DETERMINANTS OF E-BANKING SERVICE ADOPTION IN AWASH BANK JIMMA CITY BRANCHES

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BY:-

Dereje Asrat Etefa

Under the supervision of

Mr.Wubishet Mengesha (PhD Candidate, Asst. Prof)

Mr. Megersawodajo (Asst. Prof)

MBA Program, Department of Management, College of Business and Economics,

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Declaration

I, the undersigned, declare that this thesis proposal entitled "Determinant of E-banking service adoption in Awash bank Jimma city branches customers." is my original work, and has not been presented by any other person for an award of a degree in the Ethiopia or any other University.
Name: - Dereje Asrat Etefa

_____. _____.

Signature Date

Advisor

This research idea has been submitted for examination with my approval as University advisors

Mr.Wubishet Mengesha (PhD Candidate, Asst. Prof(Main advisor)

. _____.

Signature Date

Mr. Megersawodajo(Co-advisor)

. _____.

Signature Date

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ACRONYMS

ATM	Automated Teller Machine
POS	Point of Sale
PC	personal Computer
PIC	Personal Identification Number
PDA	personal digital assistant
E	Electronic

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Technological innovations play a crucial role in banking industry by creating value for banks and customers, that it enables customers to perform banking transactions without visiting a brick and mortar banking system. The rapidly growing information and communication technology (ICT) is knocking the front door of every organization in the world, where Ethiopian banks would never be exceptional. In the face of rapid expansion of electronic payment (E-payment) systems throughout the developed and the developing world, Ethiopian's financial sector cannot remain an exception in expanding the use of the system (Gardachew 2010, p.2). Technological innovations play a crucial role in banking industry by creating value for banks and customers, that it enables customers to perform banking transactions without visiting a brick and mortar banking system.

Electronic banking (commonly referred as E-banking) is one form of modern electronic payment systems which adds new flavors of cash payment transactions in addition to facilitate the traditional bank services like Cash-deposit and Withdrawal (Datta, 2010). The term is used in different ways. For instance; Natasha, Faiza, Maryum and Atta (2014) used the term for representing all systems and procedures that enables a customer to complete banking transactions electronically without visiting a physical institution. This explanation is considered as the working definition of E-banking in this document.
On the other hand, E-banking has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space (Turban, 2008.) The rise in the Information Communication Technology (ICT) has significant impact on service delivery in most of the organizations adopting information system. Electronic banking has benefited banks as competitive advantage for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labor intensive methods with automated processes, which will

lead to higher productivity and profitability. Banks have embraced self-delivery banking services in their operations to facilitate the timeless financial transactions services to their customer's satisfaction.

E-banking was introduced in Ethiopia for the first time in 2001 by the state owned Commercial Bank of Ethiopia (CBE) using Automatic Teller Machines (ATMs) (Worku, 2010).

However, it was lagged to successfully address the services to its customers mainly due to infrastructure related problems. Following the State pioneer bank, Dashen and Wegagen Banks have started to offer E-banking services through card payments in 2006 and 2010 respectively (Kindie, 2016; Worku, 2010; Zeleke, 2016). Currently, almost all commercial banks in Ethiopia provide E-banking services in one or more ways. Card based payment through ATM and Point of Sale (POS) machines, Mobile banking, Internet banking and Agent banking are some of E-banking services exercised in Ethiopia.

Mobile banking, which is also called M banking, is defined as a channel where by a customer interacts with a bank via a mobile device, such as a mobile phone or personal digital assistant(PDA).Barnes and Corbitt (2001), M-banking is a subset of banking as it allows everyone easy access to their banking operations via mobile handsets, Yu and Fang (2009).The advancement in information communication technology(ICT) is playing a major role for the world in a numerous variety of business activities. Rapid development of information technology has also affected the banking industry world widely in different form. Banks seek always to achieve competitive advantage to be first in market so they keep looking for new technology which can improve the banking services.

Bank customers were able to conduct their business transactions with the bank through personal computers all banking institutions throughout the world have been focusing on determine electronic banking service adoption. By using E- Banking transaction could made 24 hours a day without requiring the physical interaction with the bank, quick and continuous access to information and corporations have easier access as they can change on multiple at the click of button. While E-payment were a fast growing industry among

all types of E-business, it has argued that somehow its positive impact was overestimated in some claims and its limit was underestimated more often.

This study attempted to contribute to the bank and academician by identifying the major challenges of E-banking service adoption for their customers on its verge of high distribution prospect and the future demand of e-banking service in the country, bridge the literature gap and find out how e-banking service adoption could help bank to sustain a strong relationship with their customers within the context of Ethiopia banking.

On the other hand, Awash bank is one of the profitable and leading private banks in Ethiopia. The bank has deployed many internets based services including the e-banking system in all of its branches. Based on the above facts the researcher was highly motivated to see the determinants of e-banking service adoption in Awash bank by taking the case of Jimma city branches.

Therefore, the aim of the study was assess the determinants of e-banking service adoption among the Awash bank Jimma city branches.

1.2 Statement of the Problem

As different studies (Ndubisi and Sinti 2006; Ndubisi*et al*, 2004; Suganthi and Balachandran, 2001; Shanmugam and Guru, 2002)) agreed on the importance of customer acceptance and fully utilizing internet banking services, the success of internet banking is determined not only by banks or government support, but also by customers' acceptance of it(Hosein2009). They also highlighted the crucial role of the comprehensive understanding of the factors such as perceived usefulness, perceive ease of use perceived credibility and computer self –efficacy is that influence customers in adopting and using internet banking (Guriting and Ndubisi, 2006).

(Sarigiannidis et al. 2013) found perceived usefulness, security risk and performance risk, perceived ease of use and quality of the internet connection seemed to have an indirect effect on internet banking adoption in Greece. (Almohaimmeed2012) revealed that perceived usefulness and service visibility directly influence Saudi customers' intention to use internet banking in China. Moreover, perceived, trust, system reliability and

accessibility significantly influence perceived ease of use of internet banking. (Musiime and Ramadhan2011) reported as accessing account, usage, advantages accruing from the usage and use account were significant factors influencing customer's adoption of e banking services in Uganda. (Gikonyo2014) revealed that gender difference, awareness, website features and security are the factors that influence the adoption of e-banking services Kenya.

However, one of the major targets of rendering service which is supported by technology is to win the competition by enhancing service excellence in the banking industry, to increase bank service accessibility, to eliminate the limitation of time and geographical boundaries and to reduce the customer comes to the hall of the branches. On the other hand, the bank designs to with a vision to be one of East Africa's top ten private banks by 2025 G.C. The transformation plan seeks to enhance customer service and shareholder value, while contributing to the national economy through proper mobilization of local finances. The transformation will also prepare Awash Bank for future regulatory requirements, changing demographics and stiffer competition from foreign banks. To bring the vision to realty the e-banking service would play the major role. Therefore, this issue triggered the researcher to identify the determinants of e-banking in the Awash bank taking five branches found in Jimma city branches.

Thus, this study examines the crucial factors such as trust, cost, security and privacy were the factor influencing customers' adoption of e-banking services among Awash bank Jimma city branches. Therefore, the findings of this study aims to provide a greater understanding on the crucial factors influencing customers` E- banking service adoption and contribute to the current body of literature on e-banking services.

1.3. Research question

Based on the problem stated above the researcher would going to answer the following questions

1. What are the services that are being provided through e-banking?
2. What are the determinants of e-banking services adoption?

1.4. Objectives of the Study

1.4.1. General Objective

The main objective of this study was to examine the determinant of e-banking service adoption in Awash Bank Jimma city branches.

1.4.2 Specific Objectives

- To examine the services that are being provided through e-banking in awash bank
- To examine the influence of trust on the adoption of e-banking service.
- To examine the influence of security on the adoption of e-banking services.
- To examine the influence of cost on the adoption of e-banking services.
- To examine the influence of privacy on the adoption of e-banking services.

1.5. Significance of the Study

The finding of this study which details with the factors that influence the adoption of E-banking of commercial bank in Ethiopia is beneficial for different stakeholders such as Banking sector, Awash bank and National bank of Ethiopia and researchers as follows.

For National bank of Ethiopia, since such investigation has policy implication, the finding of this study was used as a directive input in developing regulatory standards regarding E-banking services of commercial banks in Ethiopia. In addition, this study to initiate Awash bank management to give due emphasis on the management of these identified variables and provides them with understanding of activities that enhanced

their e-banking services. This is due to the fact that knowing the factors that influence the adoption of E-banking help the bank manager to concentrate on the quality of e-banking services rather than its quantity. Thus, this Paper enables the management body to visualize the determinants of e-banking services.

1.6. Scope of the Study

The study was focus on contextual and geographical scope. Contextually; the research put emphasis on adoption electronic banking service. According to various researchers noted, there are 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. From the above mentioned the study purposively selected ATM, Mobile banking, internet banking and POS.

The study was limit to examine the determinants of e-banking service adoption of customers in Jimma city, Oromia regional state. The study to examine some factors that determine the e-banking service adoption such as trust, cost, privacy and security the other factors are not included in this study, the scope of the study is only from perspective of customers.

CHAPTER TWO
2. LITERATURE REVIEW

2.1. Introduction

The rapidly growing information and communication technology (ICT) is knocking the front door of every organization in the world, where Ethiopian banks would never be exceptional. In the face of rapid expansion of electronic payment (E-payment) systems throughout the developed and the

Developing world, Ethiopian's financial sector cannot remain an exception in expanding the use of the system (Gardachew 2010, p.2). Technological innovations play a crucial role in banking industry by creating value for banks and customers, that it enables customers to perform banking transactions. Without visiting a branch and monitor banking system. On the other hand, E-banking has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space (Turban 2008). However, mirroring the development of E-commerce, the adoption and diffusion of electronic banking (E-banking) system is not well developed in Ethiopia.

This chapter will present the concepts of electronic banking, status of electronic banking, factors affecting adoption of electronic banking; effects of perceived usefulness, the influence of cost, the influence of security, identify the influence of trust, effects of perceived cost, theoretical framework and conceptual framework. 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). It is simply the use of electronic means to transfer funds directly from one account to another rather than by check or cash (Malak, 2007).

2.2. Theoretical Review

The term E-banking often refers to online or internet banking which is the use of the internet as a remote delivery channel for banking services (Furst&Nolle, 2002, p.5). E-banking is the use of a computer to retrieve and process banking data (statements, transaction details, etc.) And to initiate transaction (payments, transfer, requests for services, etc) directly with a bank or with other financial services provider remotely via a telecommunication network (Yang, 1997). It should note that electronic banking is a bigger is a platform than just banking via the internet.

E-banking could defined as variety of platform such as internet banking or (online banking, TV-based banking, mobile banking, and PC (personal computer) banking whereby customers access these services using an intelligent electronic device, like PC, personal digital assistant(PDA), Automated Teller Machine (ATM), Point of sale(POS), Kiosk, or touch tone telephone (Alagheband,2006). The bank uses online banking system, as it is one of the cheapest delivery channels for banking products (pikkarainen et al, 2004). such a services also saves the time and money of the bank with an added benefit of minimizing the likelihood of committing errors by bank tellers (Jayawardhena, 2000). The supply of electronic banking services enables banks to establish and extent their relationship with the customers (Robinson, 2000). There are other numerous advantages to banks that offered by online banking. Such as mass customization to suit the likes of each user, innovation of new products and services, more effective marketing and communication at lower cost (Tuchilla, 2000), development of non- core products such as insurance and stock brokerage as an expansion strategy, improved marketing image, better and quicker response to market evaluation (Jayewardene and Foley, 2000).

2.2.1. Benefits of Electronic banking

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

A. Benefits to Customers

E-Banking had offers substantial advantages to customers in the form of convenience, time saving and easy access to the banking services. The customers can transact in their account at anytime and anywhere throughout the country or outside the country. There is no time and place restriction. The customers need not visit a branch for each and every transaction and no need to wait in the long queue. By this they could save the time. The customers can avail 24 hours a day and 7 days a week access to banking services at anywhere. With the help of e-banking, the easy access to the banks will be another advantage to the customers. Thus the e-banking provides sophisticated services to the customers (Devamohan, 2002). Dawd (2004) also argued that cardholders can be benefited from the safe and convenient nature of using cards for payment. Moreover, payment cards can make life easy for people who want to travel abroad as it minimizes the volume of cash one needs to carry and the associated risk of theft. From merchants' point of view, those merchants who accept cards enable to increase their sales as card holders prefer merchants who can accept their card for payment. Moreover, by reducing the amount of cash on hand, merchants can manage to reduce risks as well as costs related to cash management.

B. Benefits to Banks

The first benefits for the banks offering electronic banking services is better branding and better responsiveness to the market. In this competitive world, E-banking helps the banks to attract more number of customers and tackle the competition from other banks. According to Olga (2003), those banks that would offer such services would be perceived as leaders in technology implementation. Therefore, those banks that provide the service can enhance the customer satisfaction through sophisticated services. By providing secured e-Banking services, the banks can also avoid fraudulent activities. With the help of e-banking, banks can save time and hence they can increase the number of transactions and business (Devamohan, 2002). The other benefits of e-banking are possible to measure in monetary terms. The main goal of every company is to maximize profits for

its owners and banks are not an exception. In this regard, automated e-banking services offer a perfect opportunity for maximizing profits (Olga, 2003).

2.2.2. The Adoption of Electronic Banking

According to Aliyu, Younus and Tasmin (2012), e-banking is the provision of banking services through internet technology to the customers. E-banking also can be defined as an internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments.

Through e-banking, the customers will be able to transfer from one account to the other, can make cash withdrawals and pay the utility bills by using the personal computer (PC) or mobile phone. This service includes the system which enables the customers of the financial institution, individuals or businesses to obtain information on financial products and services and also through a public or private network, in which enables them to access business accounts transaction (Al-Ajam& Nor, 2013).

In addition, the customers also can pay bills online by using the bill payment service and make transfers between the accounts rather than just check their account balances and transaction history. Moreover, this service is backed with relatively high of security, that certainly will increase the confidence of the customers to use it. The e-banking also provides convenience services to the customers in term of geography, time saving and selection of banks Zheng, 2010; Adams et al., 2016). Therefore, through e-banking, the customers can access their accounts 24 hours per day and seven days a week. Therefore, it is hypothesized that adoption of e-banking is significantly higher among banks' customers.

The information technology revolution in the banking industry, especially in regards to distribution channels, began in the early 1970 with the introduction of the credit card, the Automatic Teller Machine (ATM), and the ATM networks (Gan, Clemes,Limsombunchai, &Weng, 2006). This was followed by telephone banking, cable television banking in the 1980s, and the progress of personal Computer (PC) banking inthe late 1980s and in the early 1990s Information technology enabled electronic

channels to perform many banking functions that were traditionally carried out over the counter(Giannakoudi, 1999).

2.2.3. Forms Electronic banking

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

2. 2.3.1. Automated Teller Machine

Automated Teller Machine (ATM) is an electronic machine in a public place, connected to a data system and related equipment and activated by a bank customer to obtain banking services without going in to the banking hall. It allows customers to access banking services such as withdrawals, transfers, inquiries about account balances, requests for cheque books, account statements, direct deposits, foreign Currency exchange etc. (Fenuga, 2010). Using an ATM requires an ATM card and a pass code, often referred to as a PIN (Personal Identification Number). The ATM is also called 24hour teller are electronic terminal which gives consumers the opportunity to bank at almost any time and one of the easiest and widely adopted retail electronic banking (Nyangosi et al .2009). it is described as combination of computer terminal, record keeping system and cash vault in one unit, permitting customers to enter the banks book keeping system with plastic card containing a personal identification number or purchasing a special code number into the terminal linked to the banks computerized record 24 hours a day (Rose, 1999). To withdrawal cash, making deposit or transfer funds between accounts a consumers need automated teller machine card and personal identification number. Once the customer login, access to transaction are displayed on the screen. It offers several retail banking services to customers.

2.2.3.2. Internet Banking

The concept of internet banking activities performed through electronic networks. It is the most recent delivery channel of banking services which is used for both business to business (B2B) and Business to customers (B2C) transactions. By using internet banking customers can get varieties of services. Such as, payment of bills and invoices, transfer of

funds between accounts, applying for loans, payment of loan installments, sending funds to third parties via e-mails or internet connections regardless of where the client is located (Rahman,2002). Internet banking is the cost effective and cheapest delivery channel which reduces a large number of staff needs. Because no need a large number of employees to do their transactions. All the transactions can be done through the internet. Internet banking provides competitive advantages to the banks (Ortega, Martínez and Hoyos, 2007).With the development of the information technology banking sector's performance boosts day by day. Banks should consider reducing the inconvenience, minimizes cost of transactions and time saving to be important (Kaleem, 2008)

Internet banking is conducted by completing bank transactions by directly accessing the bank through the internet. Nowadays, internet banking customers can access many different services online, which makes physical banks open even after office hours. Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution.

Internet banking can be conducted either by accessing the internet with a computer or by using a phone that has internet features (Alabar&Timothy, 2012).

Owens and Robertson (2000) contend that it takes longer for physical organizations to develop an integrated e-commerce structure than it does for virtual traders to commence trading. This is due to the reduced, simple physical structure of the virtual organizations. They argue that a structure of similar efficiency must be adopted by physical organizations for the provision of Internet services. (Mohammed shah, 2009) p-32

2.2.3.3. Mobile banking

Mobile banking (also known as M-Wallet banking) is a term used for performing balance checks, Account transaction, payments, credit application and banking transaction through a mobile device such as a mobile phone or personal Digital Assistant (PDA). The easiest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no

infrastructure, especially remote and rural areas. This aspect of mobile commerce is also popular in countries where banks can only be found in big cities, and customers have to travel several miles to the nearest bank. The scope of offered services my included facility to conduct bank and stock market transaction, to administer account and to access customized information (Tiwari &Buse, 2007).

2.2.3.4. Point of sale (POS)

An electronic fund transfer at the POS is an on-line system that allows customers to transfer funds instantaneously from their bank account to merchant account when making purchases. POS uses debit card to activate an electronic fund transfer process. A point of sale transfer allows customers to pay for retail purchase with a check card, a new name for debit card Chorafas, (1988). Increased banking productivity results from the use of point of sale to services customers shopping payment requirements instead of clerical duties in handling cheques and cash withdrawal for shopping. Furthermore, the system continues after banking hours, hence continual productivity for the bank even after banking hours. It also saves customers time and energy in getting to bank branch or Automated Teller Machine for cash withdrawals which can be harnessed into other productive activity (Abor, 2004). Some banks issued international card (such as Visa card, Master card, etc.) to their customers. Such cards can be used wherever accepted, and payment on the cards can only be done through an ordinary domiciliary account of the card holder, or any other account that may be permitted. Some these cards are credit or debit cards.

2.2.4. Factors determine Adoption of Electronic Banking

A. Perceived Trust

There are studies revealed as Security has positive significant influence on e- banking service adoption (Al-Somali et al. 2008 and Bultum2014). The implication for this evidence was establishing a clear set of legal framework on the use of technology in banking industry, supporting banking industry by investing on ICT infrastructure and

banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition.

B. Service security

Security is defined as the freedom from danger risk, or doubt it involves physical safety, financial security and confidentiality. It consists of employees who are consistently customers, making customers feel safe in their transactions, employees who are consistently courteous and employees who have the knowledge to answer customer question (Parasuraman, Zeithaml& Berry, 1985). Moreover, security is defined as personal and possessions safety of the customers. It also includes confidentiality maintained by services providers (Jon stone, 1997). Security is another essential determinant in the decision of consumers to use Internet banking. Strong issues on security are a common concern to individuals hence their unwillingness to use internet banking (Madu, 2002). Finally, Cunningham (2003) indicated that one of the most important future challenges facing individuals or customers of a bank is the fear of higher risks associated with using the Web for banking and financial transaction.

C. Privacy

Similarly, the result of this study shows Privacy has a significant influence on customers in adoption of e-banking. This is similar to study conducted in Lebanon by (Daghfous and Toufaily2007) and study in Singapore by (Gerrard*et al.*2006).This is because electronic banking services are in inherently risky environment due to the absence of personal contact, physical product evaluation, warranties and contracts. This implies that customers might be concerned about the length of time involved in waiting for transaction or learning how to operate it.

D. Perceived Cost

According to Ching and Ellis (2004, p.414) adoption will be driven by the perceived costs and benefits inherent in the particular innovation. The cost of an innovation has many components initial investment costs, operational costs, and utilization costs. Roth well and Gardiner (1984,p.88) observe that there are two fundamental sets of factors

affecting user needs, namely price factors and non-price factors. To this extent Gupta(1988, p.353) identifies price as a major factor in brand switching. If consumers are to use new technologies, the technologies must be reasonably priced relative to alternatives. Otherwise, the acceptance of the new technology may not be viable from the standpoint of the consumer.

The degree to which an individual view that utilizing mobile banking will incur cost is defined as perceived cost (Lurann& Lin 2005). These costs could typically include the cost of the mobile devise, network charges, and transaction charges for bank costs as well as costs for data sent via the network infrastructure.

2.3. Empirical Review

Some related studies are conducted by different researchers in different parts of the world, however, there are limited numbers of studies conducted in Ethiopia on e-banking technology. Specifically, (Gardachew, 2010) conducted a research on the opportunities and challenges of e-banking in Ethiopia. The 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 concluded 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 rate of illiteracy and absence of financial network that different banks.

Wondossen&Tsegai (2005) also studied the challenges and opportunities of e-payments in Ethiopia; their objective was studying of e-payment practices in developing countries. The authors employed interview and on site observation to investigate challenges to e-payment in Ethiopia and 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. According to (Wondwossen&Tsegai, 2005), an adequate legal structure and security framework could foster the use of e-banking, which is contradicting with the finding of the previous study.

The study of (Bultum, 2014) aims to identify factors that affect adoption of e-banking in

the Ethiopian banking industry. The study was conducted based on the data gathered from four banks in Ethiopia; three private banks (Dashen bank, Zemen bank and Wegagen bank) and one state owned bank (commercial bank of Ethiopia).

A mixed research approach was used to answer the research question that emerges through the review of literature and experience of the researcher in respect of the e-banking system in Ethiopia. The study statically analyzes data obtained from the survey questionnaire. A research frame work developed based on technology-organization environment model (TOE) developed by Tornatzky and Fleischer.

The result of the study indicated that, the major barriers Ethiopian banking industry faces in the adoption of electronic banking are: security risk, lack of trust, lack of legal and regulatory frame work, lack of ICT infrastructure and absence of competition between local and foreign banks.

The study suggests a series of measures which could be taken by the banking industries and by government to address varies challenges identified. These measures include establishing a clear set of legal frame work on the use of technology in banking industry, supporting banking industries by investing on ICT infrastructure and banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition. Furthermore (Assefa, 2013) conducted a study on the impact of e-banking on customer satisfaction in two privet banks in Gondar city. The researcher employed descriptive and inferential statics in analyzing this study and it was limited to customers of two private banks only.

On the other hand, the study conducted by Daghfous and Toufaily (2007) on the success and critical factors in adoption of E-banking by Lebanese banks. The research was conducted on the factors that can lead to success the adoption of E-banking and the other factors that can constitute as barrier to its adoption, it focusses on the organizational, structural and strategic factors which can accelerate or, on the contrary, slow the adoption of this electronic mode of distribution and communication by the banks, through analyzing the case of the Lebanese market.

In order to test the validity of the theoretical framework, structured survey was used, interview questionnaire that was given to E-banking managers or to information technology managers of all the banks on the official list of institutions operating on the Lebanese market, with a total of 57 banks, 31 of them operate internationally and 26 are strictly local were used to gather data. The results of their study shows that the organizational variables (bank size, functional divisions, technical staff, technical infrastructure, perceived risks, decision maker international experience and mastery of innovation) are variables which exert significant impact on the adoption of E-banking, among the structural characteristics, the result revealed that internal technological environment of the bank is a very important factor in determining the adoption of e-banking, also the result shows that banks which are developing in the international scale are more likely to adopt E-banking innovations. Finally, the result of the study indicated that extent of penetration of E banking in the growth phase of an emerging market has an important correlation with the improvement of commercial performance.

The other descriptive case study analysis conducted by Khalfan*et al* (2006) on 'Factors influencing the adoption of internet banking in Oman, aimed to identify the main potential factors or impediments that are currently inhibiting the incorporation or adoption of E-commerce applications in the Omani Banking sector. Data, used in their study were collected using semi structured interviews and survey questionnaire as well as reviewing some bank documents.

The results of their study provide a Pragmatic picture about the adoption of E-Commerce applications in the core financial sector domain of Oman.

One of the main findings is that security and data confidentiality issues have been a major barrier. The banking sector was reluctant to use E-commerce applications as they felt that transactions conducted electronically were open to hackers and viruses, which are beyond their control. Lack of top management support is the other inhibiting factor in the adoption of electronic commerce applications as per their finding. The study of Shah *et al.* (2005) on critical success factors (CSF) in E-Banking conducted in United Kingdom, aims to determine the critical issues related to financial sector organizations when they establish businesses online.

The survey method was used by researchers which target the financial sector in the UK. The study indicates that Understanding the CSFs in E-banking is important for senior management of banking related organizations, because it would potentially help them improve their strategic planning process. The analysis of the study indicates two major types of statistical analyses were conducted, descriptive statistical analyses and factor analysis. In descriptive analyses, the factors (or variables) were ranked in order of their mean score, the highest score being the most important and so on. The top six factors in order of importance were: user-friendly website, systems security, support from top management, fast responsive customer service, promotion of electronic commerce within organization, and all time availability of services and rapid delivery of services.
Gerrard *et al.* (2006) in their study in Singapore identify risk to be an important factor for Internet Banking adoption. All respondents who did not use Internet Banking services had a negative perception of the security in Internet 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, Concern about risk was mentioned by all respondents. An empirical investigation conducted by Sathye(1999) on the adoption of Internet Banking by Australian consumers also identified, security concerns as key factor in internet banking adoption. A report on Internet Banking in Australia finds that, security concerns among banks and customers are keeping both away from Internet Banking" Sathye (1999).The study of Kerem (2003) on the adoption of electronic banking: underlying consumer behavior and critical success factors conducted in Estonia, was intended to study the further understanding of, how consumers perceive electronic banking in the heyday of interactive channels inEstonia, as Estonia is internationally renowned for being a pioneer in the acceptance of new technologies. A series of an in depth interviews was conducted with leading industry experts in Estonia.

The selection criterion for the respondent was mainly their involvement with the development of Internet banking systems from the early days of its emergence. The survey conducted for this research addressed six different issues influencing the adoption

of Internet banking (Better prices, Recommendations, Better service, Marketing efforts, Better access and higher privacy). The most important factors in starting to use Internet banking are first and foremost better access to the services(convenience), better prices and higher privacy. Better service (i.e. preferring self-service over office service) was also of above the average importance. Two factors that the respondents did not consider relevant to their adoption decision were banks' marketing activities and personal recommendations from friends and colleagues. Also the survey conducted six main obstacles (computers are difficult, no access to internet, internet banking is expensive, low security, have had no chance to try and I prefer personal contact) in adopting Internet banking (results of a preliminary study, 100 respondents), the most important factors discouraging the use of Internet banking are lack of Internet access and not having a chance to try out Internet banking in a safe environment.

Finally, the research indicates that banking activities alone may not be sufficient in achieving growth if general infrastructure, economic environment and government initiatives are not supportive. The research conducted on identifying the attitudinal, social and perceived behavioral control factors that might influence the adoption of Internet banking by Hoppe *et al.* (2001**)**were based on theory of planned behavior (TPB) and the diffusion of innovations theory (DIT)developed by a previous research in Singapore. The aim of the study was to collect South African detain order to test out the hypotheses regarding the factors, which affect adoption of Internet banking and compare these results with those collected in other countries. Online questionnaire was used to collect empirical data and the results of the study shows that intention to adopt. The study of (AlaEddin& Hasan, 2011) on e-banking functionality and outcomes of customer satisfaction in Jordanian commercial banks, it aims to explore the adoption of e-banking functionality and investigates the impact of e-banking on the outcomes of customer satisfaction.

A purposive sampling technique was employed to recruit 179 customers representing the desired range of demographic characteristics (e.g. gender, age, and computer use), previous internet experience levels and product-related knowledge. The research showed that adoption of e-banking (accessibility, convenience, security, privacy, content, design, speed, fees and charges) had a positive effect on Jordanian Commercial Bank customers"

satisfaction. Gerrard et al (2006) in their study in Singapore identify risk to be an important factor for Internet Banking adoption. All respondents who did not use internet banking services had a negative perception of the security in Internet 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; concern about risk was mentioned by all respondents.

The study done by (Nathet al.2013) in Malaysia found as security, cost, trust and privacy are a significant factor of e banking service adoption. This implies that since trustworthiness assumes high significance towards user's willingness to adopt e-banking banks, concentration on factors that are found to influence customer's trust such as improving their security and privacy policies and creating more reliable web sites expected from the bank mangers.

(Bultum2014) indicated that the major barriers Ethiopian banking industry faces in the adoption of Electronic banking are: security risk, lack of trust, lack of legal and regulatory frame work, Lack of ICT infrastructure and absence of competition between local and foreign banks. The study suggests a series of measures which could be taken by the banking industry and by. Government to address various challenges identified. These point out that measures like establishing a clear set of legal framework on the use of technology in banking industry, supporting banking industry by investing on ICT infrastructure and banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition.

2.4. Research Gap

The result of different study by different researcher motivated the researcher to examine further assessment on determinants of e- banking service adoption in Awash bank specifically and also contributed for other banks which found in Ethiopia, by investigating factors which affect customer’s e-banking service adoption. Thus to address the current gap in the literature, empirical and question of representativeness this study designed to examine the determinants of e-banking service adoption on customers of Awash Banks in Jimma city.

2.5. Conceptual Framework

The study aimed at establishing determinants of electronic banking adoption by customers in selected Awash banks branches in Jimma city. These branches were namely Jimma branch, Jiren branch, shenen Gibe branch, hirmata branch, Aba jifarbaranch. The independent variables are; perceived trust, perceived cost, perceived privacy and perceived security, while the dependent variable is adoption of electronic banking.

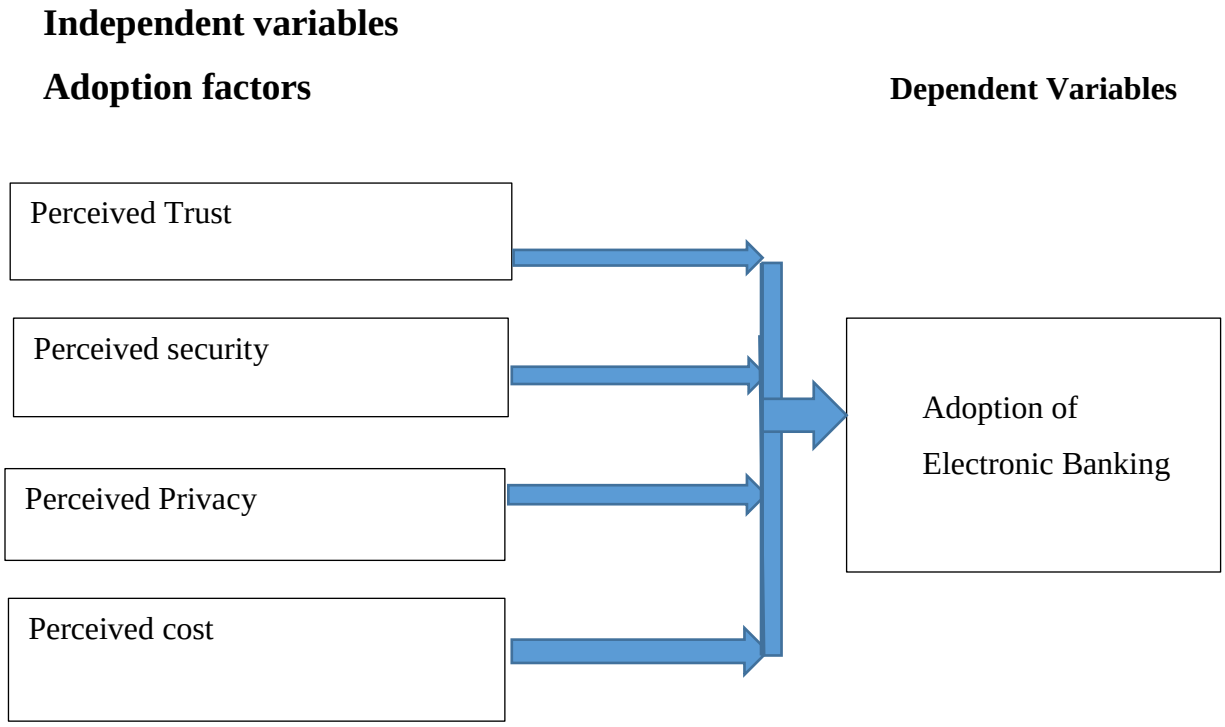


Fig.2.1. conceptual Framework

Source: Researcher 2020

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research approach

Saunders et al. (2012) state that there are three types of research approach: the deduction (quantitative) approach and the induction (qualitative) approach, and mixed (pragmatist) a combination of qualitative and quantitative method in a single study widely practiced and accepted in many areas of research. Quantitative research makes use of questionnaires, surveys and experiments to gather data that is revised and tabulated in numbers, which allows the data to be characterized by the use of statistical analysis (Creswell, 2007). In addition, quantitative researchers measure variables on a sample of subjects and express the relationship between variables using effect statistics such as correlations, relative frequencies, or differences between means; their focus is to a large extent on the testing of theory

3.2 Study Area Description

This study carried out in Jimma city. Jimma is situated in South-Western part of Ethiopia at a distance of 370 kilometers from the capital, Addis Ababa. The city is one of the business centers of Ethiopia and could have taken as the center of South-Western part of Ethiopia.

3.3 Research Design

A research design refers to plan that guide a researcher on how to organize the research activities (Bryman& Bell, 2003).This study identifies and examine the factors that determine e-banking service adoption among Awash bank customers in Jimma city. For the purpose of this study explanatory research design was adopted which helps to identify the relationship between dependent and independent variables. Since this study attempted to explain determinants of e-banking service adoption in Awash bank Jimma city, an explanatory design was used to present and to explain the cause and effects of the phenomenon under investigation.

3.4. Target and Study Population

The target population of this study active user of E-banking customers of Awash bank Jimma city branches, which were using the e-banking service since December 31, 2019. In order to collect the right data from the right person, the five Awash bank branches namely Jimma branch,Hirmata branch, Aba Jifar branch, shenen gibe branch and Jiren branch were selected due to their adoption of E-banking and to maximize the possibility of acquiring much data.

According to annual report of Awash bank Jimma District office, the total population 8,214 as of December 31, 2019.

3.5. Sampling Technique

There are two sampling methods, non-probability and probability (Mugenda and Mugenda 1999). Non-probability techniques were used when the researcher is not interested in selecting a sample that was representative of population. Among non-probability sampling technique, the researcher used convenience sampling technique.

Convenience sampling is affordable, easy, cost effective and the subjects are readily available. It is compulsory for the researcher to describe how the sample would differ from the one that was randomly selected. it also necessary to describe the subjects who might be excluded during selection process or the subjects who are overrepresented in the sample. The main objective of convenience sampling is to collect information from participants who are easily accessible for the researcher like recruiting providers attending a staff meeting for study participation. Although commonly used, it is neither purposeful nor strategic. The main assumption associated with convenience sampling is that the members of the target population are homogeneous.

There are different types of probability sample designs. The most basic one is simple random sampling. The designs increase in complexity to encompass systematic sampling, probability proportional-to-size sampling, cluster sampling, stratified sampling, multistage sampling and multi-phase sampling. Each of these sampling techniques is useful in different situations. If the objective of the survey is simply to provide overall population estimates and stratification would be inappropriate or impossible, simple random sampling may be the best. If the survey is performed by interviewers (though it is

not typical in business statistics) making the cost of survey collection high and the resources are bounded, cluster sampling is used.

Therefore, the researcher used probabilistic sampling techniques. Among probabilistic sampling techniques, the researcher used simple random sampling techniques since it is easy to have lists workers.

3.6. Sample size Determination

A sample design refers to a plan used in obtaining a sample from a population. It is a technique or procedure which the study adopts when selecting sample items (Kothari, 2004). To design the sample, setting the size of the population and the target population for the research purpose is essential. Accordingly, it was clearly indicated in the above sections that the target population was the number of customers of Awash bank using e-banking service in Jimma city in the selected five branches. But, the question here is how many of these were enough to justify or respond so that the research questions are adequately answered. It is known that samples should representative so that the conclusion to be reached can be free of any hasty generalizations.

On the other hand, the sample taken has manageable so that the output cannot be distorted. Therefore, an appropriate formula was taken to minimize the risk of the above two. Accordingly, Yamane (1967) has introduced a formula in which sample can be determined from a finite population. Accordingly, researchers go to select the degree of precision and level of confidence that was preferred. And as a result, the researcher confident about 95% and that tolerated sampling error only 5%. The formula the researchers go to select and obtained from Yamane (1967) for sample determination is presented below.

$\mathbf{n = \frac{N}{1+N(e)^2}}$ Where: n –sample size, N –population and e -permitted error.

$\mathbf{n = \frac{8214}{1+8214(.05)^2} = \frac{8214}{1+8214(.0025)} = \frac{8214}{1+20.535}}$

$\mathbf{= \frac{8214}{21.535} = 381}$

The number of respondents proportional selected from each branch by using formula of:

$$n! = \frac{n * N!}{N}$$

Proportional formula used to select respondents from each branch, because the branches have no equal customer s of using electronic banking services and take equal chances for customers.

n! = sample size for each branch

N= total number of population

N! = total number of population targeted branches

Jimma branch n! = $\frac{381*2643}{8214}$ **=123** **Hirmata branch n! =** $\frac{381*1662}{8214}$ =77

Aba Jifar branch n! = $\frac{381*1137}{8214}$ =52 **Shenen Gibe branch n! =** $\frac{381*1537}{8214}$ =71

Jiren branch n!= $\frac{381*1235}{8214}$ =58

3.7. Source of Data and Data Collection Method

The source of data is primary and secondary data. Primary sources of data include questionnaire and interview. Structured questionnaire was used to gather data from respondents of the study. The researcher used both closed ended and open ended questionnaire. The questionnaire had three parts the first background of respondents such as age,sex, occupation, education and etc. The second section about determinant of e-banking adoption and the third section is question related to dependent variables would develop. The study would use closed ended question through Likert scale 1-5 from strongly agree to strongly disagree. The questionnaire is designed its consistency is pre-test using Cronbach'sAlpha and then translated to Afaan Oromo and Amharic. Active users of e-banking customers of Awash bank in Jimma city branches used for the study. The questionnaires were distributed for respondents at working hour and brief explanation give to respondents on how to fill the questionnaire. Additionally, structured interview also used to ask the branch managers of Awash bank branches in Jimma town.

Secondary source of data those of which were made available and collected from the website of the bank, from books, reports and published articles as well as existent information, collected by researchers for different purposes.

3.8. Methods of Data Analysis and Presentation

For the analysis the data, descriptive and inferential statistics used. Statistical Package for Social Science (SPSS) software version 20 used to perform various statistical analyses and hypotheses testing. The stages in the statistical analysis were data preparation, tabulation of data, and then various tests that conduct to analyses relationships. Based on the questionnaire, frequencies and percentages would used for all variables of this study. To achieve this research objective which was to assess the influence of e-banking service adoption among Awash bank customers in Jimma city, multiple linear regression model was used. The independent variables include Trust, privacy, cost and, Risk. The dependent variable is an Adoption of Electronic banking service.

3.9. Multi co linearity

However, the analysis of validity and reliability has to prove that the data set used for further analysis with confidence. According to methodologist researchers it is not suggested to keep or use the items under a scale if the multi co linearity is high. This means that a high level of multi co linearity among the items indicate that they are not independent to each other which ultimately affect the reliability of research instruments and the finding of research (Burns & Burn, 2008). For assessing the multi co linearity of original constructs (i.e. how the items under different constructs are correlated), this research employed the technique of co linearity assessment (i.e. the tolerance and VIF value). According to this assessment any item having VIF value of less than 10 indicates the items are reliable for performing any further analysis (i.e. the analysis is free from the issue of multi co linearity) (Burns & Burns, 2008). However, it is strongly suggested that the lower the better.

3.10. Model specification

The equation of regressions on this study was generally built around two sets of variables, namely dependent variable (e-banking service adoption) and independent variables (trust, cost, privacy and security). The basic objective of using regression equation on this study was to make the study more effective at describing, understanding and predicting the stated variables. The multiple linear regressions are as follows

$$Y= \beta_o+\beta 1X1+\beta_2X_2+\beta_3X_3+\beta_4X_4+ \epsilon$$

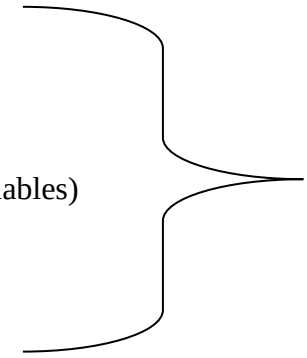
Y = e-banking adoption (dependent variables)

X1 =trust

X2 = security

X3 = cost (independent variables)

X4 =privacy



$\beta 1- \beta 4$= Regression Coefficient β_o= constant Є = Error term

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3.11. Ethical Consideration

Mugenda (2008) underlines that participation of the respondents are in voluntary bases and they have right not to give response without researcher obligation. Therefore, the researcher was contacted and received informed consent from the respondent. The respondents are not forced to take part in the study, thus the principle of volunteerism was practiced all through data collection method. Furthermore, the respondents are informed that information obtained is only for academic purpose and remain confidential.

CHAPTER FOUR

4. DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1. Introduction

Findings of the study are provided in this chapter. It also highlights various sections which are general information of respondent, descriptive statistics, background information of the respondents, correlation analysis, and multiple linear regression analysis. The results are presented in form of graphs, figures and tables.

4.2 Descriptive statics

Findings of the study are provided in this chapter. It also highlights various sections which are Response rate, descriptive statistics, and background information of the respondents, correlation analysis, and multiple linear regression analysis. The results are presented in form of tables.

General information of respondent

This study shows that 228 (59.8%)of the respondents in the study were males and the rest 153 (40.2%) were females. And also indicated that 42(11%) of the total respondents are less than 20 years old and 64(16.8%) of them are more than 30 years old.

However the majority of respondent 275 (58.3%) were aged between 20-30 years. Concerning about marital status 222(58.3%) of respondents were single while 159 (41.7%) of respondent were married. Additionally this study indicate that 58(15.2%) are from High school or less, 102(26.8%) Diploma holders, 221(58%) are first degree and above.Similarly, the below table 1 shows that 298 (78.2) are e-banking users while the remaining 83(21.8) are not e-banking users. This implies the most of Awash Bank Jimma District are e-banking users.

Table 1. General information of respondents

Variable		Frequency	Percent
Sex			
• Male		228	59.8
• Female		153	40.2
Age			
• <20		42	11
• 20-30		275	72.2
• 31-60		64	16.8
Marital status			
• Single		222	58.3
• Married		159	41.7
Educational status			
• Primary		0	0
• High school		58	15.2
• Diploma		102	26.8
• Bachelor degree and above		221	58
Employment status			
• Unemployed		8	2.1
• Student		83	21.8
• Employed		199	52.2
• Business man/women		91	23.9
Use electronic banking service	yes	298	78.2
	No	83	21.8

Table 2. Distribution of E- Banking users in tem of service type

		Frequency	Percent	Valid Percent	Cumulative Percent
	ATM	109	28.6	36.6	36.6
	Mobile Banking	114	29.9	38.3	74.8
	POS	31	8.1	10.4	85.2
	Internet banking	44	11.5	14.8	100.0
	Total	298	78.2	100.0	
Missing	System	83	21.8		
Total		381	100.0		

Source: Survey Data, 2021

The above Table 2 shows that the Distribution of e-banking users in classification of service type. Accordingly, ATM,Mobile banking ,Internet banking and Point of sales(POS) are type of e-banking services delivered by Awash banks. Thus, the above table 2shows as 108(28.2) of respondents are ATM users.114 (29.9), 31(8.1), 44(11.5) of responds are Mobile banking, Internet banking and POS users respectively. The remaining 83(21.8) of the respondents are non users.

4.3. Determinants of e-banking service Adoption

Table 3 Trust on E-Banking Service Adoption

Variable	Agree		Undecided		Disagree	
	N	%	N	%	N	%
Perceived TRUST						

E-banking completes a task accurately	272	71.9	38	10	71	18.7
E-banking deliver the service exactly as promise	279	73.2	26	6.8	76	19.9
E-banking perform the service right at the first time	253	66.4	65	17.1	63	16.5
In using E- banking, I believe that all my information is kept confidential	298	78.2	41	10.8	42	11

Source: Survey Data, 2021

According to this study 272 (71.9%) respondents were agree on e-banking completes a task accurately. However, 71 (18.7%) of respondents disagree on E-banking completes a task accurately. The remaining (38)10.8% were undecided on their answer about E-banking completes a task accurately. Respondents of 279(73.2%) agree on the assumption of E-banking delivers the service exactly as promised. Were as 76 (19.9%) disagree on the assumption of E-banking delivers the service exactly as promised. The remaining (26) (6.8) of respondents were undecided on e-banking completes a task accurately.

Concerning E-banking perform the service right at the first time respondent were agree on the performance of E-banking service right at the first time while 63 (16.5%) of respondent disagree. However 253(66.4%) of respondents were agree on E-banking perform the service right at the first time. Concerning confidentiality most of respondents 298(78.2%) agree in using E- banking; believe that all their information is kept confidential.

However as indicated **Table3**, 42(11%) of respondent disagree and 41(10.8%) of respondent undecided as E-banking kept their information confidentially.

Table 4, costs on e-banking Service Adoption

Variable	Agree		Undecided		Disagree	
	N	%	N	%	N	%
Perceived costs						
E-banking service has high charge	63	16.5	96	25.2	222	42.5
Our e-banking services are offered at minimal cost	248	65.1	54	14.2	32	8.4
I use electronic fund transfer since it is cheaper compared to other international fund transfer	249	65.4	91	23.9	41	10.8
The transactions in Internet banking are at a lower price, or at no cost	298	78.2	41	10.8	42	11

Source: Survey Data, 2021

About Perceived costs only 63(16.5%) of respondents agree in E-banking service has high charge. However, Most of respondents 222(42.5) disagree agree as E-banking service has high charge. On the other side 249(65.1%) of respondents agree as e-banking services are offered at minimal cost. But 32.3(8.4%) of respondents disagree and 14.2% undecided as e-banking services are offered at minimal cost. Similarly 249(65.4%) of respondents agree and 41(10.8) of respondents disagree as they are using electronic fund transfer since it is cheaper compared to other international fund transfer. And 91(23.9%)of respondents were undecided using electronic fund transfer since it is cheaper compared to other international fund transfer.298(78.2%) of respondents agree and 42(11%)of respondents disagree as the transactions in Internet banking are at a lower

price, or at no cost. While only 10.8% of respondents undecided the transactions in Internet banking are at a lower price, or at no cost.

Table 5. Privacy on E-Banking Service Adoption

Variable	**Agree**		**Undecided**		**Disagree**	
	N	%	N	%	N	%
Perceived Privacy						
E-banking provide security for transaction data and privacy	291	76.4	22	5.8	68	17.8
E-banking contains responsible section to guide for common problem	268	70.3	45	11.8	68	17.9
E-banking provide knowledgeable staff to solve problem	279	73.3	52	13.6	50	13.1
Password of mobile banking, ATM,, internet banking and else are safe	298	78.2	20	5.2	63	16.5

Source: Survey Data, 2021

Concerning perceived privacy 291(76.4%) of respondents agree and 68(17.8%) of respondents disagree on E-banking provide security for transaction data and privacy. However 5.8% of respondents undecided as E-banking provide security for transaction data and privacy. Additionally 278(70.3%) of respondents agree and 68(17.9%) of respondents disagree as E-banking contains responsible section to guide for common problem. While only 45(11.8%) of respondent undecided as E-banking contains responsible section to guide for common problem. On the other side 249(73.3%) of respondents agree and 50(13.1%)of respondents disagree as E-banking provide knowledgeable staff to solve problem. However 13.6% of respondents undecided as E-banking provide knowledgeable staff to solve problem. Concerning password 298(78.2%) of respondents agree as Password of mobile banking, ATM, internet banking

and else are safe. However 63(16.5%) of respondents disagree as Password of mobile banking, ATM, internet banking and else are safe, as indicated in **Table5**

Table 6. ***Security on E-Banking Service Adoption***

Variable	**Agree**		**Undecided**		**Disagree**	
	N	**%**	**N**	**%**	**N**	**%**
Perceived Security						
Customers of our bank fear risk to use automated teller machine(ATM)	67	17.5	62	16.3	252	66.1
E-Banking provide security for transaction	275	72.2	41	10.8	65	17
No Problem during using e-banking services	263	69.1	30	7.9	88	23
E-banking is secure	279	73.2	31	8.1	71	16.8
Feel safe when using E-banking	267	70.1	55	14.4	59	15.4
Can check validity and detail of past transaction every time	271	71.1	49	12.9	61	16

Source: Survey Data, 2021

About perceived security only 67(17.5%) of respondents agree and 252(66.1%) of respondents disagree on fear the risk to use automated teller machine (ATM). While 62(16.3%) of respondents were undecided on fear the risk to use automated teller machine (ATM). Similarly 275(72.2) of respondents agree and 65(17%) of respondents disagree as E-Banking provide security for transaction. While 41(10.8%) of respondents undecided on E-Banking provide security for transaction. Concerning the Problem during using e-banking services 263(69.1%) of respondents agree on No Problem during using e-banking services, while 88(17.8%) of respondents disagree on No Problem during using e-banking services. Although 279(73%) of respondents agree as E-banking is

secure, however 71(16.8%) and 6.8% of respondents disagree for E-banking is secure. Additionally 267(70.1%) of respondents agree on they Feel safe when using E-banking; while 59(15.4%) disagree as they Feel safe when using E-banking. On the other side 271(71.1%) of respondents agree as they can check validity and detail of past transaction every time. However61 (16%) of respondents disagree on they can check validity and detail of past transaction every time. The remains12.9of respondents were undecided as indicated in **Table6.**

4.4 Test for regression analysis

In the descriptive statistics part, the study shows the mean and standard deviation of the dependent and independent variables. This section provides test for the autocorrelation by durbinwatson, internal consistency by Cronbach'sAlpha (α) Test and correlation by Pearson correlation. Accordingly, as it can be seen from table 7 the result of Pearson correlation matrix indicates that Security, Privacy, Trust, and Cost have positive correlation e-banking adoption. To sum up, beside the descriptive statistics, correlation analysis is made to enhance the reliability of regression analysis. However, to reach such conclusion, this has to be supported by regression result as discussed in the upcoming sections.

4.4.1. Cronbach's and Durbin-Watson Test

The reason for conducting a reliability analysis for each variable was to assess the internal reliability of each scale for the sample used in this study. Hair et al. (2010) argue that Cronbach’s alpha above 0.7 is considered acceptable, and Cronbach’s alpha value above 0.8 is a preferable internal consistency. Cronbach’s alpha coefficients for each scale in this study were above 0.7. The results are presented in **Table 7**.

Table 7 ***Cronbach's and Durbin-Watson Test***

Scale	**Independent Variables**	**Cronbach's α test**	Durbin-Watson
1.	Security	0.955	2.056
2.	Privacy	0.947	2.361
3.	Trust	0.943	2.463
4.	Cost	0.965	2.020
5.	Adoption	0.989	2.125

Source: Survey Data, 2021

4.4. 2. Correlation

As clearly mentioned on chapter three of this study, Pearson Product Moment coefficient of correlations were calculated on IBM SPSS version 24 to assess the strength of relationships between two variables, and to identify the direction of the relationships - either positive or negative. It should be noted that correlations reach statistical significance when $p < .05$ (Pallant, 2013), and the strength of the relationship is considered small when $r = .10$ to .29; medium when $r = .30$ to .49; and large when $r = .50$ to 1.0 (Cohen, 1988). These indications were followed by the author during interpretations of the output.

Table 8. ***Pearson Correlation Matrix***

		Adoption of e-banking service	TRUST	COSTS	PRIVACY	SECURITY
Adoption of e- banking service	Pearson Correlation	1	.895**	.881**	.902**	.878**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	381	381	381	381	381
TRUST	Pearson Correlation	.895**	1	.839**	.948**	.897**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	381	381	381	381	381
COSTS	Pearson Correlation	.881**	.839**	1	.858**	.852**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	381	381	381	381	381
PRIVACY	Pearson Correlation	.902**	.948**	.858**	1	.859**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	381	381	381	381	381
SECURITY	Pearson Correlation	.878**	.897**	.852**	.859**	1
	Sig. (2-	.000	.000	.000	.000	

	tailed)					
	N	381	381	381	381	381

Source: Survey Data, 2021

Pearson Correlation – These numbers measure the strength and direction of the linear relationship between the two variables. The correlation coefficient can range from -1 to +1, with -1 indicating a perfect negative correlation, +1 indicating a perfect positive correlation, and 0 indicating no correlation at all. (A variable correlated with itself will always have a correlation coefficient of 1.) You can think of the correlation coefficient as telling you the extent to which you can guess the value of one variable given a value of the other variable. The .895 is the numerical description of how tightly around the imaginary line the points lie and explain that the strong and significant correlation between E-adoption and trust which near to 1.**Sig. (2-tailed)** – This is the p-value associated with the correlation. **N** – This is number of cases that was used in the correlation. Because we have no missing data in this data set, all correlations were based on all 381 cases in the data set. However, if some variables had missing values, the N's would be different for the different correlations.

4.5. Result of Multiple Linear Regression Analysis

Multiple linear regression analysis was used by the researchers in order to test simultaneous contributions and predictive effect of independent variables to e-banking adoption.

Table 9: Coefficients of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935[a]	.874	.872	.14775

Coefficient of determination shows the degree to which changes in the Adoption of E-banking can be explained by the change in the independent variables or the percentage of variation in the dependent variable that is explained by the seven independent variables (Privacy, Cost, Trust and security). The four independent variables that were studied, explain 87.4% of the changes in E-Banking Adoption.

4.5.1. Test of model adequacy

The ANOVA result helps us to determine at least one of the parameter of predictors is significantly important in determine the variations of dependent variable (Pallet, 2005).

Table 10: Test of Model Adequacy

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.710	4	14.178	649.411	.000[b]
	Residual	8.209	376	.022		
	Total	64.919	380			

a. Dependent Variable: Do you use E- banking?

b. Predictors: (Constant), SECURITY, COSTS, PRIVACY, Trust

Based on the above table significant level of model adequacy is less than 0.05 or5 %, and even it is less than 0.01, it is possible to generalize the regression model is significant at 0.01 level. This indicates that at least one of the beta coefficients of independent variable significantly different from zero. Therefore, the model works to determine variation of Adoption of E-Banking explained by independent variable or variables included in the model.

Table 11 . **Individual Predictors Significance Test**

Coefficients

Independent Variables	Beta	Sig.	R. Square	Durbin-Watson
Constant	0.124	.000	.874	1.80
Privacy	.902	0.000	0.813	1.13
Security	.878	0.000	0.770	1.12
Trust	-.895	0.000	0.3	1.08
Cost	.881	0.000	0.776	1.28

Source: Survey Data, 2021

E-banking adoption = 0.124+90.2% privacy +87.8% security -89.5%trust+88.1%cost+ε

Through the examination of coefficients for independent variables, Privacy, Security, Trust and Cost had positive significant effect on E-banking adoption having a coefficient of 0.902, 0.878, 0.895 and0.881 respectively. This indicates that one unit change in Security, Privacy, trust and Cost can result change on E-banking adoption rate by .902, 0.878,and 0.881 units in the same direction respectively. However, Trust had positive significant effect on E-banking adoption having a coefficient of -0.895 which implies one unit change in trust can result a change on E-banking service adoption rate by 0.895 units in opposite direction.

CHAPTER FIVE

5. Findings, Conclusion and Recommendations

5.1. Introduction

This chapter presents the summary of finding study, the conclusion and the recommendations, and future research areas comprehensively. The main objectives of this research are to understand the factors affecting mobile banking adoption in Awash Bank. The first specific objective of this research work is to examine the effect of demographic factors on the adoption of mobile banking technology by bank customers.

Based on previous studies and the finding of this study, this section discussed the general result obtained via regression analysis as shown in the above table. Referring the literature, the result of each explanatory variable including their effect on of E-banking adoption of commercial banks in Ethiopia was discussed. Thus, result of the finding was discussed in relation to the previous empirical and theoretical evidences as follows.

The results of this study revealed as trust has positive significant influence on e- banking service adoption. The result is in line with the finding of (Al-Somali et al. 2008 and Bultum2014).

This indicates creating a clear set of legal framework on the use of technology in banking industry, supporting banking industry by investing on ICT infrastructure and banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition.

Concerning about costs the findings from this study indicate that costs has significant influence on adoption of e-banking. This is consistent with the study conducted in Arab countries and in Nigeria (Cerem, Simon and Robert 2009),Gao and Owolabi2008). However, the result of this this study was not supported by the study conducted in

Malaysia (SadiqSohail and Shanmugham2003) that showed the service cost does not significantly influence e-banking adoption.

Similarly, the result of this study shows that Privacy and e-banking has a significantly associated with the influence on customers in adoption. The result is similar with the study conducted in Lebanon and in Singapore (Daghfous andToufaily2007, Gerrard*et al.*2006). The possible reason for this was electronic banking services are in inherently risky environment due to the absence of personal contact, physical product evaluation, warranties and contracts. This implies that customers might be concerned about the length of time involved in waiting for transaction or learning how to operate it.

Finally the result of this study revealed that security has a significant influence on customer in adoption of e-banking. This is in line with the study conducted in Vietnam, Ghana and Romania, (Sathye 1999; Katri 2003; Shah et al. 2005; Khalfan et al. Gerrard et al. 2006; Woldie*et al* .2008,Chong *et al*. 2010andMoga*et al*. 2010).However, this study contradicts a study conducted by (Hole *et al*. 2006).

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1CONCLUSION

This study gives an understanding on the factors that determine the adoption of electronic banking in Jimma. The study has been able to assess the factors that determines the adoption of E- banking and has been able to explain empirical implications both for management of banks and the government in order to to improve the adoption of e-banking in Jimma. Based on descriptive statistics it is possible to conclude that the majority of e-banking customers were males and also majority of commercial bank customers in Ethiopia are first degree holders. Besides, the majority of e-banking customers in Jimma city were Government employee. From the multiple regression

analysis model, the researchers conclude as the whole variables (cost, trust, privacy and security) has a significantly determine the adoption of e- banking services.

6.2 RECOMMENDATION

Thus, based upon the findings of this study we recommend the following. Banks should have struggled to improve their security and privacy functions in e-banking that will safeguard customers' personal information. However, even though the security and privacy features such as firewalls, authentication, and encryption of e-banking sites; most customers do not have the ability to fully comprehend the functions that are already implemented. Banks may equip customers with this knowledge through more awareness messages and training approaches. Since it is the duty of the concerned staff to provide all the information to its customers, they should provide all the materials to customers that demonstrate how to use E-banking.

To use electronic banking which can result in considerable amount of profits at low transaction costs. A reduction in the cost of e-banking transactions can motivate consumers to use the service, therefore, the bank have to strive to provide cost effective service.

Therefore, banks need to be focused on technological innovation competition rather than traditional bases of retail bank competition.

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REFERENCES

Afsar. (2010). Determinants of Customers Loyality in the Banking Sector: Case of Pakistan. *African Journal of Business Management*, 1040 -1047.

Aliyu, Younus and Tasmin (2012), e-banking is the provision of bankingservices through internet technology to the customers

Ayana, G. (2014): Factors Affecting Adoption of Electronic Banking System in Ethiopian Banking Industry", Journal of MIS and E-commerce Vol. 1, No. 1

Bader M,Almohaimmeed (2012) Customer Behavior towards Internet Banking: A Study of the

Bultum, A. (2014). Factors affection adoprtion of e-banking system in Ethiopia. *Journal of Management Information System and e- Commerce, 1*.

Diffusion of Internet Banking', *Int. J. Bank Mark*, 23 (5), 414–437

DimitriosMaditinos, DimitriosChatzoudes and LazarosSarigiannidis(2013) An examination of the critical factors affecting consumer acceptance of online banking, A focus on the dimensions of risk, Journal of Systems and Information Technology, Vol. 15 No. 1, 2013

Dormant Users of Saudi Arabia ;A thesis submitted to The University of Irmingham For the degree of DOCTOR OF PHILOSOPHY Lee, E., Kwon, K., and Schumann, D., 2005, 'Segmenting the Non-adopter Category in the

GadiseG.,Tekebas.,(2017). Determinants of E-Banking Services Adoption among Commercial Banks in Ethiopia: Analysis of Banks' Customers Perspectives, International Journal of Scientific & Engineering Research Volume 8, Issue 6, June-2017

Garedachew, W. (2010). Electronic Banking in Ethiopia- Practice, Opportunity and Challenges in Ethiopia. *http://www.ssrn.com/abstract+1492006*.

Gerrard ,P and Barton cunningham,J. (2003). the deffusion of enternet banking among singporeconsumers. *Banking market, 21*, pp16-18.

Innovation Attributes and Knowledge-based Trust', *International Journal of Information*

Internet Banking Adoption in Malaysia', *Management Research News*, 29, (.), 16-27.

Khalfan A, Alrefaei S and Al-Hajery M (2006) Factors influencing the adoption of internet banking inOman: a descriptive case study analysis,' international journal of financial services management, 1(2/3):155-172

Khalil, & Pearson. (n.d.). Influence of Trust on Internet Banking Acceptance. *Journal of Internet Banking & Commerce, 12(2)*.

Lin, H., 2011, 'An Empirical Investigation of Mobile Banking Adoption: The Effect of

LoiseW,(2015). Determinants of Electronic banking adoption by customersin selected Kenya commercial bank branches inNorth rift region, Kenya

Malak, J. (2007). Readiness of the Palestinian Banking Sector in Adapting the electronic Banking System : EXploratory Study , Ma Thesis . The Islamic University of Pales . *journal of Management* , 118-23.

Management, 31, 252-260.

Motivation, and Emotion into the Technology Acceptance Model', *Information Systems*

Nasim Z, Hosein(2009) Internet Banking: An Empirical Study Of Adoption Rates Among Midwest Community Banks Shantou University, Shantou, China, Journal of Business & Economics Research Vol 7, No 11 Wondossen, T & Tsegai, G. (n.d.). E-payment Challenges and opportunities in Ethiopia. *Economic Commission For Africa.* Addis Ababa.

Ndubisi, N. O. and Q. Sinti, 2006, 'Consumer Attitudes, System's Characteristics and

Normaizatul.S., (2016). Determinants for adoption of e-banking among banks customers. Article · January 2018

Research, 11 (4), 342-365.

Venkatesh V, Morris MG, Davis GB, and Davis FD (2003) User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.

Venkatesh, V., 2000, 'Determinants of Perceived Ease of Use: Integrating Control, Intrinsic

Wondossen, T & Tsegai, G. (n.d.). E-payment Challenges and opportunities in Ethiopia. *Economic Commission For Africa.* Addis Ababa.

Yang, Y. (1997). The security of electronic banking. *National Information Systems Security, 26,* pp. 505-525.

APPENDIXES

QUESTIONNAIRE

JIMMA UNIVERSITY

COLLAGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

MBA PROGRAM

SECTION 1: INTRODUCTION

Dear respondent,

I am a graduate student of MBA in the department of management, Jimma University, Collage of Business and Economics.

By now, I am undertaking a research entitled 'Determinants of E-banking service adoption: A case study of Awash Bank branches in Jimma town. So that you are one of the respondents selected to participate by giving information on this study. Please be responsible and help me in giving appropriate and full information to present real representative results on the existing situation of the factors affecting the adoption of E-banking in Jimma town. Your participation in responding the questions is entirely

voluntary and the questionnaire is completely anonymous. At the end, I prove you that the information that you give me will be kept confidential and only used for the academic research purpose. No individual's responses will be specified as such and the unique identity of persons responding will not be announced or released to anyone.

You have great thanked for your kind cooperation and giving your time.

With regards,

Dereje Asrat Etefa

Part I

Background of the information

Please put right mark (√) in front of your choice box that express yourself

1. **Gender:** Male ☐ Female ☐

2. **Age:**

3. **Marital status:** Single☐ Married☐ Divorced☐ Widowed☐

4. **Educational status**: Primary ☐ High school ☐ Diploma ☐Bachelor degree ☐

Master's Degree☐ Doctorate Degree☐

5**. Employment Situation:** Unemployed ☐ Student☐ Employed☐ Business

man/woman Pensioner Other_____

Part II

Questionnaires related with factors influencing adoption of Electronic banking

2.1. Basic questions

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

1. Do you use E- banking?

Yes ☐ No ☐

If yes, please answer question number 3 and 4.

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

ATM ☐ POS ☐

Mobile banking ☐ Internet banking ☐

Part II: **Determinants of Electronic Banking service Adoption**

Indicate the extent in which you agree or disagree with the following statements using 5 – Point Likert Scale.

(Key: 1 = SA-Strongly Agree, 2 = A-Agree, 3 = U-Undecided, 4 = D- Disagree, 5 = SD- Strongly Disagree)

1.Perceived TRUST	SA	A	U	D	SD
	1	2	3	4	5
E-banking completes a task accurately					
E-banking deliver the service exactly as promise					
E-banking perform the service right at the first time					
In using E- banking, I believe that all my information is kept confidential					

2. Perceived Cost	SA	A	U	D	SD
	1	2	3	4	5
E-banking service has high charge					
Our e-banking services are offered at minimal cost					
I use electronic fund transfer since it is cheaper compared to other international fund transfer					
The transactions in Internet banking are at a lower price, or at no cost					

3. Perceived Privacy	SA	A	U	D	SD
	1	2	3	4	5
E-banking provide security for transaction					

data and privacy					
E-banking contains responsible section to guide for common problem					
E-banking provide knowledgeable staff to solve problem					
Password of mobile banking, ATM,, internet banking and else are safe					

4. **Perceived security**	SA	A	U	D	SD
	1	2	3	4	5
Customers of our bank fear risk to use automated teller machine(ATM)					
E-Banking provide security for transaction					
No Problem during using e-banking services					
E-banking is secure					
Feel safe when using E-banking					
Can check validity and detail of past transaction every time					
When transferring money through mobile banking I am afraid that I will lose my money due to different mistakes like using wrong account number, wrong input of the amount of money.					

APPENDIX-B

Interview for managers

Q1. Do you think of e-banking services related age, gender, occupation and educational status?

1. Yes 2. No

If your answer Yes/No "how? Discuss sum points

Q2. Can you list some point of impact of e-banking service adoption?

Q3. Do you think e-banking services adoption reduced the customer to visit branch?

1. Yes 2. No

Q4. Do you think e-banking services helps customers more controlling their account movement?

1. Yes 2. No

Q5. Do you think e-banking services (i.e ATM and POS) available in necessary area?

1. Yes 2. No

Q6. Do you think e-banking providing services as expected and available for 24hr?

1. Yes 2. No

If your answer "No" why?