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**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
MASTER OF BUSINESS ADMINISTRATION**

**FACTORS INFLUENCING CUSTOMER'S INTENTION TO ADOPT
AGENCY BANKING SERVICE IN ETHIOPIA**

**BY
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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE MASTER OF BUSINESS
ADMINISTRATION**

**JULY, 2019
ADDIS ABABA, ETHIOPIA**

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DECLARATION

I, Lebse Temesgen Woldeamanuel, hereby declare that the thesis work entitled “Factors Influencing Customer’s Intention to Adopt Agency Banking Service in Ethiopia”, is the outcome of my own effort and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestions of the research advisor. This study is submitted for the award of the degree of Master of Business Administration (MBA) in graduate studies of Addis Ababa University College of Business and Economics. This research study is my original work and has not been presented for the award of Degree in any other university or institution.

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LETTER OF CERTIFICATION

This is to certify that this thesis entitled, “Factors Influencing Customer’s Intention to Adopt Agency Banking Service in Ethiopia” was carried out by Lebse Temesgen under my guidance and supervision. Accordingly, I here assure that his work is appropriate and standard enough to be submitted for the award of Master of Business Administration (in Management).

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ACKNOWLEDGEMENT

First and for most, my heartily thanks go to the Almighty God for his graciously provision of knowledge, wisdom and inspiration required for the successful completion of this paper and for bringing my dreams into reality. I would like to express my heart-felt thanks and sincere appreciation to my advisor Mohammed Seid (PhD) for the all-round help, guidance, valuable comments and encouragement which enabled me to complete the research. I would like to acknowledge those individuals and institutions participated in the study. Finally, my heartfelt thanks go to my wife, Kidist Mersha for her kind supports in many ways for the accomplishment of my paper.

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List of Acronyms

CBE- Commercial Bank of Ethiopia

CBO- Cooperative Bank of Oromia

E-banking-Electronic Banking

E-payment -Electronic Payment

IDT- Innovation Diffusion Theory

KYC- Know Your Customer

LIB- Lion International Bank S.C.

NBE-National Bank of Ethiopia

PE- Performance Expectancy

EE- Effort Expectancy

PEOU-Perceived ease of use

PU- Perceived usefulness

SPSS- Statistical Package for Social Sciences

TAM -Technology Acceptance Model

TOE -Technology-Organization-Environment

TPB-Theory of Planned Behaviour

TRA-Theory of Reasoned Action

SCT- Social cognitive theory

TAM-Technology adoption model

UTAUT-Unified Theory of Acceptance and Use of Technology

Abstract

In Ethiopia agency banking is an infant technology and has many challenges not only for service providers but also for the customers. This study tried to identify and investigate those factors which influence customers' intention to uptake agency banking service in Ethiopia. The study employed explanatory research design. The research model includes the basic concepts of the Unified Theory of Acceptance and Use of Technology (UTAUT), as well as some constructs derived from other theoretical frameworks. Accordingly, Performance expectancy, effort expectancy, Perceived risk, public Trust on agency banking and service quality were specified as a determinant factors of customer's intention to adopt agency banking service. Each variable is measured using 5-point Likert-scale. Using primary data collection method, questionnaires were distributed to target respondents of sampled customers of Commercial Bank of Ethiopia, United Bank S.C., Lion International Bank S.C and Cooperative Bank of Oromia applying judgmental or purposive sampling technique. Out of the total 399 questionnaires distributed, 362 useable questionnaires were obtained. Ordinal regression analysis was made using Stata version 13 whereas descriptive statistics analysis was done through Statistical Package for Social Sciences (SPSS) version 20. The findings of this study revealed that Performance expectancy, effort expectancy and Perceived risk were the significant factors affecting customer's intention to adopt agency banking service whereas, public trust of agency banking and service quality of service providers and agents were found to be insignificant factors in this study. The study suggests a series of measures which could be taken by the banking industry. The study recommends that financial institution needs to sensitize customers about the performance, perceived risk and ease of use of agency banking service. Financial institutions should also conduct extensive promotion; marketing and cross-selling activities in order to attract new customers and increase their customer base from untapped potential of availability of highly intended users to adopt the service. Banks should also provide training and education to their employees and agents on agency banking service in order to attain better service quality, gain public trust and ultimately encourage the participation of intended users.

KEYWORDS: Agency banking, Performance expectancy, Effort expectancy, Perceived risk, Public trust, Branchless banking, UTAUT and Adoption

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Agency banking is a component of branchless banking that allows financial institutions to offer financial services outside the traditional brick and mortar bank premises. It allows customers conduct a limited range of financial transactions at third party retail outlets including post offices, supermarkets, general and grocery stores, pharmacies, gas stations etc. (Daisy, 2011). Agency banking was introduced to expand access to financial services, especially in the unbanked population where it has been expensive for banks to maintain bank branches (Maina, 2014).

Agent banking is about providing of limited scale banking and financial service to the underserved population through engaged agents under a valid agency agreement, rather than a teller/cashier. It is the owner of the outlet who conducts banking transactions on behalf of the bank. Globally these retailers are being increasingly utilized as important distribution channels for financial inclusion (Hanna, 2018).

Nowadays, there is a global concern to entrench financial deepening access to previously ignored areas as a means to expand financial system access and usage. Agent banking will offer a solution to the slow pace of financial deepening especially to the rural areas (Fred, 2013). The development and utilization of alternative delivery channel on financial service is the result of competitive environment in the financial service market (Daniel, 1999). Economic growth through technology advancement can only be realized when and if the new technology is widely diffused and used (Cudjoe, 2015). Diffusion itself results from a series of individual decisions to begin using the new technology.

Since it is an infant technology in Ethiopia agency banking has many challenges not only for the customers but also for the service providers like frauds, lack of social acceptance, agent qualities etc. But it provides room for financial inclusion and monetizes the economy. The mobile phone menu and other extra up-to-date applications can now connect bank systems to the phone

network, hence introduction to more user friendly interfaces. Consumers can now enjoy financial services anytime and anywhere.

Agency banking prevents customers travelling long distances and spends huge amounts of money and time on transport from the remote areas in order to access a branch and banking services. Technological services play a crucial role in the banking industry in creating value for banks and enable customers perform banking transactions without visiting a conventional brick and mortar banking system and led to better product offering, improved customer service (Afework, 2015). However, customer's adoption rate of agency banking service in Ethiopia is minimal. Thus, it is in this light that the researcher is interested to assess factors that affect customer's intention to adopt agency banking service in Ethiopia.

1.2 Statement of the problem

In the last few years Ethiopia made great efforts in improving access to financial services throughout the country. Financial inclusion has risen in recent years, with aggressive expansion and deposit mobilization strategies made by Ethiopian private and public banks. Banks opened 956 new branches in 2016/17 thereby raising the total number of branches to 4,257 from 3,301 a year earlier. As a result, bank branch to population ratio declined from 1:27,932 people in 2015/16 to 1:22,164 people in 2016/17 (NBE, 2017). However, despite this, a lot still needs to be done to bring in more Ethiopian under financial inclusion.

As the second highest populous nation in Africa, Ethiopia has the lowest financial inclusion rate (banked population) even as compared to Sub-Saharan African Countries and yet having alarmingly increasing mobile penetration rate which can be used as tool for financial inclusion. The total number of bank branches reached 2,323 for an estimated population of 87,000,000 with branch-to-population ratio of 1:37,861.8. Commercial Bank branch (per 100,000 adults) ratio was 2.94 which is lower than Sub-Saharan Africa, 3.71 and the banked population was less than 8% (Elfagid, 2015). Approximately 56% of adults (15⁺) reported not owning an account but either saving, borrowing or insuring themselves against risks through informal means. Only 14 % of adults reported saving at a financial institutions (NBE, 2017).

Agent banking is a channel which complements conventional banking services that can enhance the convenience and outreach of quality and affordable financial services particularly to the underserved in a more cost-efficient manner. It provides a cheaper alternative for financial institutions to reach out to the underserved population segments. However, delivery via this channel, if not appropriately managed, can also potentially increase the risk profile of financial institution as a result of dependence on third parties, and may be adversely affects customers.

Now day's provision of banking service is not limited to banking institutions alone. Several non-banking institutions from different sectors like telecom or mobile operators and retail are starting to offer financial products and services like agent banking. Agent banking service helps to automate and digitalize the operations so that, transactions can be processed faster and improve internal processes (Momanyi, 2016). However, in spite of this importance of agent banking, the majority of our society prefers to save in cash by using other traditional ways instead of using retail agents which are available near to their surrounds.

Despite this low adoption rate of agency banking there is huge potential of usage as customers are quickly adopting digital driven trends for the value it presents in terms of convenience, speed and ease of access. Further, in Ethiopia the majority of the population is adult and subscribe of Ethio-telecom which is eager and has a potential to adopt new technologies. This demographic and technological trend forces the banking industry to continually adopt technology in order to meet and exceed the needs and preferences of their customers.

In Ethiopia some research studies have been conducted on agency banking services like Ayana (2012), Anwar (2015), Elfagid (2015) and Afework (2015).

Afework (2015) did a study which focused on factors that affect the adoption of agency banking in Ethiopian banking industry with respect to the barriers and benefits derived from adopting the system. It employed a research framework developed based on the Technology - Organization - Environment (TOE) framework and Technology Acceptance Model (TAM). The study revealed that the prospects of cost reduction and availing services beyond restriction of space and time were major driving factors in adopting agency banking. The benefits were also classified as Perceived Ease of Use (PEOU) and Perceived Usefulness (PU).

The barriers identified in this study came from the external environments like; lack of legal framework, under developed ICT infrastructure including poor network connectivity, lack of competition among banks and lack of sufficient government support and security risk.

Anwar (2015) sought to find out factors affecting adoption of agent banking and electronic banking in Ethiopian banking industry. A research framework developed was based on technology-organization-environment framework. The findings of the study revealed that the main challenges facing the banking industry in adoption of agent banking and e-banking are lack of adequate national ICT infrastructure, Lack of skilled IT personnel's, Lack of government support, Security risk and Lack of legal and regulatory frameworks.

Elfagid (2015) also tried to investigate the prospect and challenges of Mobile and Agent Banking in Ethiopia. The study found out that Mobile and Agent banking serves as a successful propagator of financial inclusion entailing an immense opportunities towards enhancing accessibility to financial services to the unbanked/under banked group of the society and serving as an additional revenue generating mechanism, cost reduction and increasing customer base for financial institutions. The findings of the research also revealed that major challenges facing up the successful implementation of Mobile and Agent banking in Ethiopia were the infrastructural problem associated with ICT and road network, lack of appropriate agent banking channels and low level of financial literacy in the Country.

However, most of the studies focused on factors affecting technology or agency banking adoption and service of financial institutions, none of these studies focused on factors influencing customer's intention on the adoption of agency banking services revealing a knowledge gap. Previous studies conducted in Ethiopia mainly focused on technological infrastructure of agency banking, but not seen from user's perspective. The successful propagation of agency banking is determined not only by financial institutions or agent's quality, but also by the level of customers' or users' acceptance and use of the service. Customer's adoption rate of agency banking service in Ethiopia is also minimal. Thus, identifying factors that influence the uptake of agency banking service is crucial and also assist financial institutions in coming up with better strategies of attracting and retaining new and existing customers respectively. This study also employed econometrics analysis whereas previous studies about the area were based on descriptive analysis. It is in this light that the study aimed at assessing factors influencing customer's intention to adopt agency banking service in Ethiopian banking context.

1.3 Research Questions

- What are the main factors that influence customer's intention to adopt agency banking service in Ethiopia?
- Does performance expectancy has influence on adoption of agency banking?
- Does effort expectancy has influence on adoption of agency banking?
- Does perceived risk of the system has influence on adoption of agency banking?
- Does public trust of the service has influence on adoption of agency banking?
- Does service quality of agents and service providers has influence on adoption of agency banking?

1.4 Objectives of the study

1.4.1 General Objective

The general objective of the study was assessment of factors influencing customer's intention to adopt agency banking service in Ethiopia.

1.4.2 Specific objectives

The specific objectives of the study are;

- To assess the impact of performance expectancy on customer's intention to adopt agency banking
- To assess the impact of effort expectancy on customer's intention to adopt agency banking
- To assess the impact of perceived risk on customer's intention to adopt agency banking
- To assess the impact of public trust of the service on customer's intention to adopt agency banking
- To assess the impact of service quality of agents and service providers on customer's intention to adopt agency banking

1.5 Significance of the study

The study focused on factors influencing customer's intention on the adoption of agency banking service in Ethiopia. Identifying factors that influence the uptake of agency banking service assist banks in coming up with better strategies of attracting new and retaining existing customers. It also helps banks to understand the challenging factors associated with adoption of new technology. It also provides information that will help researchers who will be interested to conduct study regarding on the issue thus it adds to the existing body of knowledge.

1.6 Scope of the study

The study intended to describe factors influencing customer's intention on the adoption of agency banking service in Ethiopia through questionnaires to be filled by customers of sampled banks. The study was limited to purposely selected four commercial bank branches located in Addis Ababa (one state owned bank i.e. Commercial Bank of Ethiopia and three private banks i.e. Lion International Bank S.C., United Bank S.C and Cooperative Bank of Oromia) that have commenced Agency Banking Service. Thus, the geographical scope of the study is limited to the customers of sampled banks located in Addis Ababa. The conceptual delimitation of the study was to examine factors affecting adoption of agency banking only from customer's or user's perspective. The study was also delimited to the following variables: performance expectancy, effort expectancy, perceived risk, public trust and service quality which were adopted from theory of UTAUT and constructs added from previous studies used most frequently in order to fit the situation under study.

1.7 Limitations of the Study

As the study focused only on those customers who are located on the city branches, in order to identify the challenging factors of agent banking outside of Addis Ababa is not considered but it would have been more productive if the study includes customers located on the rest part of the country which are prone to extreme financial exclusion. The results may not be representative of the whole Ethiopian population's behavior. However, the participants are still rather diverse in terms of various demographic features like age, gender, educational background, occupation and marital status and therefore the findings may be considered as a representative for urban and educated population segment. It is also vital to identify the effect of demographic variables such

as age, gender, experience and educational background etc. on intention to uptake the service in Ethiopia. Because, demographic variables may significantly affects user's intention to use the service.

1.8 Organization of the Study

This study is organized into five chapters. The first chapter deals with introduction of the study. On the second chapter, theoretical literatures, empirical literatures and conceptual frameworks are discussed. The third chapter deals with research methodology, research design, sampling technique, size and method of data analysis techniques. The research results and discussion is presented in chapter four. The last chapter includes the conclusion and recommendation part of the study based on the findings obtained from the analysis.

1.9 Definition of Terms

Agency is a contract where by a person, the agent, agrees with another person (the principal) to represent him and perform on his behalf one or several legally binding acts.

As per the national bank of Ethiopia directive (FIS-01-2012) issued to regulate the mobile and agent banking services “**agent**” means a person engaged in a commercial or business activity and has been contracted by a financial institution to provide the services of the financial institution.

Agent banking means the conduct of banking business on behalf of a financial institution through an agent using various service delivery channels (NBE, 2012).

Customer is an individual or entity who uses mobile and agent banking services of financial institutions offered through mobile devices (NBE, 2012)

Adoption is can be defined as a continued use, uptake and the acceptance of a product, service or idea. According to Rogers (2003) adoption is the process through which an individual or other decision-making unit passes from knowledge of service, to forming an attitude towards the service, to a decision to adopt or reject, to implementation of the new idea, to confirmation of the decision.

Bank-led Model; in this model a licensed financial institution (typically a bank) delivers financial services through retail agents. The model consists of three main entities; the bank, the retail agents, and the customer to deliver financial products and services developed by banks but distributed through retail agents for ultimate users (Afework, 2015). The Regulation of Mobile and Agent Banking Services Directive No.FIS/01/2012 issued by National Bank of Ethiopia (NBE) clearly stated that Ethiopia has adopted the Bank Led Model. In Ethiopia only financial institutions that are licensed by the National Bank are allowed to engage in mobile and agent banking services (NBE, 2012).

Nonbank-led Model; in this model the non-bank institutions performs all the functions. The role of banks are minimal only act as a safe-keeper of surplus funds obtained from the transaction. The customers neither deal with the bank nor maintain a bank account they deal with non-bank organizations, either a mobile network operator or prepaid card issuer and retail agents. This model is implemented by most successful countries in Mobile and Agent Banking business. However this model has the issue of fund protection problem/risk.

Financial inclusion

It is an acquiring of a broad range of financial products, such as saving, insurance, credit, pensions, and payment, which are relevant, appropriate and affordable for the entire adult population, especially those low-income segments (Afework, 2015).

CHAPTER TWO: REVIEW OF RELATED LITERATURES

2.1 Introduction

This chapter provides a wider understanding of the concepts and variables of this study from previous research. The content of this chapter focuses on literature review on relevance of agency banking services, theories in adoption of agency banking, and the theoretical framework guiding this study.

2.2 Theoretical Foundations

There are several theories evolved for explaining adoption of new technology. Researchers have been used different frameworks in the study of adopting new technological service. Among frameworks that have been developed in different studies includes, Theory of Reasoned Action, Technology Acceptance Model (TAM), Extended TAM Factors, Unified Theory of Acceptance and Use of Technology (UTAUT), Theory of Planned Behavior, Diffusion of Innovation Theory, Social Cognitive Theory, Technology-Organization-Environment Framework (TOE) and Decomposed Theory of Planned Behavior. For purpose of this study the researcher adopts UTAUT to describe factors influencing customer's intention to adopt agency banking service in Ethiopia.

A.Theory of reasoned action

Theory of reasoned action (TRA) proposes three general constructs, namely “behavioural intention (BI), attitude (A), and subjective norm (SN)”. A person's actual behavior can be determined by looking at his formal intention together with the beliefs that the person would have for the given behavior. According to the model behavioural intention of a person depends on his feelings and prejudiced norms. Mathematically, it can be interpreted that behavioural intention is the summation of attitude and subjective norms. Moreover, intention of a person likely to convert to action if there is the intention to behave in a specific manner is strong enough (Feshbein, 1989).

B. The theory of planned behaviour

This theory was developed by Fishbein (1975) and Ajzen (1980). It was developed as a result of failure of the TRA when it was discovered that behavior was not voluntary. According to the model only those specific attitudes toward the behavior in question can be expected to predict a behavior.

Basically TRA and TPB are similar, in both theories Behavior intentions is an important element in predicting the actual behavior while on the other hand the main difference between these two theories is that the TPB added more constructs to the model and thus Perceived Behavioral Control (PBC) as the determinant of Behavioral Intention and control beliefs that affect the perceived behavioral control. The reason for including the PBC is because the perceived behavior control is an external variable that has both direct and indirect effect on actual behavior intentions (Grace, 2014).

C. Technology Acceptance Model (TAM)

TAM proposes perceived usefulness (PU) and perceived ease of use (PEOU) as fundamental determinants of technological adoption where an individual's intention to use an application is predicted and explained by once perception of the technological usefulness and its simplicity. Davis (1989) defines PU as the degree to which a person believes that using a particular system will enhance his or her job performance. PEOU refers to the degree to which the person believes that using the system will be free of effort. Davis proposed that the readiness of a user to use or not to use a new technology or information system is determined by his or her attitude, and this attitude is influenced by two beliefs which are perceived usefulness and perceived ease of use.

D. Diffusion of Innovation theory

The original diffusion research was done in 1903 by the French sociologist Gabriel Tarde who plotted the original S-shaped diffusion curve and later elaborated by Rogers (1995). The author argued that, diffusion process takes place in four stages namely: invention, communication of the innovation through a social system, time and consequences of adopting the innovation to the adopter's image among society or their peers. The chances of innovation adoption are affected by the nature of networks and the opinion leaders' roles. Research on diffusion of innovation has

attempted to explain factors that influence how users adopt services. Opinion leaders have a huge impact on people's behavior through their interactions and opinions. In addition to the opinion leaders change agents and gatekeepers also have a key role in the diffusion process. People can be grouped into five categories based on their adoption behavior. These groups include innovators, early adopters, early majority, late majority and laggards.

According to Rogers (2003) diffusion is influenced by five elements; an innovation characteristic, decision making process, individual characteristics, the product itself, communication channels and the effect of the innovation in the eyes of society. According to the model the determinants of adoption of an innovation are: *complexity* (is the level of difficulty in understanding and using the technology), *relative advantage* (is the extent to which the innovation is perceived as better than the technology it replaces, including technical performance, cost, risk, or other attributes), *trialability* (the ability to try or experiment with the performance of new technology on a limited basis), *observability* (the extent to which the results of a new technology can be observed or visible to others) and *compatibility* (is the extent to which an innovation is perceived as being consistent with the existing values, past experiences and needs of potential users). An innovation with relative advantage, with less complexity and compatible will be adopted easily and faster by an individual.

E. The social cognitive theory

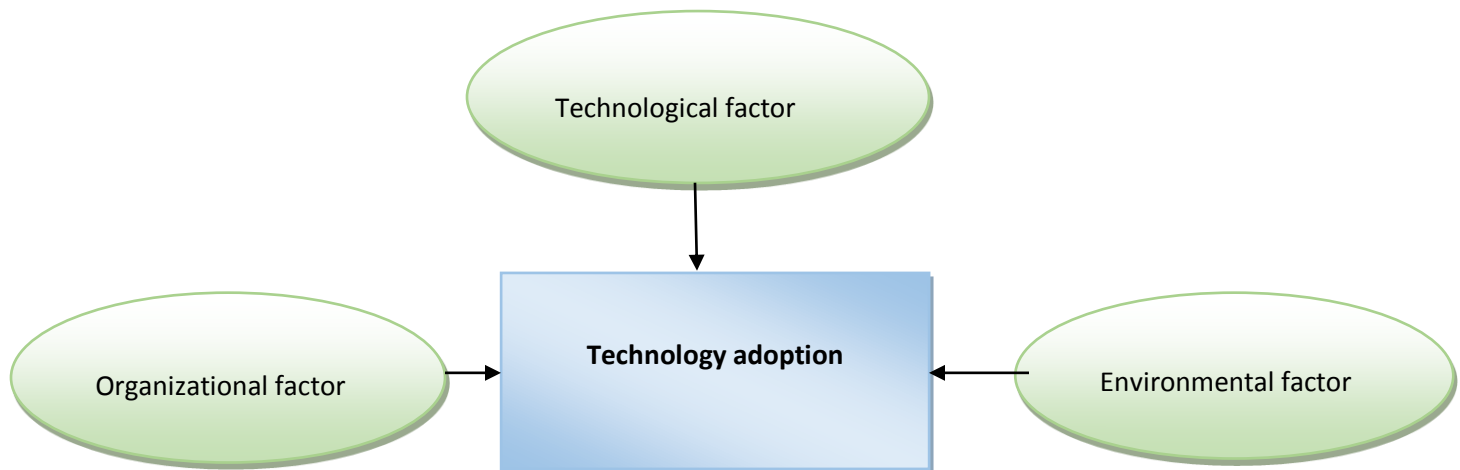
Social cognitive theory (SCT) is on the concept of self- efficacy which is defined as “the judgment of one's ability to use a technology to accomplish a particular job or task. According to Bandura (1986) behaviour of the user is influenced by expectations of outcome related to personal as well as performance- related gains. Self-efficacy, in turn, influences the expectation of outcome of both types. While esteem of the person and his sense of achievement relate to personal outcome expectations, outcome expectations related to performance on the job lead to performance related expectations. There are two opposing factors that influence behaviour of the users. Positive contribution is made by the factor “affect” which is the extent to which an individual likes his job. On the other hand, negative contribution to desired behaviour is made by the factor “anxiety” which is the anxious reaction of the person while performing a job such as trying to use a computer with which the person is not very familiar (Hanna, 2018).

F. Technology-organization-Environment framework (TOE)

TOE framework was proposed by Tornatzky and Fleischer (1990) identifies three basic factors for the adoption of technological services i.e. technological, organizational and environmental factors. Accordingly, technology adoption within an organization is influenced by factors pertaining to the technological context, the organizational context, and the external environment.

The technological factors includes adopter's perception of E-banking attributes which include relative advantages (perceived benefits), and relative disadvantages (perceived risks). The organizational factors refer to the organization's characteristics that influence its ability to adopt and use of E-banking system which includes financial and human resources. The environmental factor refers to the external environment in which an organization operates and its condition for supporting the development of E-banking services. It includes Legal framework, National ICT infrastructure, Competitive pressure and Government support.

Figure 2.1: Technology-organization-Environment framework (TOE)



Source: Tornatzky and Fleischer (1990)

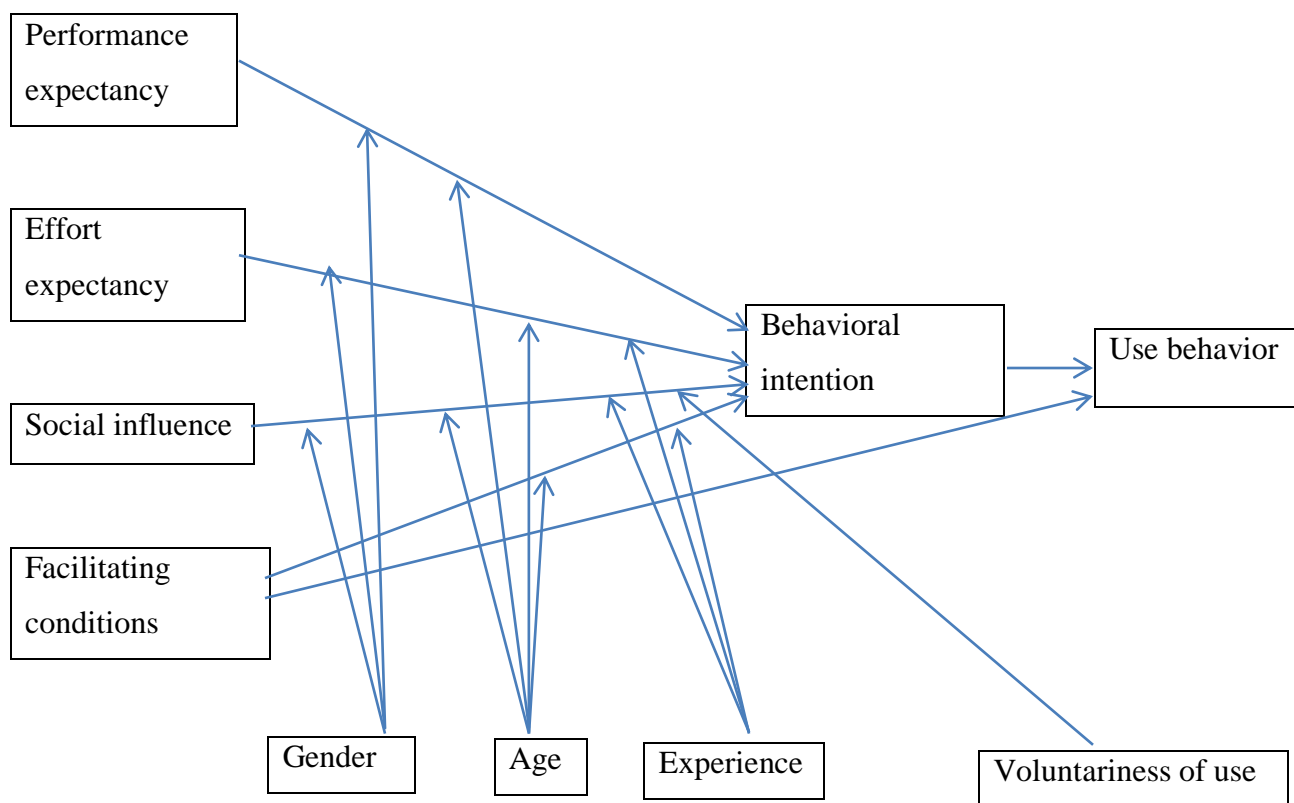
G. Unified Theory of Acceptance and use of Technology (UTAUT)

Unified Theory of Acceptance and Use of Technology (UTAUT) is a technology acceptance theory formulated by Venkatesh et al. (2003). The UTAUT aims to explain user intentions to use an information system and subsequent usage behavior. This theory is based on four core determinants of intention and usage (performance expectancy, effort expectancy, social

influence, and facilitating conditions) and whereas gender, age, experience, and voluntariness to use moderate the impact of the four key constructs on usage intention and behavior (Keneth, 2016).

The model integrates significant elements across eight prominent user acceptance models (theory of reasoned action, technology acceptance theory, motivational theory, theory of planned behavior, a combined theory of planned behavior, theory of personal computer use, diffusion of innovations theory, and social cognitive theory) and formulates a unique measure with core determinants of user behavioral intention and usage.

Figure 2.2: Unified theory of acceptance and use of technology model



Source: Venkatesh et al (2003)

The theory establishes that variables such as PEOU and PU can influence adoption but also varied depending on age, gender and experiences of the individuals who are introduced to a new

technology. The effect of core constructs is moderated by gender, age, experience, and voluntariness of use.

UTAUT is considered to be the most important theory for IT adoption studies. The model has been empirically examined and found to outperform the other eight preceding models. However, UTAUT is not perfect. To apply UTAUT in certain special IT applications such as mobile E-banking, modification and revision of constructs or variables in order to fit situations is needed (Masinge, 2010).

2.3 Legal Framework on Agent Banking in Ethiopia

In line with National Payment System Proclamation No. 718/2011 and article 59 (2) of Banking Business Proclamation no. 592/2008, the National Bank of Ethiopia has issued directives of modality of agency banking operations to ensure the following;

- ✓ Deepening financial service accessibility to the wider section of the population at an affordable price;
- ✓ To encourage and enhance savings mobilization through the use of alternative and innovative financial services delivery channels;
- ✓ To set the minimum standards for risk management and customer protection on the delivery of mobile and agent banking services;
- ✓ For ensuring that financial institutions are delivering mobile and agent banking services without compromising the safety and soundness of the financial system of the country.

As per the Directive No.FIS-01-2012 of National bank of Ethiopia (NBE) only financial institutions that are licensed by the National Bank are allowed to engage in mobile or agent banking services. This directive has also clarified and framed the business modality of the agent and mobile banking services in Ethiopia. Mobile and agency banking service shall be carried out only within Ethiopian geographic boundary and only with Ethiopian Birr.

The directive has also articulates limits on Mobile Banking Transaction. Accordingly, the maximum balance that should be available in a mobile account of a person with a financial institution at any time shall not exceed Birr 25,000. Daily mobile banking transaction that involves debiting of an account by a person with a financial institution shall not exceed Birr 6,000.

Moreover the directive also states about customer Due Diligence requirements. Financial institutions must ensure their agents fully comply with the requirements of “Prevention and Suppression of Money Laundering and the Financing of Terrorism Proclamation Number 657/2009” and “Customers Due Diligence of Banks Directives No. SBB/46/2010”. Notwithstanding the provision stated above, financial institutions shall train their agents on prevention of money laundering and financing of terrorism requirements and on the procedures to be followed to ensure same (NBE, 2012).

Banks can deliver mobile banking through their agents as specified in the directives. As per same directive, the following are permissible activities of an agent; an agent, on behalf of the principal financial institutions as agreed between it and the financial institution and as may be specifically perform customer due diligence and Know Your Customer (KYC) requirement of natural persons and make registration: shall open regular saving account of natural persons, open mobile account of natural persons, perform cash-in and cash-out services, transfer funds between different parties, perform various payment services. But notwithstanding the provision stated above, agents shall not undertake banking transaction that involves the use of cheque and other cheque related instruments and any other operation related with provision of credit (NBE, 2012).

The directive also clearly stipulates that where financial institutions carryout mobile banking services through agents;

- The financial institution/principal shall be fully responsible and liable for all actions and omissions of its agents and this responsibility shall extend to actions of the agents,
- all transactions involving deposit, payment, withdrawal or transfer of cash from or to an account shall be made in a real time basis and financial institutions shall ensure that agents are able to carry out same,
- agents shall not under any circumstance accept funds from customers in excess of their prepaid balance with banks,
- financial institutions shall automatically debit or credit the agents’ or customers’ account upon conduct of any transaction that necessitates reduction or increase of the account balance of the agent or customer and
- A bank shall have a mechanism to uniquely identify each of its agents.

2.4 Empirical Literature Review

Studies have been conducted by different researchers in different part of the world about agency banking. There are also some related studies conducted in Ethiopia on the adoption of agent banking. However, none these studies specifically conducted to assess factors affecting customer's intention to adopt agency banking services in Ethiopia.

Several literatures indicates different factors that influencing customers adoption of technology such as, perceived usefulness, perceived ease of use and other factors related to the service itself & how to be accepted and used by the customers, which differ from country to country, reflecting the economic and technological development in respective country. Studies conducted by Afework (2015) and Anwar (2015) focused specifically on investigating those factors affecting the adoption of agency banking in Ethiopian banking industry. They employed a research framework developed based on the Technology - Organization - Environment (TOE) framework and Technology Acceptance Model (TAM). The findings of study conducted by Afework (2015) revealed that the prospects of cost reduction and availing services beyond restriction of space and time were major driving factors in adopting agency banking. The benefits were also classified as Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). The barriers identified in this study came from the external environments like; lack of legal framework, under developed ICT infrastructure including poor network connectivity, lack of competition among banks and lack of sufficient government support and security risk. Similarly Anwar (2015) also revealed that the main challenges facing the banking industry in adoption of agent banking and e-banking are lack of adequate national ICT infrastructure, Lack of skilled IT personnel's, Lack of government support, Security risk, Lack of legal and regulatory frameworks.

There were also studies conducted to assess prospect and challenges of Mobile and Agent Banking and factors affecting adoption of mobile banking in Ethiopia. Laekemariam (2016) intended to identify factors affecting the adoption of mobile banking in Commercial Bank of Ethiopia. The findings of this study revealed that Performance expectancy, Perceived risk, perceived cost, Effort expectancy and Trust, were the factors affecting users having intention to adopt mobile banking. Study conducted by Elfagid (2015) tried to investigate the prospect and challenges of Mobile and Agent Banking in Ethiopia. The study found out that Mobile and Agent

banking serves as a successful propagator of financial inclusion entailing an immense opportunities towards enhancing accessibility to financial services to the unbanked/under banked of the society and serving as an additional revenue generating mechanism, cost reduction and increasing customer base for financial institutions. The findings of the research also revealed that major challenges facing up the successful implementation of Mobile and Agent banking in Ethiopia were the infrastructural problem associated with ICT and road network, lack of appropriate agent banking channels and low level of financial literacy in the Country.

There was also a study conducted to identify adoption factors of E-banking technologies like mobile banking, internet banking and agency banking in Ethiopia in general. Ayana (2012) was conducted study to identify factors that affect adoption of E-banking in the Ethiopian banking industry. The study statistically analyzes data obtained from the survey questionnaire. A study was based on a research framework of technology-organization environment model (TOE) developed by Tornatzky and Fleischer. The result of the study revealed 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 framework and Lack of ICT infrastructure.

There were also studies conducted about agency banking in the rest part of the world.

In neighboring Kenya extensive research studies had been conducted on agency banking like Diasy (2011), Lisa and Gitaar (2013), Momanyi (2016) and Maina (2014). In general the major reason for the adoption of agency banking in many countries relates with the effort to reach the unbanked/under banked segment of society at minimal cost. Descriptive study conducted by Daisy (2011) sought to determine factors that influence agent banking adoption among commercial banks in Kenya. The findings of the study revealed that the main factors influencing the adoption of agent banking among commercial banks in Kenya are, Cost reduction, Enhancement of customer service and expanded presence by banks particularly in remote areas. The study also reveals that the introduction of third party retail agents presents several risk factors with regard to effective regulation and supervision of banks. Momanyi (2016) also sought to identify factors influencing the adoption of digital banking services by customers among commercial banks in Kenya. The study was guided by Rogers's Diffusion of Innovations theory. The study found out that demographic factors like age, level of education and occupation had an influence on the adoption of digital banking services. Accordingly, the main factor hindering the

adoption of digital banking services is security concerns, lack of skills and also customer's awareness of service benefits.

Similarly study conducted by Lisa and Gitaar (2013) also aims at investigating the determinants of uptake of agency banking in Tier II banks in Kenya. According to their findings the main variables influencing uptake of agency banking among the Tier II banks were government regulation, perceived security and agent training. Maina (2014) also studied factors influencing the uptake of agency banking services by customers of commercial banks in Kenya. The study also sought to establish how security, liquidity availability, customers and awareness influence the uptake of agency banking by customers of commercial bank in Kenya. This study was based on descriptive research design. The study employed probit analysis to establish the relationship between the dependent variable and independent variables. In general the study found out that security and liquidity availability influence the uptake of agency banking by customers in commercial bank in Kenya. The study also revealed that there is security problem of agent banks in Kenya.

There were also studies conducted by different authors on factors affecting customer's adoption rate of mobile banking. Cudje, etal. (2015) examined the determinants of mobile banking adoption among bank customers in Ghana, with specific emphasis on Access Bank. The study revealed that, perceived credibility and perceived financial cost were the major setback with regards to customers adoption of mobile banking services provided by Access Bank, and as a result of this, Ghanaians have formed a negative behavioral pattern towards mobile banking. In addition, the findings showed that, perceived credibility and perceived financial cost have stronger effect on consumer intention to adopt and use mobile banking service than perceived usefulness and perceived ease of use. Grace (2014) was also conducted study in order to analyze the factors that influence consumer adoption of mobile banking in Tanzania. The study was based on primary data collected through questionnaire. The results of the study suggested that perceived risk, relative advantage and convenience are the determinant factors in influencing consumers' adoption decisions.

The finding of the above studies in general revealed that that the most important factors influencing the usage of agent banking services are risk/security, liquidity, lack of legal and regulatory frame. Most of the studies were also based on descriptive analysis.

2.5 Conceptual framework

A conceptual framework helps the reader to quickly see the proposed relationships between the dependent and independent variables in the study and depict the same graphically.

Several studies undertaken on agent banking revealed that the most important factors influencing the usage of agent banking services are risk/security, liquidity, lack of legal and regulatory framework, Lack of ICT infrastructure, quality of service, cost. Based on literature findings about models and factors influencing the adoption of agency banking, the study adopts the Unified Theory of Acceptance and Use of Technology (UTAUT) model as a bench mark to propose research model with some additional constructs. UTAUT is considered to be the most important theory for IT adoption studies. The model has been empirically examined and found to outperform the other eight preceding models. However, UTAUT is not perfect. To apply UTAUT in certain special IT applications such as mobile and E-banking, modification and revision of constructs or variables in order to fit situations is needed (Masinge, 2010).

Accordingly, the model consisted of the following constructs; performance expectancy, effort expectancy, perceived risk, public trust and service quality as a determinant factors affecting customer's intention to adopt agency banking service in Ethiopia.

A. Performance Expectancy (PE)

Performance expectancy (PE) is defined as “the degree to which an individual believes that using the system will help him or her to attain gains in job performance” (Venkatesh et al., 2003). PE is the strongest predictor of intention. Perceived usefulness, relative advantage, outcome expectation, job fit, and extrinsic motivation are the parallel constructs of performance expectancy (PE) from different models TAM, Innovation Diffusion Theory (IDT), Social Cognitive Theory (SCT), Model of PC Utilization (MPCU), and Motivational Model (MM) respectively. Hence, adopting performance expectancy to the context of agency banking adoption will suggest that individuals will find it useful due to convenient access to banking services without the restriction on physical locations (bank bricks and mortar) and time.

B. Effort Expectancy (EE)

The concept of Effort expectancy is developed from perceived ease of use, complexity, and ease of use from existing models which are TAM, MPCU, and IDT respectively. The effort needed to learn and use a new technology affected its acceptance and use. Hence, the easier a system is to use, the more likely it will be accepted and used (Venkatesh et al., 2003). Thus, it is logical to expect effort expectancy to have a direct effect on intention to use agency banking. However, as individuals became more familiar with the technology, the effort needed to use the technology declined.

C. Perceived Risk

One of the basic barrier a firm faces, while adopting technological service is the perceived risks of the technology by the customers. Security and trustworthiness of a service was identified as one of the most important factors within every target customer segment when deciding on the use of a banking service delivery channel (Ayana, 2012).

Perceived risk variable has also several constructs. The perceived risk can be divided into the following facets (performance risk, financial risk, time risk and privacy/security risk), which provided a more in-depth understanding of the characteristics of risks regarding agency banking (Lee, 2009).

- **Performance risk:** refers to losses incurred by deficiencies or malfunctions of agency banking servers. Malfunction of a banking server would reduce customers' willingness to use banking services.
- **Security/privacy risk:** is defined as a potential loss due to fraud or a hacker compromising the security of a system.
- **Time/convenience risk:** this refer to a loss of time and any inconvenience incurred due to the delays of receiving payments or the difficulty of navigation (finding appropriate services and relevant commands)
- **Financial risk:** is defined as the potential for monetary loss due to transaction errors.

D. Public Trust on agency banking

Trust is one of included constructs on the original UTAUT model. It can be defined as “the belief that vendors or suppliers will perform some activity in accordance with customer’s expectations” Trust is a fundamental component for establishing and maintaining successful relationships between customers and businesses (Masinge, 2010).

The effect of trust can be viewed based on the three dimensions: *Ability* (the perception of the consumer about the competency and salient knowledge of the agent banking services providers to deliver the expected service, *Integrity* (users’ perceptions that the service provider will be fair, honest and adhere to reasonable conditions of transactions) and *Benevolence* (the extent to which a service provider will demonstrate openness, good-faith effort, receptivity and empathy towards the user).

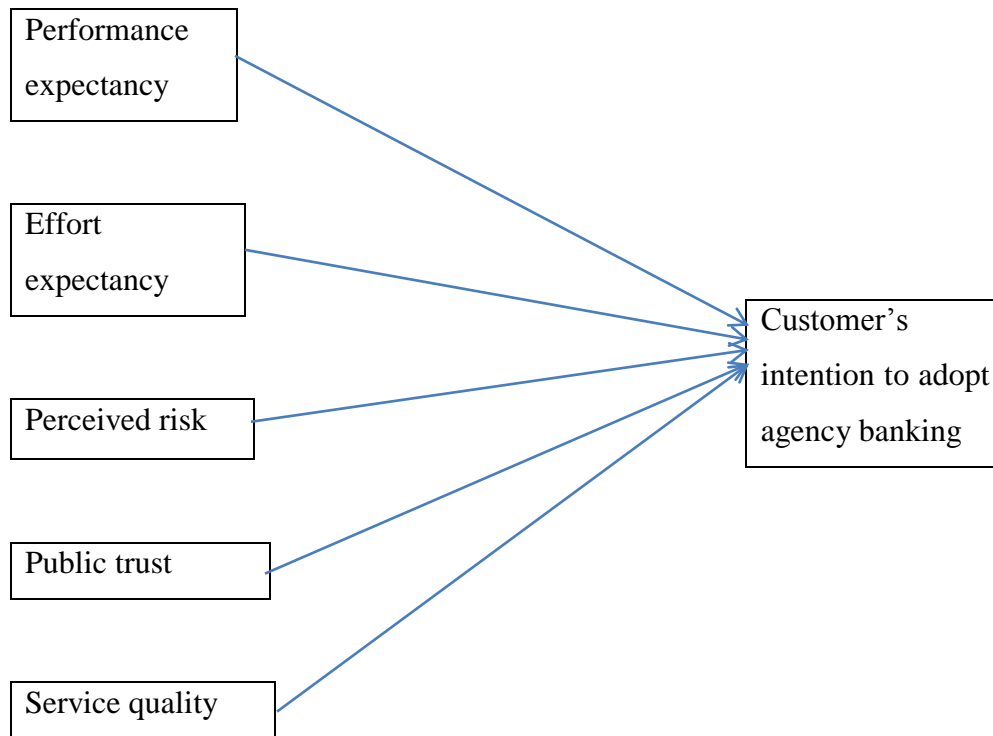
For the purpose of this study the three dimensions of trust: ability, integrity and benevolence. The trusting intention represents users' willingness to engage in subsequent transactions with the service provider. The higher levels of trust in a service provider will therefore lead to a greater intention on the part of user to engage in mobile banking transactions.

E. Service Quality

Service quality refers to reliability, content quality, personalization, accuracy, and quality of agents and service providers are critical factors to the effectiveness of agency banking (Laekemariam, 2016). Agents and service providers should be reliable to ensure the effectiveness of agent banking service, and hence service quality is included in the study.

Thus, the researcher adopts the UTAUT framework with some added constructs to summarize possible key factors affecting customer’s intention to adopt agency banking service in Ethiopia as shown in the following figure.

Figure 2.3: Proposed research model



Source: Venkatesh et al (2003) and customized by the author

2.6 Research Gap

In different parts of the world various research studies have been conducted on agency banking service. In Ethiopia various research studies also have been conducted on factors influencing adoption of E-banking in general and agency banking in particular like that of Ayana (2012), Afework (2015) and Anwar (2015). However, none of these studies focused on factors affecting customer's intention to adopt agency banking services specifically in Ethiopian banking context. Different frameworks and theories are also used in different studies like Diffusion of innovation theory, technology acceptance model (TAM). However this study employed the Unified Theory of Acceptance and Use of Technology (UTAUT). Most of previous studies also based on descriptive data analysis whereas this study is based on econometrics or ordinal regression analysis. Thus, this research study shed light on factors affecting customer's intention to adopt agency banking service in Ethiopia to fill the research gap in this regard.

CHAPTER THREE: RESEARCH METHODOLOGY

This section of the study looks at the methods used in order to achieve the objectives of the study. It highlights research design, data source, agency banking in Ethiopia and the methods used in data collection for the research. It also identified the target population for the study, the sample size and frame, sampling technique and how data obtained from the study analyzed.

3.1 Agency banking in Ethiopia

In late 2012, National Bank of Ethiopia has issued a directive cited as “Regulation of Mobile and Agent Banking Services under Directives No.FIS-01-2012” with effective date of January 1, 2013. The directive states about modes of business conduct, limits on mobile banking transactions, agent management, customer and agent due diligence requirements and so on. Following the directives several banks started to launch agency banking services i.e. Commercial Bank Of Ethiopia (Cbe Birr), Lion International Bank S.C.(Hello Cash), United Bank S.C. (HibirWekil), Cooperative Bank Of Oromia (Hello Cash), Wegagen bank (Hello Cash), Oromia International Bank (Oro-Cash), Awash Bank (Awash Mobile/Wallet), Dashen Bank (Amole) And Abay Bank (Abay Bedeje). Lion international SC, Oromia Cooperative bank wegagen bank SC and Somali micro finance institute S.C., in partnership with Belcash, launched HelloCash services in Ethiopia on February, 2015 (belcash, 2011). On June 30, 2018 the total number of active agency banking customers of Commercial Bank of Ethiopia, Lion International Bank S.C, United Bank S.C. and Cooperative Bank of Oromia located in Addis Ababa were 208,776, 98,384, 62,319 and 47,484 respectively (Belcash, 2018).

3.2 Research Design

In conducting the study, the researcher employed explanatory research design. In order to achieve the objectives of this study and answer the research questions, the research follows a quantitative (survey) research approach. It enables to measure the variables by asking the respondents questions which helps to examine the relationship among the dependent and independent variables. The study also employed structured questionnaire as the primary data collection and articles and banks’ annual and periodic report as secondary data collection instrument to gather information. It is also cross sectional study.

3.3 Population and Sampling

3.3.1 Target Population

According to the National Bank of Ethiopia 2017/18 annual report, there are Eighteen commercial banks operating in Ethiopia, which comprises two state owned and sixteen private commercial banks. Thus, population of this study comprised of all customers of commercial banks in Ethiopia.

3.3.2 Sample Frame

The population of this study comprised of all customers of commercial banks in Ethiopia. Commercial bank of Ethiopia (CBE) is a public bank which officially commenced agency banking service called ‘cbe birr on December, 2017. Dashen Bank S.C., Lion International Bank S.C., Cooperative Bank of Oromia S.C., United Bank S.C., Abay Bank, Oromia International Bank S.C., Wegagen Bank and Awash Bank are private banks which already launched agency banking service. However, it is impractical and difficult to collect data from each and every customer of aforementioned commercial banks in Ethiopia. Therefore, the researcher purposely targeted to consider one state owned bank i.e. CBE and three private banks i.e. Lion International Bank S.C, United Bank S.C. and Cooperative Bank of Oromia in order to obtain representative samples both from private and public banks. CBE has a highest market share and accessibility in the banking sector which gives a competitive advantage to attract new customers in turn influence customer’s intention to adopt agency banking service. Private Banks are selected on the basis of commencement period of mobile money solution or agency banking service applying judgmental or purposive sampling. Thus, the sample frame for the study is all customers of selected banks located in Addis Ababa.

However, customers of selected banks in Addis Ababa are too large and impractical to consider all of them as a result the study considered one branch from each selected four banks. Branches are selected based on their Grade and those serve as a pilot branch during commencement of agency banking service under respective banks. These intend us to select those branches with wider customer base and diversified populations. Accordingly, Arat kilo branch, Quersa Main branch, Misrak branch and Yeka branch From Commercial Bank of Ethiopia, Cooperative Bank of Oromia, United Bank and Lion International Bank S.C. are selected respectively.

3.3.3 Sample Size

The size of the sample and the way in which it is selected will definitely have implication for the confidence you can have in your data and the extent to which you can generalize. On June 30, 2018 the total number of customers of Commercial Bank of Ethiopia Arat kilo branch, Lion International Bank S.C Yeka branch, United Bank S.C Misrak branch and Cooperative Bank of Oromia Quersa Main branch were 152,238, 21,258, 40,277 and 27,328 respectively.

According to Yamane (1967) to get a representative sample from the population the following sample size determination technique is used.

$$n = N / (1 + Ne^2)$$

Where,

N = number of total population of selected banks i.e. 241,101 in our case

n = required sample size;

e = margin of error 5%

$$n = 241,101 / (1 + 241,101(0.05)^2), n = 399$$

Based on the above information, the sample size (n) is calculated for the target population of 241,101 and it is 399.

However, the obtained result indicates the total sample sizes of selected bank branches therefore it is vital to calculate proportional sample sizes for each bank branch. According to Kothari (2004) sample size of respective stratum can be calculated by using the total sample size obtained.

Thus, the proportion of the sample size for each banks are determined based on the following manner:

$$nh = (Nh / N) * n$$

Where; **nh** is the sample size for stratum h i.e. respective banks;

Nh the population size for stratum h i.e. respective banks;

N is the total population size;

n is the total sample size.

The following table depicts the proportion of the sample size for each bank branch;

Table 3.1 sample size determination

Bank/Branch	Target population(N)	Sample size (n)
CBE/Arat Kilo branch	152,398	252
CBO/Quersa Main branch	27,328	45
LIB/Yeka branch	21,258	35
United Bank S.C./Misrak branch	40,277	67
Total	241,101	399

3.3.4 Sampling Techniques

The study is based on non-probability sampling techniques. Purposive sampling technique as a non-probability sampling is used to select banks and selected bank branches. According to Kothari (2004) purposive sampling technique is useful to focus on particular characteristics of a population that are of interest (adoption of agency banking in our case) and enables the researcher to obtain relevant information and helps to answer the research questions. Purposive sampling helps in selecting those banks which were familiar with agency banking. This method is selected to enable the researcher to target specific customers both from private and public banks. In addition it is better to select those banks and branches of respective banks which adopted agency banking service earlier in order to get service friendly customers and obtain relevant and reliable response.

Convenience sampling technique is also employed to select customers under selected bank branches. This intend us to save time and cost by selecting those customers easily available (or most convenient) during a survey. It is also practically difficult to obtain lists of bank customers & their address.

3.4 Data Collection Instrument

A. Primary Data

Primary data is collected through self-administered questionnaire to be distributed to different group of sampled customers of Commercial Bank of Ethiopia, United Bank S.C, Lion International bank S.C and Cooperative Bank of Oromia of selected branches. The questionnaire includes all factors that are assumed to be determinants of customer's intention to adopt agency banking service.

The questionnaire is divided into two parts. The first section of the questionnaire enables the researcher to collect demographical data and general information about the respondents such as age, gender, occupation and background information while the second section contain respondent's perceptions on the various effects of the factors affecting customer's intention to adopt agency banking service which is useful in addressing the stated research questions and their actual intention to adopt the service. Closed ended questions are rated on a five-point Likert scales ranging from '1' "Strongly Disagree" to '5' "Strongly Agree". The target respondents are customers of selected banks branch.

B. Secondary data

The main source of secondary sources data were literatures from different papers, journals, articles, books and annual and periodic reports of respective banks.

3.5 Analysis of Data

Data analysis is a process used to make sense of the collected raw data. Both descriptive statistics and regression analysis is employed to analyze quantitative data obtained from the distributed questionnaire of factors affecting customer's intention to adopt agency banking service. Descriptive statistics such as frequency distribution and percentages is used to assess the demographic profile of the respondents to make the analysis more meaningful, clear and easily interpretable. Descriptive statistics allow the researchers to present the data acquired in a structured, accurate and summarized manner (Creswell, 2003). Statistical Package for Social Sciences (SPSS) version 20, data analysis software is used to analyze the descriptive parts of the study whereas Stata version 13 is used to conduct the regression analysis.

3.6 model specification

The research intend to establish the effect of independent variables, which includes performance expectancy, effort expectancy, perceived risk, public trust and service quality on dependent variables, i.e. customer intention to adopt agency banking. Ordinal Regression analysis is used to analyze the data quantitatively and study relationships between dependent and independent variable.

Ordinal regression model of the study is specified as follows:

$$\text{CUSTINT} = \alpha + \beta_1\text{PE} + \beta_2\text{EE} + \beta_3\text{PR} + \beta_4\text{PT} + \beta_5\text{SQ} + e_i$$

Where: CUSTINT (dependent variable): customer intention to adopt agency banking

PE: Performance expectancy,

EE: Effort expectancy,

PR: Perceived risk,

PT: Public Trust,

SQ: Service quality and



Independent variables

α = Constant term

β = is the coefficient predictor variables.

e_i = is the error term which captures the effect of independent variables which are not included in the model

3.7 Testing for reliability and validity

Reliability refers to consistency and for a questionnaire to be valid it must be reliable. Reliability indicates the robustness of our questionnaire and, in particular, whether or not it will produce consistent findings at different times and under different conditions, such as with different samples. Internal consistency or reliability involves correlating the responses to questions in the questionnaire with each other. In measuring internal consistency, the study used Cronbach's alpha statistic.

It consists of an alpha coefficient with a value between 0 and 1. Values of 0.7 or above indicate that the questions combined in the scale are measuring the same thing (Saunders, 2016).

Validity is about having some level of similarity in the original idea of research and the actual idea after getting the results. It refers to the degree of success of an instrument in measuring what it is set out to measure. The concept of validity measures whether the findings in the research are really about what they appear to be about and check the relationship between variables (Saunders, 2000).

To ensure content validity, first, questions selected for the constructs were mostly adapted from prior studies, such as those by Davis (1989), Masinge (2010), Kenneth (2016), and Ray (2018). A preliminary discussion was also made with my colleagues who have good understanding in the area of interest, examined issues related to the relevance and wordings of the questionnaire items, length of survey and time taken to complete the questions and to evaluate if the questionnaire contains anything ambiguous and that was hard to interpret. The researcher also sought opinions of experts in the field of study especially got approval from the supervisor. Thus, their feedbacks were considered to assure content validity and develop the final research instrument.

3.8 Data Coding

The table shows the codes for each question in the study for both sections of the questionnaire.

Table 3.2: Measurements of all Variables

	Variable codes and labels		Measurement	Scale of measurement
Demographic and background information	D1	Gender	Dummy	1=male, 0=female
	D2	Age	Ratio	1=(18-25), 2=(26-33), 3=(34-41), 4=(42-49)& 5=(>50)
	D3	Education level	Ordinal	1=primary, 2=secondary, 3=diploma, 4=degree, 5=master &above
	D4	Marital status	Nominal	1=single, 2=married, 3=divorced, 4=widowed
	D5	Occupation	Nominal	1=government, 2=private, 3=business, 4=student, 5=other
	B1	Prior information of agency banking	Dummy	1= Yes, 0= No
	B2	User of agency banking	Dummy	1= Yes, 0= No
Independent variables	PE,EE, PR,PT, SQ	Performance expectancy, effort expectancy, perceived risk, public trust, service quality	Interval	five point likert scale
Dependent variable	CUSTI NT	Intention to adopt agency banking	Interval	Five point likert scale

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

The main purpose of this section is to present the analysis and discussion of the findings of the study. The researcher distributed a total of 399 questionnaires to four purposely sampled commercial bank branches customers; Commercial Bank of Ethiopia, United Bank S.C, Lion International Bank S.C and Cooperative Bank of Oromia who have already commenced agency banking services in Ethiopia. Out of the total 399 questionnaires, 362 useable questionnaires were obtained to enable a meaningful analysis of the data with 90.7% response rate, while 37(9.3%) remain uncollected and not relevant for analysis due to negligence of the respondents in filling the questionnaires. Statistical Package for the Social Sciences (SPSS) software is used to analyze the descriptive part of research findings and the regression part of the study is also analyzed by using Stata 13. The analysis is also done in line with the objectives. The first part of this chapter presents the demographic characteristics of the respondents. The second part of the chapter contains of detail analysis of descriptive and regression findings.

4.1. Respondents Demographic Characteristics

Demographic factors age, gender, educational status and occupation have significant impact on consumers' new technology adoption and usage behavior (Beza, 2017). The respondents of the survey have different personal information. This section outlines the findings on the demographic characteristics of the sample, which includes gender, age, educational level, marital status and occupation of the respondents. To reveal the demographic profile of the respondents, the study used frequencies to determine the number of times a respondent answered a particular question as clearly depicted in the following table.

As reflected in Table 4.1 below, about 45% of the entire respondents were females and around 55% of them were males. This indicated that there were slightly more male respondents participated in the study than their female correspondents. This is may be due to the fact that males are more likely to be interested in the usage and adoption of new technologies; which is in line with the finding of shi yu (2009).

Table 4.1 below also revealed that the majority of the respondents (about 45%) were between the ages of (26-33), followed by the age group of (18-25) & (34-41) with the respondent percentage of 19 & 17 respectively. Five percent (5%) of the respondents fall below the lowest age group

which is above fifty years. This implies that almost all classes of population were represented and the data provided reflected the views of the entire population. However, most of the respondents which reveal willingness to participate in the study were relatively younger. According to Rogers (2003) innovation diffusion theory earlier adopters of technological innovations are typically younger in age, having higher incomes and better educated.

Table 4.1 Respondents demographic characteristics

Demography	Label	Frequency	Percentage
GENDER	Female	164	45.3 %
	Male	198	54.7 %
AGE	18-25 years	70	19.3%
	26-33 years	164	45.3%
	34-41 years	63	17.4%
	42-49 years	47	13%
	>50 years	18	5%
EDUCATIONAL LEVEL	Primary	18	5%
	Secondary	54	14.9%
	Diploma	28	7.7%
	Degree	180	49.7%
	Master and above	82	22.7%
OCCUPATION	Government	165	45.6%
	Private	82	22.7%
	Business	90	24.9%
	Student	25	6.9%
	Other	-	0%
MARITAL STATUS	Single	147	40.6%
	Married	212	58.6%
	Divorced	3	3%
	Widowed	-	-

Source; own computation, 2019 N=362

Educational level of the respondents indicates that most of them had University level education; around 72% of the respondents were degree and above degree holders. Meanwhile, around 5% of the respondents had primary education level which is the lowest educational category. As revealed from the age of respondents most of them are younger which could be a possible reason for obtaining many university level education holders respondent. This implies that the respondents could read, understand and interpret questionnaires reliably.

The occupation distribution of the respondents included in the study deferred from one another. The study revealed that, the highest respondents were government employee with around 46% of the respondents, followed by the business persons with around 25 % of the total respondents. Students were the lowest respondents of the study while their marital status revealed that most of the respondents are married individuals followed by single status respondents. Study conducted by Faisal (2013) claimed that marital status was found to be significantly associated with level of adoption of technologies.

4.2 Respondents background information

Analysis of level of customer prior information about the service and usage of the service is vital to assess factors affecting customer's intention to adopt agency banking service. As shown in the following table, majority of the customers of banks included in the study, i.e. 92.3% (334) have heard of agency banking service provided by the financial institutions.

Table 4.2 respondents background information

Response	Prior information about agency banking			User of agency banking		
	Yes	No	Total	Yes	No	Total
Frequency	334	28	362	132	230	362
Percentage	92.3%	7.7%	100%	36.5	63.5	100%

Source: SPSS output

This indicated that our financial institutions has used different means of advertisement such as radio, cross-selling, internal and external marketing's, brochures, newspapers and even TV in conveying their messages to customers about this new service. However, the service is yet to be well embraced by the banks customers taking into account of the revealed high information about the service.

Though a lot of people claim to have heard of agency banking services, as mentioned above, the rate of adoption of current users of the services i.e. only (36%) of sampled customers is very insignificant. These imply that, consumer’s attitude towards agency banking adoption in Ethiopia is still minimal. However, for financial institutions it convey significant message of availability of untapped potential customers to adopt the service.

4.3 Customer’s intention to use agency banking services

To determine whether the respondents are intended to use agency banking service, they were asked to indicate whether they intend to use agency banking or not in the near future by using a five-point Likert scales ranging from ‘1’ “Strongly Disagree” to ‘5’ “Strongly Agree.

Table 4.3 Summary of customer’s intention to adopt agency banking service

N	Mean	Std.deviation
362	3.9024	0.9144

Source: SPSS output

Customers of sampled banks are intending to use agency banking services in the future with a mean value of 3.9 on a 5 point likert scale. The overall scale mean of 3.9 out of 5 suggests that there is a high intention to adopt or use agency banking services in the near future within the sampled respondents. This may be due to the fact that, their prior information and sampled respondents may like to try these services as new applications and technologies.

Table 4.4 Customer intention to adopt agency banking service

Response	Strongly disagree & agree	Neutral	Strongly agree & agree
Frequency	41	4	317
Percentage	11.3%	1.1%	87.6%

Source: SPSS output

As revealed in the above table about 88% of sampled customers responded “agree” and “strongly agree” scale in regards to the intention to use agency banking in the near future. This implies that customers are willing to uptake this new technology and application. This result is obtained because of most of the respondents were young group of the population (about 80%)and literate (about 72% degree & above degree holders) which are fast learners and represent a new technology acceptance group within the population.

However, it is vital to assess the individual impacts of independent variables for obtained high level of customer's intention to adopt agency banking by using descriptive and regression analysis.

4.4. Data reliability test

Cronbach's alpha reliability test was run on the data collected to determine the reliability of the data. According to Hair, et al. (2006), if α is greater than 0.7, it means that it has high reliability and if α is smaller than 0.3, then it implies that there is low reliability. Reliability scale of the overall variables high as indicated below which is about 92%. The scale reliability coefficients of individual dependent and independent variables are also high as depicted on the following table.

Table 4.5 Cronbach's Alpha

Variables	Alpha(α)
CUSTINT	0.8896
PE	0.8991
EE	0.8970
PR	0.9062
PT	0.9174
SQ	09.057
Test scale	0.9176

Source; Stata output

4.5 Descriptive Analysis Results

Descriptive statistical analysis is used to present and interpret the data collected on various variables of factors affecting customer's intention to adopt agency banking. Frequencies, table, percentage, mean and standard deviations are also employed to analyse the responses of respondents.

4.5.1. Performance expectancy and Its Impact on customer's intention to Use

From the results of below table 4.6, responses observed from the customers sampled for the study indicates that, majority of respondents (about 87%) responded agree and strongly agree scale. respondents of the survey had the highest Mean (4.11) on the performance expectancy

construct, which means they mostly ‘agreed’ that agency banking is expected to be useful or have good performance. Customers with high performance expectancy had high intention to adopt agency banking. This result could imply those customers who expect to gain benefits from using agency banking are more likely to have intention to adopt agency banking. Thus, using agency banking system will help customer to perform banking activities within a short period of time and at minimal cost. This assured that, the performance expectation or usefulness of agency banking service is very important to their decision to adopt and continual use the service while few of the respondents (around 10 %) strongly opposed stating that the usefulness of the service will not likely to influence their decision to adopt agency banking service

Table 4.6 performance expectancy

Response	Strongly disagree & agree	Neutral	Strongly agree & agree
Frequency	37	12	313
Percentage	10.2%	3.3%	86.5%

Source: SPSS output

The mean value of 4.11 rated out of five point likert scale revealed a higher performance expectation of customers’ from the service. Thus, if customers expect a better performance from the service they are likely to adopt it implying a positive effect of performance expectancy on consumer intention to adopt agency banking services.

This study is congruent with Venkatesh et al. (2003), in which Performance expectancy was found to have significant influence on the behavioral intention to adopt mobile banking. The finding of the study is also consistent with that of Ayana (2012) and Kenneth et al. (2016).

4.5.2. Effort expectancy and Its Impact on customer’s intention to Use

From the descriptive analysis below responses observed from the customers sampled for the study revealed that, majority of them (about 80%) responded agree and strongly agree scale. Respondents also revealed high mean value of (3.97) on the effort expectancy construct, which means they mostly ‘agreed’ on the ‘ease of use’ of agency banking. The findings confirm respondents’ strong agreements where Agency Banking will makes easier to do banking activities and effort required using the service or ease of use is important for their decision to adopt agency banking service.

These respondents also acknowledged that, their perception about the ease of use of this device will help their decision to adopt this service. Few of the respondents (around 12 %) strongly opposed the impact of effort expectancy on decision to adopt agency banking service.

Table 4.7 Effort expectancy

Response	Strongly disagree & agree	Neutral	Strongly agree & agree
Frequency	44	30	288
Percentage	12.1%	8.3%	79.6%

Source: SPSS output

The average result of 3.97 rated out of five point likert scale revealed customers' expectation of lower effort required to adopt the service. The researcher concluded that, when an innovation is expected to be easy to use consumers will likely adopt it revealing a positive effect of effort expectancy on consumer intention to adopt agency banking services.

This research finding is consistent with that of Laekemariam (2016), Venkatesh et al. (2003) and Elizabeth (2016) conducted on factors influencing the adoption of agent banking by commercial banks in Kenya. In contrast the finding of the study is against with Momanyi, (2016) conducted on factors influencing the adoption of digital banking by customers among commercial banks in Kenya found that, customers of majority of the banks believe that using digital banking technologies is difficult to use

4.5.3. Perceived risk and Its Impact on customer's intention to Use

Responses captured in the following table shows that, the respondents asked on the Perceived risk facets whether they fear risk or not to use Agency Banking system. The responses observed from the customers sampled for the study indicates that, most of respondents (about 65%) responded disagree and strongly disagree scales on how they felt about the perceived risk of agency banking, as a contributing factor on the adoption of agency banking.

This indicated that, the perceived risk facets of *Performance risk* (agency banking service may not perform well & process payment incorrectly and may not perform well because of network problems), *security/privacy risk* (I would not feel secure for sending sensitive information via agency banking & there is a considerable risk involved In agency banking), *time/convenience*

risk(fixing payment errors would lead to loss of convenience) and *financial risk*(agency banking may expose me to fraud or monetary lose) will likely influence their decision to adopt agency banking service i.e. lower perceived risk is associated with a higher intention to uptake the service. A higher Perceived risk expectation also create grounds for doubts and confusion in the customers mind especially when they are not sure about their security while using agency banking.

Table 4.8 Perceived risk

Response	Strongly disagree & agree	Neutral	Strongly agree & agree
Frequency	235	76	51
Percentage	64.9%	21%	14.1%

Source: SPSS output

Meaning when customers believe that using agency banking is riskier they will intend not to adopt or use the service in this study context. The average result of 2.79 rated out of five point likert scale revealed a lower perceived risk expectation of customers' for adopting the service which is replicated by a higher customer's intention to adopt agency banking i.e. a mean value of 3.9. Thus, if customers expect a lower risk from the service they are likely to adopt it implying inverse relationship between perceived risk and consumer intention to the service.

Several technology adoption studies have supported that people refuse or are unwilling to use new service mainly because of perceived risk. For instance this research finding is consistent with that of (Masinge, 2010), after conducting a regression analysis from results obtain from 306 respondents in South Africa found out that, perceived risk has negative impact on the usage of service. This study finding is also consistent with the study undertaken by Ayana (2012). The result of this study is also conformity with the study by Makongoro (2014) who found perceived risk to be a significant factor affecting mobile banking adoption.

4.5.4. Public trust and Its Impact on customer's intention to Use

Public trust construct includes Ability, Integrity and Benevolence facets. The following table revealed that, responses observed from the customers sampled for the study indicates about half of respondents (52%) responded neutral followed by agree responses (about 38 %). Most of the respondent's response with a Mean value of (3.54) lies between 'neutral' and 'agree' that agency banking service providers have the ability to render the service, are generally fair and honest

when conducting agency banking transactions and agency banking service providers have benevolence (open, receptive, empathy and good-faith effort) towards the user. This indicated that, the public trust facets of ability, integrity and benevolence will not likely to influence their decision to adopt agency banking service.

Table 4.9 Public trust

Response	Strongly disagree & agree	Neutral	agree	Strongly agree
Frequency	24	189	139	10
Percentage	6.6%	52.2%	38.4%	2.8%

Source: SPSS output

The mean value of 3.54 rated out of five point likert scale revealed almost a neutral impact of public trust of service providers for adopting the service which is in contrast with observed higher customer's intention to adopt agency banking i.e. a mean value of 3.9.

The finding of the study is in line with Renima (2011) which found out that public trust has positive and insignificant impact on mobile banking or technology adoption. However, other studies do not support the outcome of this study. For instance the study undertaken by Bakhshali (2010) and Makongoro (2014) on factors influencing the adoption and use of electronic banking in Arak city and mobile banking in Tanzania respectively indicated that public trust has a negative effect on technology adoption.

4.5.5. Service quality and Its Impact on customer's intention to Use

The following table revealed that, responses observed from the customers sampled for the study indicates that, more than half of the respondents (55.5%) responded neutral followed by agree responses (about 26%). This indicated that, service quality facets like accuracy, reliability, and quality of agents and service providers will not likely to influence their decision to adopt agency banking service.

Table 4.10 service quality

Response	Strongly disagree & agree	Neutral	Agree	Strongly agree
Frequency	60	201	95	6
Percentage	16.6%	55.5%	26.2%	1.7%

Source: SPSS output

The mean value of 3.32 rated out of five point likert scale strongly revealed almost a neutral impact of service quality for adopting the service which is in contrast with observed higher customer’s intention to adopt agency banking i.e. a mean value of 3.9. Thus, the impact of service quality to adopt agency banking service is almost insignificant.

This research finding is consistent with that of Laekemariam (2016), after conducting a study on Factors Affecting the Adoption of Mobile Banking in Commercial Bank of Ethiopia found out that, service quality has insignificant impact on the usage of service.

4.5.6. Summary of descriptive Results

The following (table 4.11) shows that performance expectancy have the highest Mean, and perceived risk to have the lowest Mean, as factors affecting the adoption of agency banking.

Table 4.11 Summary of descriptive analysis

		Statistics					
		customer intention	performance expectancy	effort expectancy	perceived risk	public trust	service quality
N	Valid	362	362	362	362	362	362
	Missing	0	0	0	0	0	0
Mean		3.9024	4.1112	3.9715	2.7905	3.5381	3.3170
Std. Deviation		.91446	.75602	.81222	.57193	.59985	.62149

Source: SPSS output

4.6 Correlations among variables

In determining the strength of the relationship between variables the value of the coefficient of correlation(r)which is between 0 &1 value is used and interpreted as follows if r=0.10 to 0.29 or r= -0.10 to -0.29 week correlation, r=0.30to 0.49or r= -0.30 to -0.49 moderate and r=0.50to 1 or r= -0.50 to -1 strong correlation.

The correlation analysis of the figure 4.1 below shows that there is a positive relationship between each determinants of customer's intention except perceived risk to adopt agency banking service. Perceived risk is negatively correlated with customer's intention to adopt agency banking service ($r=-0.734$).

The highest correlation ($r=0.802$) is occurred between the effect of performance expectancy and effort expectancy. It indicates the existence of strong positive correlation between perceived usefulness and perceived ease of use. This due to the fact that individual's perception about the ease of use of this service helped their decision to adopt this service having been informed about its advantages and disadvantages. The degree to which the person believes that using the system will be free of effort will affects a person believes that using a particular system will enhance his or her job performance. Thus, the greater the ease of use, the more likely agency banking is useful, thus influencing decisions to adopt it as a means of financial transactions.

As the same time there is also a strong correlation between customer's intention and performance expectancy ($r=0.809$) and customer's intention with effort expectancy ($r=0.807$). This implies if a person believes that using the system will be free of effort and enhance his or her job performance they are likely to adopt the service.

The negative correlation coefficients of perceived risk with the rest of the variables indicates that when respondents believes that adopting the system is risky, they are likely to expect low performance, highest effort and lower tendency to adopt the service. Customers will not adopt the service if it is perceived to be risky whereas they reveal strong tendency to adopt the service when it is perceived to have minimal risk.

There is also slightly strong relationship between public trust of the service and customer's intention to adopt the service with the correlation coefficient of ($r=0.586$). This shows that public trust will not significantly affects adoption and usage of the service. This is due to the fact that even if customer's does not have trust on service providers, when they feel good perception about the ease of use of this service, having been informed about its advantages and disadvantage and it's risk level they are likely to adopt the technology.

There is also slightly strong relationship between service quality and customer’s intention to adopt the service with the correlation coefficient of (r=0.637). This shows that service quality will not significantly affects adoption and usage of the service. The minimum moderate correlation value is revealed between effort expectancy and public trust (r=0.477).

Figure 4.1 correlation matrix

		Correlations					
		customer intention	performance expectancy	effort expectancy	perceived risk	public trust	service quality
customer intention	Pearson Correlation	1	.809 ^{**}	.807 ^{**}	-.734 ^{**}	.586 ^{**}	.637 ^{**}
	Sig. (1-tailed)		.000	.000	.000	.000	.000
	N	362	362	362	362	362	362
performance expectancy	Pearson Correlation	.809 ^{**}	1	.802 ^{**}	-.607 ^{**}	.516 ^{**}	.609 ^{**}
	Sig. (1-tailed)	.000		.000	.000	.000	.000
	N	362	362	362	362	362	362
effort expectancy	Pearson Correlation	.807 ^{**}	.802 ^{**}	1	-.679 ^{**}	.477 ^{**}	.628 ^{**}
	Sig. (1-tailed)	.000	.000		.000	.000	.000
	N	362	362	362	362	362	362
perceived risk	Pearson Correlation	-.734 ^{**}	-.607 ^{**}	-.679 ^{**}	1	-.558 ^{**}	-.583 ^{**}
	Sig. (1-tailed)	.000	.000	.000		.000	.000
	N	362	362	362	362	362	362
public trust	Pearson Correlation	.586 ^{**}	.516 ^{**}	.477 ^{**}	-.558 ^{**}	1	.715 ^{**}
	Sig. (1-tailed)	.000	.000	.000	.000		.000
	N	362	362	362	362	362	362
service quality	Pearson Correlation	.637 ^{**}	.609 ^{**}	.628 ^{**}	-.583 ^{**}	.715 ^{**}	1
	Sig. (1-tailed)	.000	.000	.000	.000	.000	
	N	362	362	362	362	362	362

** Correlation is significant at the 0.01 level (1-tailed).

Source: SPSS output

4.7 Regression Analysis

Econometrics analyses are also used to estimate and identify the sign and significance of factors affecting customer’s intention to adopt agency banking in banking industry of Ethiopia. There are five independent variables (performance expectancy, effort expectancy, perceived risk, public trust and service quality) with one dependent variable (intention to use) to be analyzed in this stage. Ordinal Regression model is applied to test the impact of independent variables on customer’s intention to adopt agency banking service. The initial model of the study is depicted as follows:

Customer intention to adopt agency banking = $\alpha + \beta_1$ Performance expectancy + β_2 Effort expectancy+ β_3 Perceived risk+ β_4 Public trust+ β_5 Service quality+ e_i

OR, **CUSTINT** = $\alpha + \beta_1$ PE + β_2 EE+ β_3 PR+ β_4 PT+ β_5 SQ+ e_i

Using the ologit command of Stata 13, the following results depicted in figure 4.2 below were obtained. Before interpreting the results, it is vital to look at the overall results. It is known that under the null hypothesis that all regressor coefficients are zero; the Likelihood Ratio (LR) test follows the chi-square distribution with degrees of freedom equal to the number of regressors, five in our case. Likelihood ratio (LR) test measures the statistical significance of the entire regression equation rather than each individual coefficient as the Z test is designed to do. The greater the value of LR test implies that variables included in the model have together a significant effect on the dependent variable, and the model has a high explanatory power. In our case this chi-square value is about 278. If the null hypothesis were true, the chances of obtaining a chi-square value of as much as 278 or greater is practically zero. The p value (i.e. the exact significance level) is practically zero ($\text{prob} > \chi^2 = 0.000$), thus refuting the null hypothesis. So collectively all the regressors have significant impact on the customer's intention to adopt agency banking service.

The model also gives the Pseudo R^2 of 0.20. This is not the same as the usual R^2 in OLS regression – that is, it is not a measure of the proportion of the variance in the regressand explained by the regressors included in the model. It should be emphasized that in binary and ordinal logistic regression models goodness of fit measures are of secondary importance. What matters are the expected signs of the regression coefficients and their statistical and or practical significance (Gujarati, 2004). Therefore, the Pseudo R^2 value should not be considered as a measure of goodness of fit like the OLS R^2 . Rather, the p value being practically zero ($\text{prob} > \chi^2 = 0.000$), suggests that the model chosen gives a good fit.

cut1, cut2 and cut3..., labels in the following figure are the intercepts values for respective category. The statistical significance of an individual regression coefficient is measured by the Z value (the standard normal distribution Z). Coefficients of performance expectancy, effort expectancy and perceived risk are individually highly statistically significantly different from zero, as their p values being practically zero and their z value being higher while the coefficients

of public trust and service quality are statistically insignificant, as their p values being practically different from zero. However, the coefficient of service quality is statistical significant at least at the 10% level of significance.

Figure 4.2 Ordinal regression estimation of the model

```
. ologit CUSTINT PE EE PR PT SQ

Iteration 0:  log likelihood = -668.94942
Iteration 1:  log likelihood = -619.37535
Iteration 2:  log likelihood = -554.16901
Iteration 3:  log likelihood = -531.46565
Iteration 4:  log likelihood = -530.03946
Iteration 5:  log likelihood = -530.03004
Iteration 6:  log likelihood = -530.03002

Ordered logistic regression          Number of obs   =       362
                                   LR chi2(5)        =       277.84
                                   Prob > chi2       =       0.0000
Log likelihood = -530.03002         Pseudo R2      =       0.2077
```

CUSTINT	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
PE	1.24433	.2549373	4.88	0.000	.7446619	1.743998
EE	.9594374	.2359677	4.07	0.000	.4969492	1.421926
PR	-1.359722	.2589303	-5.25	0.000	-1.867216	-.8522279
PT	.3404778	.2356222	1.45	0.148	-.1213332	.8022888
SQ	.4529301	.2559563	1.77	0.077	-.048735	.9545953
/cut1	.7503399	1.444885			-2.081582	3.582262
/cut2	2.394644	1.459996			-.4668967	5.256184
/cut3	3.507212	1.500043			.5671826	6.447241
/cut4	4.180114	1.533494			1.17452	7.185708
/cut5	7.057952	1.606355			3.909555	10.20635
/cut6	8.779708	1.613427			5.617449	11.94197
/cut7	10.2051	1.619502			7.030936	13.37927
/cut8	11.08761	1.628254			7.896287	14.27893

Source; Stata 13 output.

The result of ordinal regressions, presented in Figure 4.2above, shows that performance expectancy has positive and significant effect on customer’s intention to adopt agency banking with a beta value (beta = 1.244), and p value= 0.000, at 95% confidence level (p >0.05) which is consistent with theoretical literatures. Therefore, the researcher can conclude that performance expectancy is strong determinant of adoption of agency banking.

After running ordinal regression it is also revealed that effort expectancy has positive and significant effect on customer's intention to adopt agency banking with a beta value (beta = 0.956 and p value= 0.000, at 95% confidence level ($p > 0.05$)) which is in line with theoretical findings. Therefore, we can conclude that effort expectancy is also strong positive determinant of adoption of agency banking.

Perceived risk found to have negative and significant effect on customer's intention to adopt agency banking with a beta value (beta = -1.36 and p value= 0.000, at 95% confidence level ($p > 0.05$)) which is in line with theoretical findings. Therefore, we can conclude that perceived risk is also strong negative determinant of adoption of agency banking.

Public trust and service quality are found to be positive and insignificant effect on customer's intention to adopt agency banking with a beta value (beta = 0.34 and 0.453 and p value= 0.148 and 0.077 respectively, at 95% confidence level ($p > 0.05$)). From this finding, it is possible to conclude that both public trust and service quality have positive impact on adoption of agency banking which is consistent with theoretical findings. However, the obtained p value revealed that the positive impacts of the above variables are insignificant.

Figure 4.3 the odds ratio of customer intention to adopt agency banking service

```
. ologit CUSTINT PE EE PR PT SQ, or

Iteration 0: log likelihood = -668.94942
Iteration 1: log likelihood = -619.37535
Iteration 2: log likelihood = -554.16901
Iteration 3: log likelihood = -531.46565
Iteration 4: log likelihood = -530.03946
Iteration 5: log likelihood = -530.03004
Iteration 6: log likelihood = -530.03002

Ordered logistic regression          Number of obs   =       362
                                   LR chi2(5)       =       277.84
                                   Prob > chi2      =       0.0000
Log likelihood = -530.03002         Pseudo R2      =       0.2077
```

CUSTINT	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
PE	3.470608	.8847876	4.88	0.000	2.105729	5.720166
EE	2.610228	.6159294	4.07	0.000	1.643699	4.145095
PR	.2567322	.0664757	-5.25	0.000	.1545533	.4264638
PT	1.405619	.3311195	1.45	0.148	.8857388	2.230641
SQ	1.572914	.4025973	1.77	0.077	.9524335	2.597619
/cut1	.7503399	1.444885			-2.081582	3.582262
/cut2	2.394644	1.459996			-.4668967	5.256184
/cut3	3.507212	1.500043			.5671826	6.447241
/cut4	4.180114	1.533494			1.17452	7.185708
/cut5	7.057952	1.606355			3.909555	10.20635
/cut6	8.779708	1.613427			5.617449	11.94197
/cut7	10.2051	1.619502			7.030936	13.37927
/cut8	11.08761	1.628254			7.896287	14.27893

Source; Stata output

In practice it is often useful to compute the odds-ratios to interpret the various coefficients of the independent variables (Gujarati, 2004).The odd ratio indicates that if we increase performance expectancy and effort expectancy by a unit, the odds in favor of higher customer intention category over a lower category is greater than 1. As we can see from these odds ratios, the odds of getting higher customer intention ranking are lower or less than one if perceived risk increase by a unit. This is due to the fact that there is inverse relationship between perceived risk and customer’s intention to adopt agency banking service. The odds are about even for public trust and service quality.

4.8 Chapter summary

This chapter deals with the results of the data analysis based on the data collected from the respondents of survey conducted. The demographic profile, background information of the respondents and the usage intention of respondents are also described in detail. Correlation analysis between dependent and independent variables is also conducted. Ordinal regression analysis techniques is applied to test the predicting capability of the model and to identify the individual significance of independent variables. The result of the regression analysis revealed that all variables in the research model, except perceived risk, have direct or positive influence on customer's intention to adopt agency banking service. The results from the regression analysis of figure 4.2 also suggest that performance expectancy, effort expectancy and perceived risk have significant impact for adoption whereas the impact of public trust and perceived risk is found to be insignificant. The result of the analysis also indicates that both non-users and users are expecting to adopt or use agency banking in the future with a higher expected or mean value.

The impact of public trust and service quality is found to be positive which is in line with theoretical literatures and empirical findings. Renima (2011) and Laekemariam (2016) found out that public trust has positive impact on mobile banking or technology adoption. Ray (2018) also found a positive impact of service quality on technology adoption. However, in contrast with the available theoretical literatures and empirical findings the observed positive impact of public trust and service quality on customer's intention is found to be insignificant in Ethiopian context and further study needs to be conducted in this regard in order to clarify the obtained contradicting results.

CHAPTER FIVE: Summary of Findings, Conclusion and Recommendation

5.1. Summary of Findings

The aim of this research is to assess factors affecting customer's intention to uptake agency banking service in Ethiopia. The study revealed that, there was a high level of customer knowledge about agency banking in Ethiopia but currently, the rate of agency banking adoption in Ethiopia is very low when it is compared with the number of bank customers get informed about agency banking facilities. This showed that, consumers were reluctant to adopt this service due to many factors which have been described in the research.

Accordingly, the finding of the study depicted that performance expectancy has a positive and significant impact on the adoption of agency banking service in Ethiopia. Customers will intend to adopt agency banking service as long as it is perceived to be useful and when the value and benefit of the service is apparent. Thus, it is vital to develop agency banking service features with valuable functionalities and be compatible with the end users.

The study also revealed that respondents will intend to adopt agency banking services when it is perceived to be easy to use. Effort expectancy has a positive and significant relationship impact on the adoption of agency banking service in Ethiopia. Effort expectancy is also found to be significantly correlated with performance expectancy. This implies that the easier it is to use agency banking, the more it will become useful.

The results of the study show that customers will adopt agency banking services when it is perceived to be risk free. Perceived risk has a negative and significant impact on the adoption of agency banking service in Ethiopia. Perceived risk is found to be negatively correlated with the rest of the variables. This implies that when respondents believe that adopting the system is risky, they are likely to expect low performance, highest effort to use and lower tendency to adopt the service. Thus, customers will not adopt the service if it is perceived to be risky whereas they reveal strong tendency to adopt the service when it is perceived to be minimal risk.

It is also evident that public trust of the service and service quality is found to be positively correlated with intention to uptake the service. However their effect on the adoption of agency banking services is found to be insignificant. Thus, public trust of the agency banking service

providers and service quality of agents and banks had no effect on customer's intention to adopt agency banking.

5.2. Conclusions of the study

As a new technology application, agency banking is used as a banking and financial service. Consequently exploring the factors influencing the use or adoption of agency banking is quite important for agents and service providers who may intend to improve their services in order to attract more customers and attain better performance. This research adopts UTAUT in Ethiopian context to investigate the research questions and achieve the objectives.

From the result of the study it can be concluded that, in Ethiopia customers are highly intended to adopt agency banking service. However, currently agency banking service adoption rate is very low as compared to the availability of high intention toward adoption of agency banking service. This is due to the fact that awareness created by the banks and their penetration rate is low.

When it comes to all the factors that can influence the adoption and usage of agency banking services, majority of the respondents included in the study attested to the findings that performance expectancy, effort expectancy and perceived risk have a significant influence on their adoption and usage of the service whereas the influence of public trust and service quality of agents and service providers were found to be insignificant.

This study has also clearly identified factors affecting user intention to adopt agency banking service. The effect of performance expectancy, effort expectancy and perceived risk were found to be important and significant in the adoption of agency banking in Ethiopia which is consistent with previous studies conducted in this area. Thus, it can be concluded that customers will consider adopting agency banking service as long as it is perceived to be useful, perceived to be easy to use and perceived to be risk free or minimal risk.

5.3 Recommendations of the study

Based on the above conclusion the researcher suggests a series of measures which could be taken by the banking industry and retail agents.

Banks, merchants and retail agents who have already introduced or planning to introduce agency banking for their customers are the primary stakeholders that would be interested in the finding of the study. Assessment of factors influencing user's intention to uptake the service will guide banks and retail agents on what is expected from their service in order to recruit more customers and get the maximum benefit out of the service. In this regard the above stakeholders should give attention on the performance expectancy, effort expectancy and perceived risk of the service.

The study also recommends that financial institution needs to sensitize customers and create awareness about the performance, perceived risk and ease of use of agency banking service. Stakeholders should provide aggressive awareness of agency banking service usefulness in terms of convenience, time and cost saving. The service should also be easier to operate and understand. Banks should also inform customers that transacting via agency banking is secure. Bank officials need to create favorable beliefs of usefulness, ease of use in the customers regarding their adoption of agency banking service.

Financial institutions should conduct extensive promotion; marketing and cross-selling activities in order to attract new customers and increase their customer base from untapped potential of availability of highly intended users to adopt the service. This research finding revealed that agency banking adoption in Ethiopia is low, as compared to developed countries of the world even neighboring countries like Kenya, despite the high level of customer information and knowledge in the country about the service. For the financial institutions it is vital to realize the benefits that could be derived from the service if it is well embraced by the customers. Thus, Ethiopian banks need to increase and improve marketing in order to persuade and recruit new potential customers so as to grasp the maximum benefit out of it.

Although public trust and service quality are not significant factors to customer's intention to adopt the service, Banks should give attention and provide training and education to their employees and agents on agency banking service in order to attain better service quality, gain public trust and ultimately encourage the participation of potential adopters.

In general, the result of the study conveys vital information to the financial institutions and retail agents; in order to secure a higher adoption and usage rate of agency banking in their operation, they must be aware of what is expected to achieve their plan.

5.4. Limitations and suggestions for the future study

Further research of this study's frame work could be useful to advance knowledge about factors which influence consumers' behavior towards agency banking in Ethiopia. This research work has the following limitations. First, in order to obtain the population segments which are prone to extensive financial exclusion the study should consider populations residing outside of Addis Ababa. The type of participants responding to the research was only completed by customers' residing in the capital city. The results may not be representative of the whole Ethiopian population's behavior. It is also vital to identify the effect of demographic variables such as age, gender, experience and educational background etc. on intention to uptake the service in Ethiopia. Because, demographic variables may significantly affects user's intention to use the service. However, the participants are still rather diverse in terms of various demographic features like age, gender, educational background, occupation and marital status and therefore the findings may be considered as a representative for urban and educated population segment.

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APPENDICES

ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS SCHOOL OF GRADUATE STUDIES

MASTER OF BUSINESS ADMINISTRATION

QUESTIONNAIRE

Part I. Introduction

I am graduate student of A.A.U College of Business and Economics undertaking a research project on the *factors influencing customer's intention to adopt agency banking service in Ethiopia*, in partial fulfilment of the requirement for the award of master of business administration (MBA) in management.

This questionnaire is prepared to collect data from the respondents in order to assess factors affecting customer's intention to adopt agency banking service in Ethiopia. The main objective of the study is therefore to assess and analyse factors affecting customer's intention to uptake agency banking service.

The study is only intended for academic purpose and the information you provided will be kept confidential. Therefore, I kindly request your cooperation to fill this questionnaire accurately as it determines the acceptability and quality of the study.

Thank you in advance

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Part II. Demographic profile and background information

Put a tick mark (√) in their corresponding box.

- **Gender** male female
- **Age** 18 to 25 26 to 33 34 to 41
 42 to 49 above 50
- **Educational level**
 Primary education secondary education
 Diploma degree master and above
- **Marital Status**
 Single married divorced widowed
- **Occupation**
 Government employee private employee business person
 Student Other (specify) _____
- Have you heard of agency banking service before? Yes (1) No (0)
- Do you use agency banking services? Yes (1) No (0)

Part III. Questions on factors affecting customer's intention to adopt agency banking

In responding the under listed questions please consider 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. Put a tick mark (√) in their respective box.

No	Items	1	2	3	4	5
Performance expectancy						
1	I think that using agency banking would enable me to complete my transactions and tasks more quickly and easily					
2	I think that using agency banking service is convenient in terms of time and cost saving					
3	I think that using agency banking is useful in my life					
4	I think that using agency banking service is more accessible to users than visiting a bank premises					
Effort expectancy						
5	I think that Learning to use agency banking would be easy for me					
6	I think that it is easy to use agency banking to accomplish my banking task					
7	I think that interaction with agency banking does not require a lot of mental effort					
8	I think that it is easy to do what I want to do with agency banking					
9	I think that agency banking service is compatible with the bank existing service offering					
10	I think that using agency banking does not require additional training					
Perceived risk						
11	Agency banking services may not perform well and process payments incorrectly					
12	Agency banking service may not perform well because of network problems					

13	I would not feel secure for sending sensitive information using agency banking					
14	I think that there is a considerable security risk involved in agency banking rather than other modes of banking services					
15	I think that fixing payment errors would lead to loss of convenience					
16	I think that using agency banking may expose me to fraud or monetary lose					
Public trust						
17	I believe that agency banking service providers have the required skills and expertise to perform transactions					
18	I believe that agents are capable of handling banking transactions					
19	Agency banking service providers are fair in their conduct of customer transactions					
20	I believe that agency banking service providers are open and receptive to customer needs					
21	Overall I believe that banks and agents are trustworthy					
Service quality						
22	I think that service provided by banks & agents is reliable					
23	Always bank and agents would maintains error-free records service					
24	Whenever I need service, bank staffs & agents would provide me quick service					
25	Bank and agents has modern-looking equipment & technology					

Part IV. Questions on customer's intention to adopt agency banking

In responding the following questions please consider 1 = strongly disagree, 2 = disagree, 3= neutral, 4= agree, 5= strongly agree and Put a tick mark (√) in the box.

No	Item	1	2	3	4	5
Customer's intention						
26	I intend to use agency banking within near future					
27	I will regularly use agency banking in the future					
28	I am very likely to use agency banking in the near future					

