English Dictionary, defines adoption as “course of action”. Sathye (1999) & Rogers (1971) also defines adoption as the acceptance and continued use of a product, service, or idea. For this study, customer adoption can be define as clients gain knowledge of the services put forward by the online banking provider throughout the development of experiences. The familiarities are a major verify of consumer choice and preferences (Foxall, 2003). The success of the service highly relay on clients acceptance and supports.

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 service.

1. Knowledge: At this stage, an individual get to know about innovation and possesses understanding of how it functions.
2. Persuasion: This stage represents an individual's formation of an attitude, which can be either favorable or unfavorable towards an innovation process.
3. Decision: This stage shows an individual's involvement in activity, which determines his/her choice towards accepting or rejecting an innovation.
4. Implementation: At this stage, an individual make use of an innovation i.e. puts the innovation into use.
5. Confirmation: At this stage, the results of an innovation-decision already made evaluated by an individual.

2.4. Technology Acceptance Model (TAM)

According to Davis (1985) technology acceptance model (TAM) developed as the most famous model to determine the acceptance and use of new information technology within organizations. The goal of TAM is to provide an explanation of the determinants of computer acceptance, that is general, capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified. Ideally, one would like a model that is helpful not only for prediction but also for explanation, so that researchers and practitioners can identify why a particular system may be unacceptable, and pursue appropriate corrective steps. A key purpose of TAM therefore is to provide basis for tracing the impact of external factors on internal beliefs, attitudes, and intentions. The model suggests that the perceived usefulness and perceived ease of use of a technology are the main factors that influence a potential user's decision on whether or not to use the technology. The researcher adopts TAM as the base model for this study and adjusts the model to reflect the new proposed dimensions of online banking. The researcher proposed another two factors that embedded into the model split better understand the customer acceptance of online banking in CBE. A brief explanation of this model is present below.

2.4.1. Perceived Usefulness

Davis (1989) asserts that the decision to use new technology determined by the extent to which a person believes that it is cost effective in providing goods or services compared to

the current method. Perceived usefulness is defined as the degree to which a person believes that using a particular technology will enhance his performance. The Perceived usefulness is also an important variable from TAM (Araujo and Nteberget al., (2003). Perceived usefulness confirmed as an important variable that influences users' technology acceptance and therefore has received a great deal of attention from previous researchers.

2.4.2. Perceived Ease of Use

According to Davis (1989), Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort and it related to an easy-to-remember URL address, well organized, easy in site navigability, concise and understandable contents, terms, and conditions. Customers expected such advantage from online banking service and it is necessary to find out the impact it has on them.

2.4.3. Perceived Risk

Perceived risk is powerful in explaining a consumer's behavior because consumers are more often motivated to avoid mistakes than to maximize utility in purchasing (Mitchell, 1999). Consumers perceive greater risks when purchasing services other than goods, because services are intangible, non-standardized, and often sold without guarantees or warranties (Murray and Schlacter, 1990; Zeithaml, 1981). Uncertainties associated with the purchase of services and the possibility of service failure result in a very high degree of risk in the services purchase situation (Zeithaml, 1981).

Perceived risk is generally regarded as being a composite of several categories of risk. Six types or components of perceived risk in the case of online banking have been identified (Featherman and Pavlou, 2003; Lee, 2009)

1. Security/privacy risk. Refers to security/privacy threats whereby a fraud or a hacker may get unauthorized access to the online bank user's account and fraudulently acquire sensitive information, such as usernames and passwords (Lee, 2009; Littler and Melanthiou, 2006).
2. Financial risk: Represents the possibility of monetary loss due to transaction error or bank account misuse (Lee, 2009).
3. Performance risk: Refers to an unexpected breakdown of system servers or disconnection from the Internet while conducting online transactions and the consumer may not be certain whether the transactions are performed or not (Lee, 2009).

4. Psychological risk: Occurs when something goes wrong with Internet banking transactions and consumers are likely to feel frustrated or annoyed, and their self-image may be adversely affected by the adoption of online banking (Littler and Melanthiou, 2006).

5. Social risk: Refers to the possibility that using Internet banking may result in the disapproval of one's family, friends or work group (Lee, 2009).

6. Time risk: Related to the significant length of time involved in learning and using Internet banking (Lee, 2009). Time risk is also related to the time involved in dealing with erroneous transactions or the failure to effect transactions expeditiously (Litter and Melanthiou, 2006).

Several empirical studies identify perceived risk as having a significant negative and direct effect on consumers' adoption of online banking (Lee, 2009; Kuisma, Laukkanen and Hiltunen, 2007; Polatoglu and Ekin; 2001; Tan and Teo, 2000). The security/privacy risk, as one of the main dimensions of perceived risk, appears to be the most inhibiting factor in the adoption of online banking (Lee, 2009; and Speece, 2003).

2.4.4. Customer Support

Customers before using a particular service they want to have full information. It is necessary the bank offering this service create the awareness about the availability of the service by using promotion tools like web site, radio, TV ad and marketing effort and this will have a positive effect on customer adoption of the service. Not everyone is good at different technology so they need guide on how to use the service. Sometimes, after services on the online banking, customers might have questions waiting to answer, so he or she also needs support. Therefore, support is very important for customers to adopt and use online banking service (Rangsan&Titida, 2013).

2.5. Empirical Literature

Sathe, (1999) investigated adoption of online banking by Australian consumers. A quantitative study was used to obtain data regarding the usage and attitudes towards the internet as a banking channel. The study identifies six characteristics that influenced the rate of adoption. The results proved that security concerns and lack of awareness about the service and its benefits stand out as being the obstacles to the adoption of internet banking in Australian.

Wadie, (2011) studied factors influencing the usage of online banking in Tunisia. He also identifies prior knowledge, convenience, security perception, perceived risk, and demographic characteristics as a factor and find out that prior knowledge, convenience, security and risk influence OB users in Tunisia.

Rakesh and Ramya (2014) studied factors influencing consumer adoption of online banking in India. A new construct “perceived reliability” proposed to enhance the understanding of an individual’s acceptance behavior of Internet banking with respect to consumers’ perceived security, privacy issues and the perceived risk of consumers. In addition to perceived reliability, level of awareness, perceived ease of use and perceived usefulness were other factors. It was hypothesized that all the factors have positive effect on consumer adoption of online banking and each other. Data for the study collected from 100 participants by means of a survey conducted in Mysore, India. It found that awareness level of consumers has a positive effect on the perceived ease of use, perceived usefulness, and perceived reliability on Internet banking. Perceived ease of use has effect on consumer adoption of online banking. Perceived usefulness has a positive impact on perceived ease of use, perceived reliability, and consumer adoption of Internet banking. Perceived reliability has a positive impact on consumer adoption of Internet banking.

Gerrard et al., (2006) in his study in Singapore, identify risk to be an important factor for online Banking adoption. All respondents who did not use OB services had a negative perception of the security in online banking. The respondents perceived that there were many security risks when using the internet. They felt the privacy was a concern, feeling all their financial information could be in jeopardy. Risk was one of the two most frequently mentioned factors in their study.

Howcroft (2002) found that education level did not have any influence on the usage and adoption of home based internet banking in the United Kingdom. However, Pikkarainen, Karjaluoto, and Pahnla (2004) concluded that people with higher education and higher income are more active at online banking services in Finland.

Bayrakdaroglu (2012) analyzed the relationship of the demographic characteristics of customers and identified factors affecting the usage the internet banking services. The data was obtained from five different provinces in the Aegean region in Turkey. Findings of this study revealed that privacy and security issues affect the adoption of online banking.

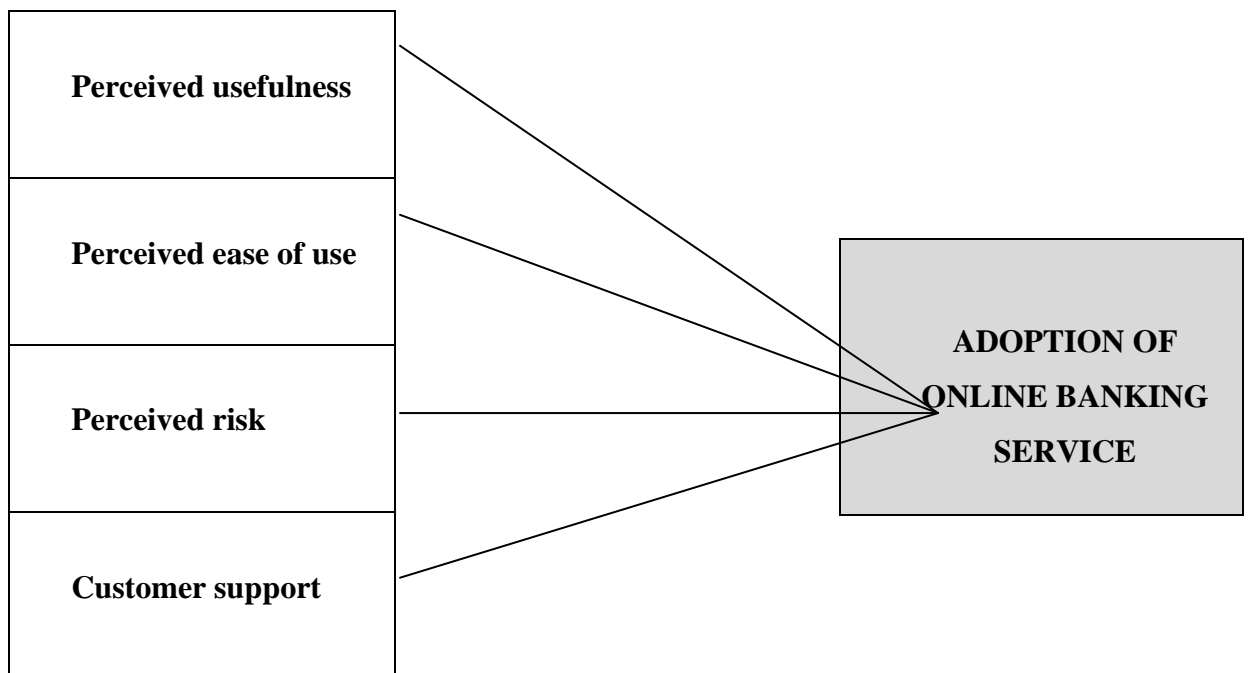
Kent et al., (2011) studied customer acceptance of internet banking in Estonia. Three constructs were used to examine what is influencing the customers' usage of the Internet banking. They are trust, perceived usefulness, and perceived ease of use. They took perceived usefulness and ease of use from technology acceptance model and add trust as another factor. A quantitative study was selected to obtain data regarding the usage of, and attitudes towards, the Internet as a banking channel.

To examine what influences customers use of the Internet bank a questionnaire was sent to 9000 bank customers in Estonia. The findings suggested that Internet banking use increases if customers perceive it as useful. The perceived usefulness is central because it determines whether the perceived ease of Internet banking use will lead to increased use of the Internet banking. This means well-designed and easy to use internet bank may not be used if it is not perceived as useful. They finally concluded that the perceived usefulness of Internet banking is, for banks, a key construct for promoting customer use. They also suggested that models of technology acceptance should be re-formulated to focus more on the key role of the perceived usefulness of the service embedded in the technology. They advised banks to put much effort not only into making a user-friendly internet bank, but also into explaining to their customers how the internet bank is useful to them.

According to Dwumfuo and Dankwah(2013) that perceived benefits to the bank served as a motivating factor for adopting the OB product in Ghana. In general, review of empirical studies shows that understanding the critical success factors in online banking is important for banking industries because it would potentially help them to improve their strategic planning process.

2.6. Conceptual Framework

The conceptual framework of the study is developed by arrangement different factors from deferent writers related to the specific area. The independent variables that are believed to have an influence on the adoption of online banking service.



Source:- Chong et al 2010

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Chapter Introduction

This chapter of the study deals with research approach, research design, sample design, population of the study, sample size, sampling techniques, source of data, data collection instrument, data collection procedures, methods of data analysis, validity, reliability, and research ethics that are employed.

3.1. Research Approach

In order to examine factors that influence customers' adoption of online banking service, this study used quantitative approach. Quantitative approach is appropriate in order to achieve the objectives stated in chapter one. According to Du plessis and Rouseas (2007) view a quantitative approach as a systematic and structured, aimed at obtaining information from respondents in direct, and open manner. Results obtained from such an approach are easily quantifiable and has a potentially high degree of accuracy. Therefore, this study is quantitative to describe factors that influence customer adoption of OB under north district, 5 grade four branches by collecting quantitative data from customers of the branches. In addition, the effect of the independent variables (TAM Models and the other two independent variables) on the dependent variable (customer adoption) is quantitatively deliberate by this study.

3.2. Research Design

Descriptive research is used to find information about the present status of a phenomenon to describe, "what exist" with respect to variables or conditions in a situation (Yin, 2003).

Explanatory research aims to ask questions to find out what is happening (Robson, 1993). It is concerned with discovering ideas and insights, and is suitable for any problem about which already known and have a description of it, we might begin to wonder why things are the way they are. (Churchill, 1999). This research type establishes causal relationship among dependent variable and independent variables.

This study collected data from 5 grade four branches customers of CBE to describe the present condition of online banking use across four factors. This makes the study descriptive. In addition the study analyzed the casual relations between the dependent (customer

adoption) and the independent variables (perceived usefulness, perceived ease of use, perceived risk, and finally customer support) using regression. Which make the research explanatory. Therefore, based on the research objectives and problem the researcher used descriptive and explanatory research.

3.3. Sample Design

3.3.1. Population of the Study

The target population defined as the entire group a researcher is interested. According to Zikmund (2003), the definition of the population was an identifiable total set of elements investigated by a researcher.

The population for this study is customers of commercial bank of Ethiopia. CBE chosen among commercial banks because, it is the biggest, oldest financial institution and pioneer in introducing most of e-banking platforms. In addition, the reason for limiting the study to only one bank was to reduce the variance of responses that might affect the results, that there are differences that exist between all commercial banks in A.A, in terms of their application of technology.

It is because of the fact that the branches are quite many in CBE and thus, the researcher shall not have studied all customers in the institution. For this reason, the study focused on north district, 5 grade four branches. This particular district also chosen among other districts it is because of its performance in terms of online banking, number of branches, transaction, and location. According to, the data obtained from e-payment department the active users in the selected branches are 1328 customers that constitute the population size of this study.

3.3.2. Sample Size

There is no single rule that used to determine sample size. Yamane (1967) cited in Israel (1992) provides a simplified formula to calculate sample sizes. This formula used to calculate the sample sizes. A 95% confidence level and $P = .05$ or 5% margin error are assumed. The researcher uses the following formula to determining sample size.

$$n = \frac{N}{1 + N(e)^2}$$

Where, n – designates the sample size the research uses.

N - Designates the total number of Online banking users in the target population.

e – Designates maximum variability or margin of error 5% (0.05).

1 – Designates the probability of the event occurring.

The total population is 1328, which are active online banking users in five grade four branches under north district. Thus, at 5% error and 95% confidence coefficient

$$n = \frac{1328}{1 + 1328 * (0.05)^2}$$

$$n = \frac{1328}{1 + 1328 * (0.05)^2}$$

$$n = 307$$

3.3.3. Sampling Techniques

Probability sampling is a technique, in which every unit in the population has a chance (non-zero probability) of being selected in the sample, and this chance can be accurately determined. All probability sampling have two attributes in common: (1) every unit in the population has a known non-zero probability of being sampled, and (2) the sampling procedure involves random selection at some point. Probability-sampling technique was generally applied in order to obtain a representative sample.

3.4. Source of Data

The required data has been collected from customers of CBE five grade four branches under north district. In addition, journals, articles, and books used to congregated related literature. Moreover, CBE e-payment reports used to know the status of the bank regarding online-banking services.

3.5. Data Collection Instrument

The researcher used questionnaire in order to collect the required data for the study. The questionnaire measured the relation between the dependent variable and independent variables. The type of questionnaire would be close-ended. The layout of the questionnaire kept very simple to encourage meaningful participation by the respondents. For an easy understanding and reading, the questionnaire designed into two parts. Part 1-cover questions

on respondent's profile, and part 2 focused on the variables that believed to impact customer intention to adopt online banking service. Respondents asked to rank their level of agreement based on a 5-point Likert scale, ranging from '1' (strongly disagree) to '5' (strongly agree).

3.6. Data Collection Procedure

A self-administered, structured questionnaire was used to gather data from respondents to the study. The researcher first acquires permission from the Branch Managers to distribute the questionnaires. Questionnaires distributed to the respondents when they arrived for banking service. Each respondent fill a questionnaire after a brief introduction and objective of the study. Moreover, the questionnaires are prepared in English version because the researcher knows that the service is not given in another language other than English and customers are expected to have knowledge in order to use the service. Collection of responded questionnaires was done after the customers have completed their response.

3.7. Methods of Data Analysis

The study designed to examine the factors influencing customers from using online banking service in Commercial Bank of Ethiopia. The data analysis of the study is done in a way that its objectives demand. Demographic characteristics summarized using frequencies and percentages for all variables including age, sex, educational level, and frequency of usage. After the data collected through structured questionnaire, computation and analysis has beentaken by using SPSS (Statistic Package for Social Science) version 20.0 software. Descriptive statistics Mean, Standard Deviation and inferential statistics like Multiple Regression analysis were used in order to address the initial research objective of the study.

3.8. Validity and reliability

3.8.1. Validity

The statements generated from an extensive review of literatures, the study assume that the construct validity was hold. For the content validity, the researcher had a discussion with some customer relationship managers and operation expert of the e-payment department. Their comments were taken in to consideration for developing the final version of the instrument and finally approved by the research advisor.

3.8.2. Reliability

Reliability is the consistency of responses; the degree to which an instrument measures in the same way each time under the same conditions. Reliability is used to ensure internal consistency and to achieve high degree of homogeneity between questionnaire statements Polit and Hunger (1985). We can compute reliability through different methods like test-retest reliability, internal consistency reliability, and equivalent forms reliability. In this research, we checked questionnaire reliability by choosing internal consistency reliability method. By using this method, we can measure the correlation between each item in the questionnaire. In addition, we do not need to perform more than one test, or to design two equivalent forms. According to Malhotra & Birks (2007), Likert scale questionnaires use Cronbach alpha (α) method to check for convergent and discriminate validity of the constructs. Accordingly, Cronbach's alpha was calculated for all statements in the questionnaire to test its reliability as follows.

Table 1: - Reliability Test

Measurement Scale	Cronbach-Alpha	No. of items
Perceived usefulness	.747	7
Perceived ease of use	.653	5
Perceived risk	.718	6
Customer support	.819	5

Source: - Own survey result, 2017

According to Malhotra & Birks (2007) A Cronbach's Alpha coefficient close to 1.0 means that the questions are measuring similar dimensions of a factor. Although the general limit is > 0.7 , a score > 0.6 would be acceptable because of the explanatory nature of this research. By this standard, any factor with a Cronbach's Alpha coefficient less than 0.6 should be eliminated.

The scales used for this study are found to be reliable as their respective alpha values are higher than 0.6, and for most closer to 1. The Cronbach - alpha of each scale is presented in table 1 above.

3.9. Ethical Consideration

Before handing out the questionnaire to respondents, the researcher obtained approval prior to any research activity at the specified location. The research was carried on the consent of all participants and confidentiality of the information is reassured. Lastly, all secondary sources are quoted to keep the rights of ownership of all materials.

CHAPTER FOUR

RESULTS AND DISCUSSION

Chapter Introduction

This chapter has three sections the general information analysis, and the specialized information analysis (Regression analysis), based on the information collected from 307 respondents. 307 questionnaires administered and customers contacted at the branch when they arrived for service and all distributed questionnaires were returned back.

Therefore, the general analysis was analyzed using descriptive analysis via frequency, percentage and the specialized questions was analyzed using SPSS version 20 via multiple regression models, and the hypothesis tested using t-test.

4.1. Demographic Information of the Respondents

Table 2: - Respondents' Profile

Variable	Category	N	Percent (%)
Gender	Male	185	60.3%
	Female	122	39.7%
Total		307	100
Age	20-30	222	72.3%
	31-40	69	22.5%
	41-50	11	3.6%
	Above 51	5	1.6%
Total		307	100
Education Level	Certificate	8	2.6%
	Diploma holder	11	3.6%
	First-degree holder	230	74.9%
	Master- degree holder	53	17.3%
	Phd	5	1.6%
Total		307	100

Source: - Own survey result, 2017 total for both n and percent

Results of the demographic characteristics of respondents are shown in table 2 above. As observed from the table majority of respondents are male which comprises 60.3% while the rest 39.7% are female respondents. From these result male respondents are likely to have more interaction with online banking than females. When we see the previous researcher on the same title most of their findings show that males were took online-banking service than females the researchers like, Parasuraman et al (1985), Bambore PL (2013), Kwashie W. (2012) of Ghana etc.

In terms of age, 72.3% of the respondents are between 20-30 years, 22.5% between 31-40 years, 3.6% between 41-50, and 1.6% are 51 years and above. In this regard, more responses were received from younger age groups. The researcher believes that the reason of this is the growing interest of young people in the internet and technology. As cited by Yitbarek et al. (2013) quoting (Amel, 1986; El-Haddan&Almahmeed, 1992; Marshal &Heslop, 1988; Swinyard&Ghee, 1987; Taube, 1988), this result supports the findings of many studies on online-banking technology acceptance, where users tended to be young.

Concerning the educational status of the respondents the majority of respondents were those with first – degree 230(74.9%) followed by those with masters holder 53 (17.3%), 11(3.6%) were diploma holders, 8 (2.6%) of the respondents were certificate holder, and the rest of 5 (1.6%) were Phd. As the study, the indication is that respondents are generally of sound educational background. The high education group consumers adopt online banking because generally they have a higher knowledge of new technology information and skills compared to consumers in the low education group. The result of this study is supported by Stavins (2001), consumers with more years of education are more likely to use online banking.

Table 3:- Frequency of Using Online Banking

Frequency of Usage	
1-6 Month	25.7%
7-12 month	16.9%
>1 year	57.3%

Source: - Own survey result, 2017

Concerning with the experience of OB service of the respondents, (25.7%) are used OB for 1-6 months while (16.9%) of them used OB for 7-12 months, the rest (57.3%) of them used for 1 year and above. This clearly shows that most of the respondents used the service more than a year and they are expected to have knowledge and experience than customers who started using ob service recently. Therefore, the researcher believed that they are fitted for the study since they cover 57.3% of the population.

4.2. Descriptive Statistics Analysis

Descriptive statistics analysis helps to know the overall mean and standard deviation of each variable used in the study. According to, Best (1995) the mean score that ranges from 1-1.80 is considered to be lowest, from 1.81-2.61 is lower, from 2.62-3.41 is deemed to be average/moderate, from 3.42-4.21 is good/high and from 4.22-5 is going to be considered as very good/excellent.

Table 4:-Descriptive Statistics

	Mean	Std. Deviation	N
PU	4.29	.659	307
PEU	4.09	.650	307
PR	2.72	.753	307
CS	3.56	.896	307
CA	3.17	.694	307

Source: own survey, 2017

As compared to the mean score of factors that influence customer adoption of online banking service the researcher, find out that the mean score of perceived usefulness has the highest - mean score(4.29).

While perceived risk has mean score of 2.72, which is deemed to be moderate/average. Moreover, perceived ease of use, perceived usefulness, and customer support mean score falls between 3.56 up to 4.29. This implies that the dependent variable is highly described by the three independent variables. Mean score of customer adoption(3.17) indicates that customers are slightly influenced by the independent variables.

4.3. Test of Regression Assumptions

4.3.1. Linear Relationship

Customer adoption is assumed to be linearly related with the five independent variables. This means the dependent variable customer adoption is assumed to be influenced with changes in four factors (the independent variable) linearly. The plot that shows the linear relationship of each independent variable with the dependent one is annexed.

4.3.2. No Multicollinearity

Table 5:- Level of Multicollinearity in the Model

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.212	.317		3.827	.000		
Perceived usefulness	0.425	.066	.060	6.433	.000	.650	1.538
Perceived ease of use	0.268	.064	.220	4.187	.000	.720	1.389
Perceived risk	-0.216	.050	-.194	-4.324	.000	.893	1.120
Customer support	0.056	.052	.073	1.086	.024	.577	1.732

Source: Own survey result, 2017

Multicollinearity is tested in this study using the variance inflation factor (VIF) which quantifies the severity of multicollinearity in regression analysis. The VIF factor should not

exceed 10, and should ideally be close to one. The table above shows there is no multicollinearity. Tolerance is an indicator of how much of the variability of the specified independent variable is not explained by the other independent variables in the model. If this value is very small (less than 0.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity (Field, 2005). The table above confirms the absence of multicollinearity according to Collinearity Statistics.

4.3.3. No Auto-correlation

Table 6:- Level of Auto-Correlation

Model	R	R Square	Adjusted R Square	Std. error of the estimate	Durbin-Watson
1	.738 ^a	.545	.539	.721626	1.818

Source: Own survey result, 2017

To determine the autocorrelation between observations Durbin – Watson test was used. The Durbin-Watson statistic ranges in value from 0 to 4. A value near 2 indicates non autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation (Field, 2005). With Durbin Watson value of 1.818, which is very close to 2, it can be confirmed that the assumption of independent error has almost certainly been met.

4.3.4. Normality

In terms of this assumption, a check for normality of the error term is conducted by a visualexamination of the normal probability plots of the residuals. The plots are different from residual plots in that the standardized residuals are compared with the normal distribution. In general, the normal distribution makes a straight diagonal line, and the plotted residuals are compared with the diagonal. If a distribution is normal, the residual line will closely follow the diagonal (Ghozali, 2001). The normality plot of this study fit with the assumption. The plots are annexed.

4.4. Multiple Regression Analysis

Multiple regression was conducted to reveal how different factors affect intention to use online banking. This approach has been widely employed in the survey - based studies(Guriting and Ndubisi, 2006; Luarn and Lin,2005; Wang et al., 2003 and Ramayah et al, 2003).

Table 7:- R Square Level of the Study

Model	R	R Square	Adjusted R Square	Std. error of the estimate
1	.738 ^a	.545	.539	.721626

Source: Own survey result, 2017

As for the effect of independent variables on dependent variable, the above table shows that R square is 0.545, which means that 54.5% customer adoption was explained by the variation of four factors and the other 45.5% is due to the other independent factors not included in the model and the random error.

The value of R shows that there is strong correlation between the dependent variable and the independent variables.

Table 8:-Significance of the Model

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	32.826	6	5.471	14.351	.000 ^b
	Residual	114.366	300	.381		
	Total	147.192	306			

Source: Own survey result, 2017

The ANOVA tells us whether the model, overall, results in a significantly good degree of prediction of the outcome variable (Field, 2005). Since the significance result on the ANOVA table is 0.000, which is $p < 0.05$, the regression analysis proved the presence of a good degree of prediction. It means that explanatory variables have a great contribution to improve or increase customer adoption of the service. The contribution of each factors can be seen from the results of multiple regressions in the coefficient table below.

Table 9:- Coefficients of the Variables

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.212	.317		3.827	.000		
Perceived usefulness	0.425	.066	.060	6.433	.000	.650	1.538
Perceived ease of use	0.268	.064	.220	4.187	.000	.720	1.389
Perceived risk	-0.216	.050	-.194	-4.324	.000	.893	1.120
Customer support	0.056	.052	.073	1.086	.024	.577	1.732

Source: Own survey result, 2017

Beta value in the table signify the effects of each factor towards customer adoption of the service.

From the above table perceived usefulness, perceived ease of use, and customer support strongly influenced customers to adopt online banking except perceived risk.

Among beta values the highest beta level is for perceived usefulness with the beta value of $\beta=0.425$. This indicates that perceived usefulness is the dominant factor that influences the intention to use online banking services and should be given the highest focus. This means that active online banking customers agree with the concept of online banking usefulness. For this reason, if assumed other things being constant when perceived usefulness increased by one unit, it increases online-banking users by 0.425. And perceived risk has the lowest impact on customer adoption of online banking service.

Regression Equation

$$\text{Customer Adoption} = 1.212 + (.425) \text{ Perceived Usefulness} + 0.268(\text{Perceived Ease of Use}) + (-.216) \text{ Perceived Risk} + .056(\text{Customer Support})$$

4.5. Hypothesis Testing

The researcher used the coefficient table to reject or not to reject the hypothesis developed. Hypothesis testing is based on unstandardized coefficients beta and P-value of the variables.

Hypothesis 1

Ho1: Perceived usefulness will not have a positive and significant effect on consumers' adoption of online banking service.

Ha1: Perceived usefulness will have a positive and significant effect on consumers' adoption of online banking service.

As the result presented in table above, perceived usefulness has a positive and significant effect on customer adoption with a beta value ($\beta = 0.425$, at 95 % confidence level ($p < 0.05$). Thus, the study rejected the null hypothesis and support alternative hypothesis that says perceived usefulness has positive and significant impact on customer adoption of online banking service. This result is consistent with the study Chong et al (2010) undertook in Vietnam based on the TAM framework.

Hypothesis 2

Ho2: Perceived ease of use will not have a positive and significant impact on customer adoption of online banking service.

Ha2: Perceived ease of use will have a positive and significant impact on customer adoption of online banking service.

As indicated in the above table 7 perceived ease of use has a beta value of 0.268. Since this relationship is significant ($p < 0.05$). Perceived ease of use has a positive and significant effect on customer adoption of online banking service. Therefore, the study rejects the null hypothesis and accepts alternative hypothesis, which says perceived ease of use has a positive and significant impact on customer adoption of online banking service. This result also consistency with the findings of the original TAM model developed by Davis et al, (1989) cited in Aldas-Manzano et al., (2008).

Hypothesis 3

Ho3: Perceived risk will not have a positive and significant effect on customers' adoption of online banking service.

Ha3: Perceived risk will have a positive and significant effect on customers' adoption of online banking service.

By looking at the table above, perceived risk has a beta value (beta = -0.216), at 95% confidence level ($p < 0.05$). Therefore, perceived risk has a negative and significant effect on customer adoption of online banking service. This result is similar with Tan and Teo, (2000).

Hypothesis 4

Ho4: Customer support will not have a positive and significant effect on customers' adoption of online banking service.

Ha4: Customer support will have a positive and significant effect on customers' adoption of online banking service.

As shown from the above table, customer support p-value is significant ($p < 0.05$), and the beta value is positive. Therefore, the study accepts the alternative hypothesis that customer support has a significant and positive effect on customers' adoption of online banking service.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

Chapter Introduction

This chapter presents the, conclusion, limitations of the study, direction of future research and recommendation

5.1. Conclusion

The study was intended to examine the factors influencing customer adoption of online banking service in 5 selected grade four branches under north district in CBE. Based on the questionnaire distributed to 307 selected customers the following conclusions are drawn.

By using Cronbach's Alpha the internal consistency of each scale were reassured.

Majority of the total respondents (60.3%) are male. As presented in the age analysis the majority of respondents are at young age (20-30). In terms of education, the most represented educational levels were those with a Bachelor degree, which was made up of 60.3% of the respondents.

The mean result of the variables show that perceived usefulness has the highest mean score (4.29), and perceived risk has the lowest (2.72) mean score among independent variables. Mean score of customer adoption(3.17) indicates that customers are slightly influenced by independent variables.

The R square level of the study table R square showed that 54.5% of independent variables was explained by the four independent variables and the other 45.5% is due to the other independent variables not included in the model and the random error.

The value of R shows that there is strong correlation between the dependent variable and the independent variables.

The ANOVA table proved the presence of a good degree of prediction.

The multiple regression also shows that perceived usefulness has the highest impact on customer adoption and it's the dominant factor that influence customer adoption of online banking service with (B=0.425), followed by perceived ease of use(B=0.268), customer support(B=0.056), perceived security (B=0.200), and perceived risk(B=-0.216).

From this, we can conclude that perceived usefulness, perceived ease of use, perceived security, and customer support have positive and significant impact on customer adoption. However, perceived risk has negative and significant impact on customer adoption

5.2. Limitations

Gathering sufficient information for the study regarding the topic under study was difficult due to limited prior research work centering Technology Acceptance Model in the Ethiopian context.

In addition, the theories reviewed in this paper are not considered exhaustive, as there are many other theories. This study empirically examined only five factors that may influence consumers' adoption of online banking service. They were selected out of the most frequently used ones in the study. Furthermore, getting data on number of active online banking users from the responsible department were difficult and time consuming. In addition, some customers were not willing to accept and fill the questionnaires. Under this circumstance, questionnaires were distributed on willingness basis.

5.3. Recommendation

As per the findings from the analysis of the collected data, the following recommendations are forwarded to the bank.

- In this study, perceived usefulness was found to have a significant influence on customers' intention to use online banking. Therefore, the bank should work more on this variable i.e. the bank should focus on the full functionality of their systems to respond efficiently to the different banking needs of users including adding services. The bank can achieve this by promoting the usefulness of the service through media, so that the bank can attract potential users and encourage dormant and active users to use the service more often.
- Perceived ease of use has a significant influence on customers' intention to use online banking. The bank should work more on this variable. I.e. the bank should concentrate on corporate websites to make it more user-friendly and provide training for customers so it will not be difficult for customers to use the service and perceive it as easy to use.
- The result shows that customer support has a significant influence on customers' intention to use online banking. The bank should create awareness regarding the service,

regularly survey customers' responses on service quality and take remedial actions immediately and consistently, train its staffs so that all staffs can assist customers when they are in need.

- Perceived risk has a significant influence on customers' intention to use online banking. This implies that the bank needs to develop risk-reducing strategies that could reduce the customers' concerns regarding the service. Like building secure firewalls to avoid intrusion, developing methods for strengthening encryption, and authenticating websites in order to prevent fraud are all measures that should be undertaken.

5.4. Direction for Future Research

This research was conducted on the adoption of online banking by CBE personal online banking customers. This study can be extended to corporate customers as well. In this regard, the usage behavior of companies regarding online banking can also be measured i.e. factors influencing their adoption decisions can be analyzed through interviews, surveys and some established e-business models. Lastly, this research was carried out by taking into account experiences of online banking users. Further research can be conducted on non online-banking users; and the factors, which could appeal or motivate them to adopt online banking, can be analyzed, since the study will be helpful for banks to attract new customers, if they are aware of the adoption intentions of non-online banking users. In addition, this study included only four factors, there could be some other relevant factors that may be perceived as important by customers. Future researches, therefore, may consider more factors.

References

- Alhamdani et (2006). Factors Influencing the Adoption and Usage of Internet Banking: A New Zealand Perspective. Auckland University of Technology.
- Bayra (2012). Customer Behavior towards Online Banking in Saudi Arabia: Birmingham Business School.
- Churchill, G. A. (1999). Marketing Research Methodological Foundations. Seventh Edition Fort Worth, The Dryden Press.
- Commercial Bank of Ethiopia, Company Profile dated 30 June 2016.
- Dassanayake, D. D. (2003). Critical Factors Influencing the selection and continued usage of Internet Banking in Sri Lanka.
- Davis, F & Warshaw, P (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models, Management Science 35(8): 982-1003.
- Dineshwar, R & Ashvin, R (2010). Factors influencing the Use of Online Banking in Mauritius: The 9th International Conference on e-Business (iNCEB2010) November 18th – 19th.
- Ebrahim (2010). Factors Affecting the Adoption of Online Banking. International Journal of Business and Management, 5(9).
- Faisal Qayyum & Haider Ali (2012). Factors determining Customers' Adoption of Internet Banking a Quantitative study of Swedish customers.
- Featherman and Pavlou, 2003; Lee, 2009): The factors impacting on customers' decisions to adopt Internet banking Banks and Bank Systems, Volume 7, Issue 3, 2012.

- Field A,(2005). *Discovering Statistics Using SPSS: (and Sex, Drugs and Rock'n'roll)*,London England, *SAGE*.
- George, D., &Mallery, P. (2003).“SPSS for Windows step by step”, A simple guide and reference.11.0 update (4 th ed.).Boston.
- Gonzalez, M. E. (2008). An Alternative Approach in Service Quality: An E-Banking Case Study, Quality Manage, 15, pp. 41-48.
- JasveenKaur&BaljitKaur, (2012), Determining Internet Banking Service Quality andCustomer Satisfaction in India:Apeejay’s Commerce & Management Journal.
- Maholtra.P & Singh.B. (2000). Determinants of Internet Banking Adoption by Banks in India, Emerald Internet Research Vol. 17, No. 3, pp. 323-339.
- Mark, S. et al. (2009). Research Methods for Business Students.5th edition.FT Prentice Hall.
- Murray and Schlacter (1990); Zeithaml(1981), The factors influencing customers’ decisions to adopt online banking.
- Mitchell, (1999).The factors impacting on customers’ decisions to adopt online banking in Singapore.
- Nabil Hussein Al-Fahim (2013)"An Exploratory Study of Factors Affecting the Internet Banking Adoption: A Qualitative Study among Postgraduate Students" Global Journal of Management and Business Research Finance Volume 13 Issue 8 Version 1.0.
- Nasri, W. (2011).Factors Influencing the Adoption of Internet Banking in Tunisia.International Journal of Business and Management, 6(8).
- Perkins, E, and Annan, J. (2013). Factors affecting the Adoption of Online Banking in Ghana: Implications for Bank Managers. International Journal of Business and SocialResearch (IJBSR), Volume 3, No.-6.

- Quaddus, M, and Hofmeyer G (2007).An investigation into the factors influencing the adoption of B2B trading exchanges in small businesses” , European Journal of Information Systems, 16:202-215.
- Rangsan, Nochai, &Titida. (2013). The Impact of Online Banking Service on Customer Satisfaction in Thailand: A Case Study in Bangkok.
- Rakesh, M &Ramya, J. (2014).A Study on Factors Influencing Consumer Adoption of Internet Banking in India.International Journal of Business and General Management Vol. 3, Issue 1.
- Robson, C. (1993). Real world research: a resource for social scientists and practitioner-researchers. Oxford: Blackwell.
- Sara NaimiBaraghani (2007). Factors affecting the adoption of Internet Banking in Iran.Lulea University of Technology.
- Turban, E (2000).Electronic Commerce: A managerial perspective.Prentice Hall International Inc.
- Turban, D (2008).Electronic Commerce: A managerial perspective, 4th edition, prentice hall.
- Tan, Z & Wu, O, (2002). Global and National Factors Affecting E-commerce Diffusion in China, Centre for research on information technology and organizations: Irvine.
- WadieNasri, (2011), Factors Influencing the Adoption of Internet Banking in Tunisia: International Journal of Business and Management Vol. 6, No. 8.
- Yoon Cheolho, (2010), Antecedents of customer satisfaction with online banking in china: The effects of experience, computers in human behavior.
- Yang (1997), Assessing Serviceability and Reliability to Affect Customer Satisfaction of Internet Banking in china: Journal of Software, Vol. 7, No. 7.
- Zeithaml (1981),The factors influencing customers’ decisions to adopt Internet banking.

APPENDIX I
ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
MASTERS OF BUSINESS ADMINISTRATION (MBA) PROGRAM

Research Questionnaire

Dear: Respondents

The purpose of this study is for the partial fulfillment of the researcher's Master's Degree Program in Business Administration at St. Mary's University. I am conducting a research thesis on the title " **Factors Influencing Adoption of Online Banking Service**". Now I need to collect information from you for the successful completion of my research study. Please assist me by giving correct and complete information.

The researcher would like to confirm to you that the respondents as well as the data obtained through this questionnaire will remain confidential and will be used only for an academic purpose.

General Instructions: For your free and genuine responses, please circle for the first section and use the tick (✓) mark for the second section.

NB:OB – stands for online banking

Section A:

1. Gender a. Male
- b. Female
2. Age a. 20-30
- b. 31-40
- c. 41-50
- d. above 51
3. Education Level a. Certificate
- b. Diploma holder
- c. First-degree holder
- d. Master degree holder
- e. Phd

4. How long have you been using online banking?
 a. 1-6 Months
 b. 7-12 Months
 c. More than a year

Section B:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Perceived Usefulness	1	2	3	4	5
1. Using OB enables me to conduct banking transaction more quickly than traditional banking.					
2. Using OB decrease my cost of banking.					
3. Online services are available 24hr a day and 7 days a week.					
4. Using OB enables me to mange my bank account (s) more effectively.					
5. Using OB would increase the quality or output of banking transaction.					
6. OB made communication with the bank much easier.					
7. OB contains enough services.					
Perceived Ease of Use	1	2	3	4	5
1. Learning to use OB is easy for me.					
2. I find my interaction with the OB services clear and understandable.					
3. By using OB various services can be accessed at the same time.					
4. It is easy for me to remember how to perform task with OB.					
5. It is easy to download CBE application either on PC or on cell phone.					
Perceived Risk	1	2	3	4	5
1. Banking on the Internet entails uncertainty or vulnerability.					
2. In using OB, there is no guarantee for financial loss.					
3. I don't feel safe providing personal information about my banking through the OB.					
4. There are negative outcomes on OB.					
5. Using OB, I was confused and incurred errors feel of risk.					

6. No trust in the service.					
Customer Support	1	2	3	4	5
1. I have enough information about OB service.					
2. The bank provides knowledgeable staff to solve problem.					
3. In case of problem happen, I can contact staff immediately. Telephone/email					
4. The bank update customers when there is a new feature on OB service.					
5. Staff can describe step to use and condition to use clearly.					
Intention to Use	1	2	3	4	5
1. For future task, I would use OB.					
2. I believe that using online banking would be an amazing experience.					
3. I plan to use OB on regular basis.					

ENDORSEMENT

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

Advisor

Signature

St. Mary's University College, Addis Ababa June 2, 2017

DECLARATION

I, WintaAfework Haile, declare that this thesis is my original work, prepared under the guidance of Mohammed M.Nur (Ass pro). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for earning any degree.

Name

Signature

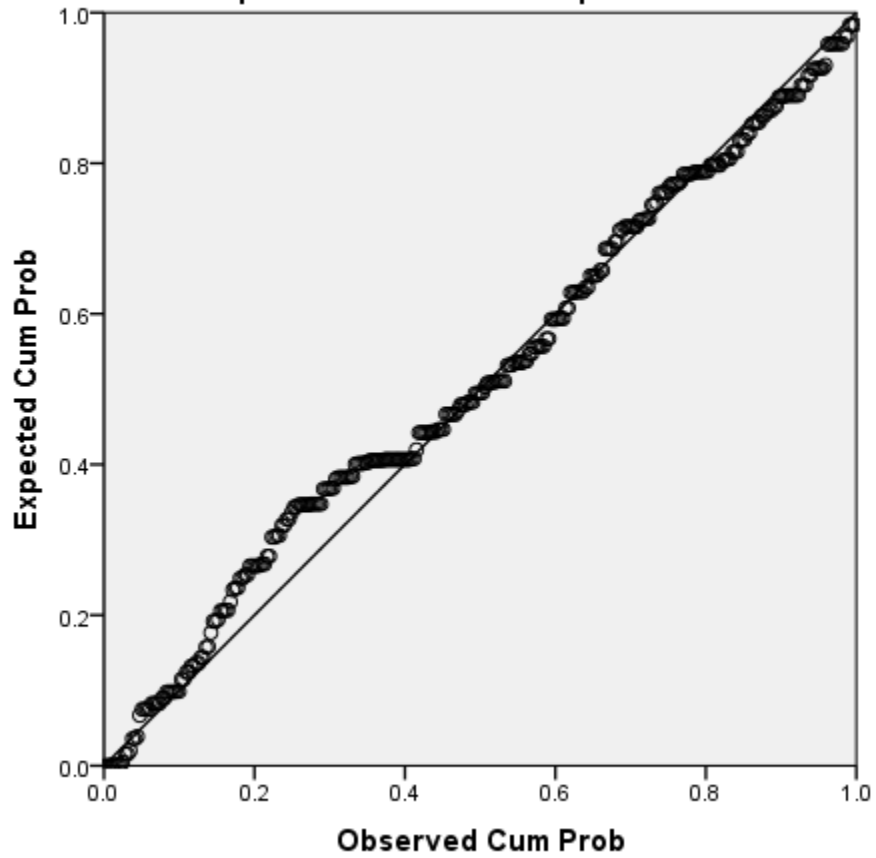
St. Mary's University College, Addis Ababa June 2, 2017

APPENDIX II

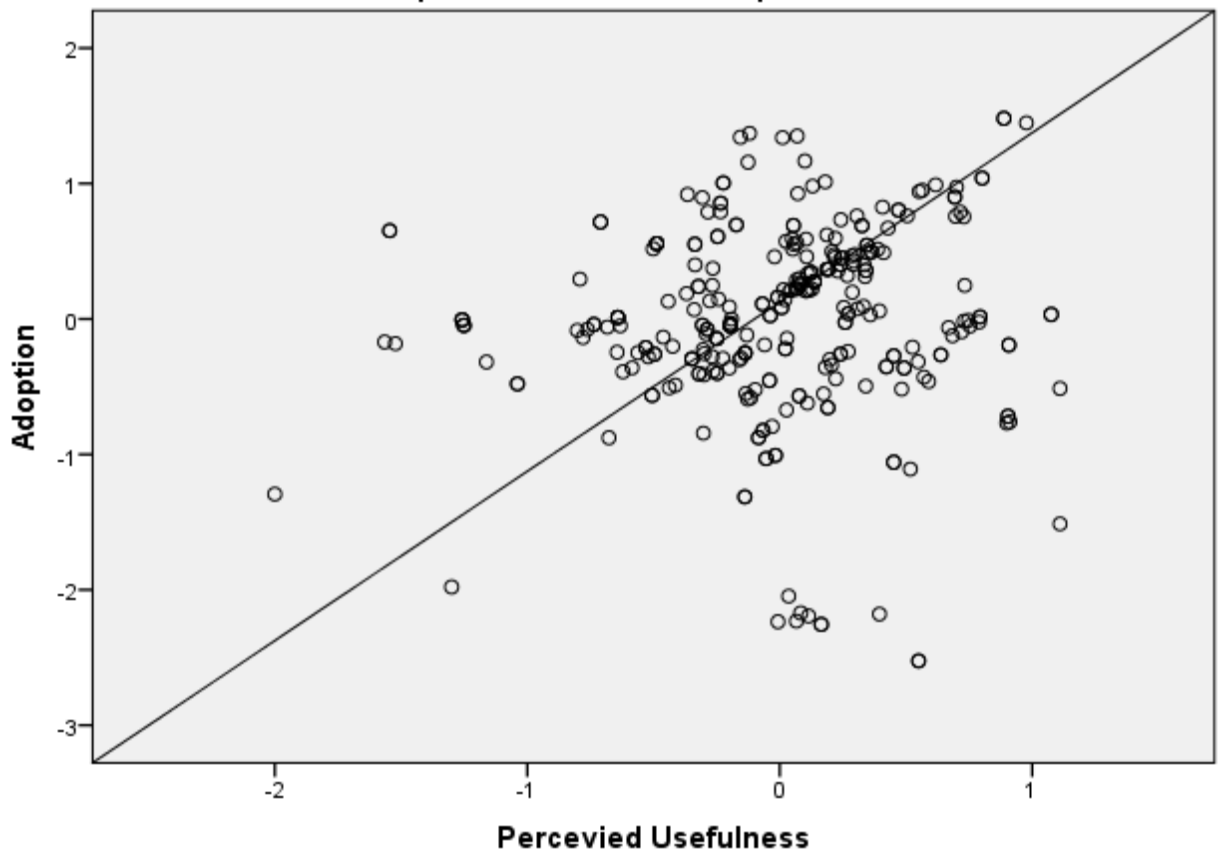
SPSS OUTPUT

Normal P-P Plot of Regression Standardized Residual

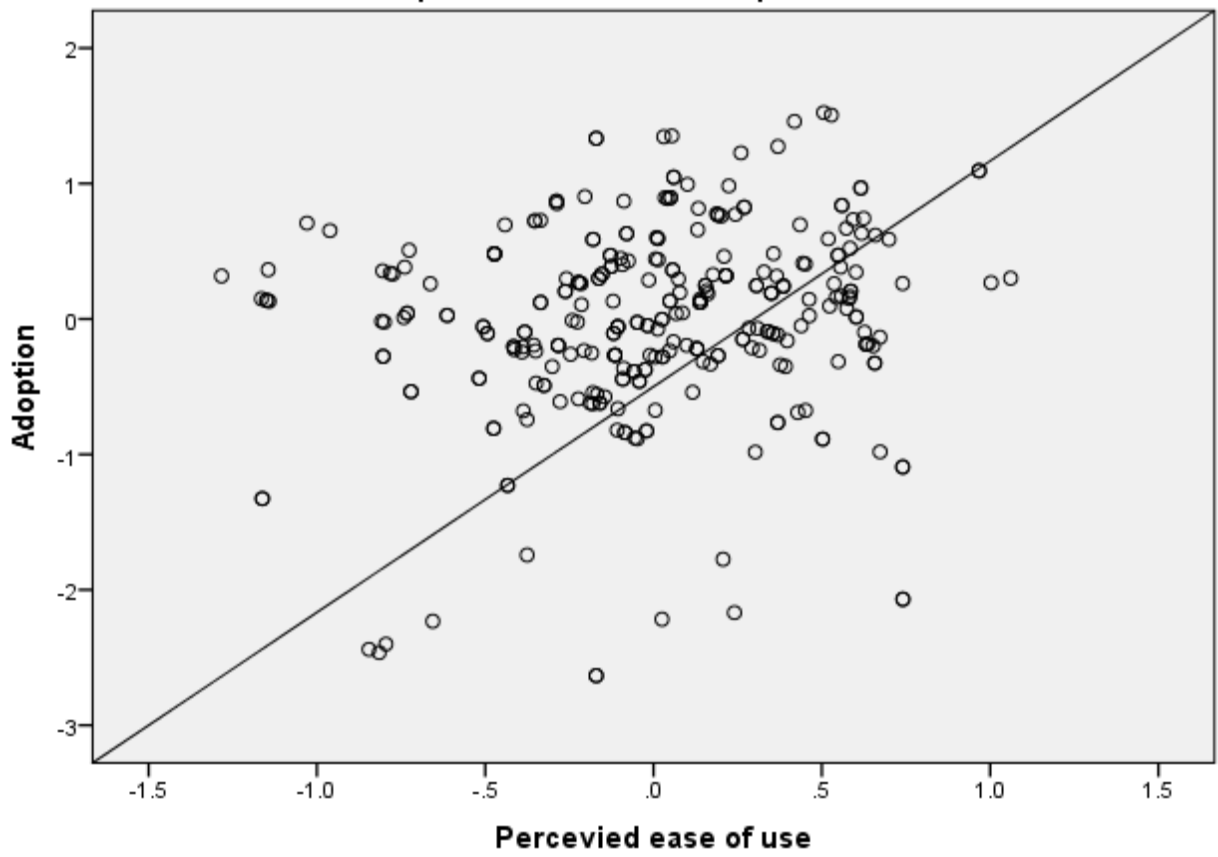
Dependent Variable: Adoption



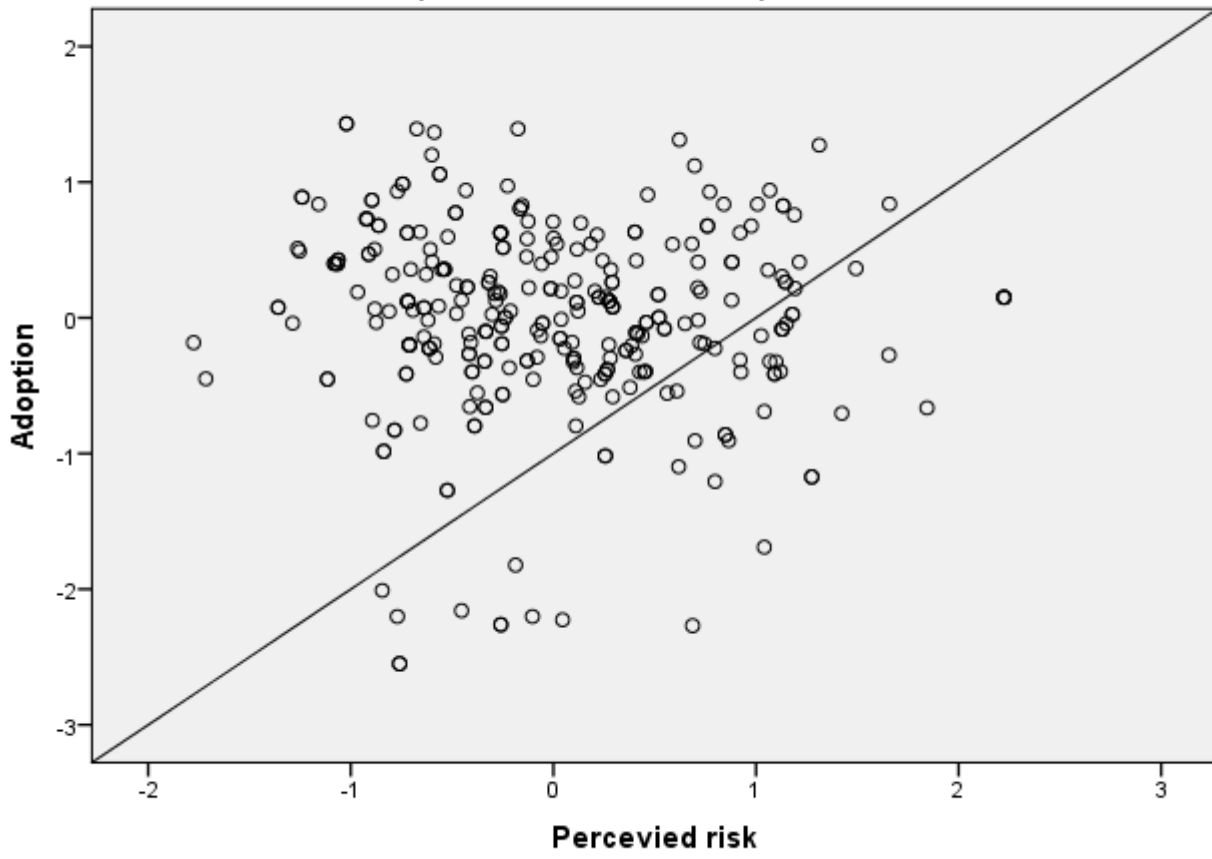
Partial Regression Plot
Dependent Variable: Adoption



Partial Regression Plot
Dependent Variable: Adoption



Partial Regression Plot
Dependent Variable: Adoption



Partial Regression Plot
Dependent Variable: Adoption

