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Department of Marketing Management

FACTORS AFFECTING THE ADOPTION OF AGENT BANKING IN ETHIOPIA

Case study: Some Selected Private Banks in Ethiopia

Prepared by

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SGS/0373/2011A

Advisor: Zemenu Aynadis (Ass.Professor)

A Thesis Submitted to the Department of Marketing Management, St. Mary's University, in Partial Fulfillment of the Requirements for the Award of Degree of Masters of Art (MA in Marketing Management)

June, 2020

Addis Ababa, Ethiopia

Factors affecting the adoption of agent banking in Ethiopian Banking Industry

(Evidence: from some Selected Private Banks)

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ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES FACULTY OF BUSINESS

"FACTORS AFFECTING THE ADOPTION OF AGENT BANKING SERVICE CASE STUDY ON SOME SELECTED PRIVATE COMMERCIAL BANKS."

By: Girum Getachew

APPROVED BY BOARD OF EXAMINERS

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Statement of Declaration

I, the undersigned, declare that this thesis entitled as "Factors Affecting the Adoption of Agent Banking Service in Ethiopia: Case Study On Some Selected Private Commercial Banks' is my original work, prepared under the guidance of Zemenu Aynadis (Ass. Professor). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Declared by: **Confirmed by Advisor:**

Name: Girum Getachew   Name: Zemenu Aynadis (Asis.professor)

Signature_____   Signature _____

Date_____   Date _____

Place and date of submission: St. Marry University, June, 2020

Abstract

This study is carried out to identify the factors affecting the adoption of Agency banking in Ethiopia. The commercial banks operating in Ethiopia are taken as Population of the study that is 18 commercial banks. Among them the research was conducted and data gathered on the three pioneers banks in agent banking service (Dashen bank, united bank, and lion international bank). So as to meet the research objective 58 questioners were distributed to e-banking department employees and structured interview were also held with E banking department managers of sampled banks. Purposive sampling method was employed to draw the sample from the population. The study statistically analyzed data obtained from the survey using Statistical Package for Social Sciences 20.0 V (SPSS) and descriptive statistics particularly data mean used for interpretation purpose.

The result of the study regarding the major driving forces that initiate Ethiopian banks to adopt agency banking are: the desire to cover wide geographical area, desire to satisfy rapid change of customer needs & preferences and the desire to improve productivity and Organizational Performance. The major factors affecting the adoption of agent banking are: lack of giving proper attention to the service as its given to other conventional banking services, Board of directors, top management and staffs resistance to change in technology, Lack of proper coordination among stakeholders of the bank - in setting goals and following up the implementation process of the service and high cost of implementation of agent banking, lack of adequate public awareness and low level of customers & agents' technology literacy (mobile phones), Lack of adequate coordination between banks and other decision making centers in agent banking; Lack of adequate infrastructural facilities in the remote area; lack of strong push from the government to promote mobile and agent banking and Lack of sufficient legal frameworks,, customer fear of risk to use agent banking service; absence of common network that links different banks and lack of confidence in relation with the security aspects, Loss of Audit Trail and Users do not trust the agent banking services. The study also tried to identify various benefits from adopting of agency banking, among the benefits overcoming geographical limitations, reduction of queues in the banking hall, enhancement of productivity in the banking industry and Reduction of paper work are the leading benefit banks in Ethiopia realized from the adoption of agency. The existing opportunities for adoption of agency banking are Expansion of mobile phone users, Commitment of the government to facilitate the expansion of ICT infrastructure, Increment of educated potential customer, the relative increase of the public awareness about the service are among the leading opportunities. The study suggests a series of measures which need to be taken by commercial banks so as to address various factors affecting its adoption among them: Public awareness on the use of ICT, e-commerce and e-Payment need to be raised and enhanced. The government should also legalize the acceptance of electronic receipts as a mode of transaction confirmation. This removes the past requirement of providing paper-based receipts for cash in and cash-out transactions, in doing so the desire to use the agency banking service will rise.

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Acronyms and Abbreviations

7X24-   7 days and 24 hours

ATM   Automatic Teller Machines

CBE   Commercial Bank of Ethiopia

DB   Dashen Bank S.C

E-Banking   Electronic Banking

E-Commerce   Electronic Commerce

E-Payment   Electronic Payment

ICT   Information and Communication Technology

LIB   Lion International Bank S.C

NBE   National Bank of Ethiopia

POS   Point of Sales

RTGS   Real Time Gross Settlement System

SPSS   Statistical Package for Social Science

TAM   Technology Acceptance Model

TOE   Technology-Organization Environment framework

TPB-   Theory of Planned Behavior

TRA   Theory of Reasoned Action

UB   United bank S.C

WB   Wegagen Bank S.C.

ZB   Zemene Bank S.C.

CHAPTER ONE

1. Background of the Study

Nowadays modern technology is being introduced in all fields and it is changing the world with full of innovations. In this regard, Information technology is considered as the key driving factor for the changes taking place around the world. Like all other social entities financial institutions are also being constantly shaken by technological innovations and inventions (Shyamapada, Abu, and Salman, 2011). In modern economy a strong and secured financial system is a pillar of economic growth and development. The availability of banking facilities and unfolding banking service outreach are the major facilitators of developmental and expansionary activities. In this regard, information technology plays a key role in promoting inclusive financial system as it is the only way to reduce the cost significantly and reach the masses.

Thus, some years flashing back bank clients were expected to stand in line or at the branch out late to get financial services. But now following to the expansion of information and communication technology (ICT) and the introduction of electronic banking services, they can perform it at anytime from anywhere even from home. In electronic banking new and traditional banking products and services are directly delivered to customers through electronic medium. This allows customers to access their accounts, transact business, make enquiries and have prompt responses from banks.

E-banking is the provision of banking products and services through electronic delivery channels. Electronic banking has been around for quite some time in the form of automatic teller machines (ATMs) and telephone transactions. The evolution of e-banking started from the use of Automatic Teller Machines (ATMs) and Finland is the first country in the world to take the lead in electronic banking (Mishra, R. and J. Kiranmai, 2009). In more recent times, it has been transformed by the internet, a new delivery channel that has facilitated banking transactions for both customers and banks and in various forms. The common E-banking channels include the payment cards (debit or credit), online web portals, Point of Sales (POS) terminals, Automated Teller Machines (ATM), mobile phones, Automated Clearing House (ACH), direct debit/ deposit and Real Time Gross Settlement System(RTGS) (Nnaka, 2009). Therefore the transfer of electronic funds has been described as the third of the great ages of payment, the first being

payment by cash (notes and coins) and the second being paper based payment (for instance, cheques).

The E-banking is transforming the banking and financial industry in terms of the Nature of core products /services and the way these are packaged, proposed, delivered and consumed. It is an invaluable and powerful tool driving development, supporting growth, promoting innovation and enhancing competitiveness (Gupta, 2008; Kamel, 2005).

In a growing number of countries, banks and other commercial financial service providers are finding new ways to make money delivering financial services to unbanked people. Among these branchless electronic channels, agency banking is planting an important contribution in enhancing financial inclusion through reaching people that traditional or branch-base structures would have been unable to reach. Rather than using bank branches and their own field officers, they offer banking and payment services through postal and retail outlets, including grocery stores, pharmacies, super market and gas stations among others. For poor and rural people, retail agents may be far more convenient and efficient than going through a bank. Banking through retail agents uses information and communication technology through cell phones to transmit transaction details from the retail agent or customer to the bank.

Agency banking is branchless banking based on ICT that allows financial institutions to offer financial service outside the traditional bank premises (Mas and Siedek, 2008). It allows customers to conduct a limited type of financial transactions at third party outlets that include post offices, supermarkets, general and grocery stores, pharmacies, gas stations and etc, that are located in remote areas (Warii, 2011).

Agent banking improves the bank's geographical coverage and competitiveness so that existing and potential customers can benefit from a greater level of convenience in accessing banking services. This convenience is offered through agents of the bank and when combined with new services can expand the bank's target beyond the traditional markets. The service has helped to bring some banking services to rural and suburban areas. The prohibitive costs of setting up branches and ATMs vis-à-vis the expected returns have been a disincentive for banks to roll out their services in these areas, but agency banking has provided an avenue to these markets at limited cost.

Most banks in developed and some in developing parts of the world are now offering agency banking services. In Ethiopia cash is the main medium of exchange and electronic banking at large and agency banking specifically is still under developed, let alone used for transacting banking business. Hence, given the almost complete adoption of agent banking in developed countries, the reason for slow adoption of the service in developing countries like Ethiopia is an important issue which is going to be addressed by this thesis.

Therefore, the purpose of this research was to assess the current practice and extent of agent banking service adoption, benefits realized by banks & users of the services, driving forces, and factors affecting the adoption of agency banking service in Ethiopia.

1.2. Background of the Organization

According to World Bank's 2017 report, still around 1.7 billion adults worldwide remain unbanked. 80% of population in developing countries does not have a bank account or access to basic financial services. Poor people are often not considered viable customers by the formal financial sector as their transaction sizes are small, and many live in remote areas beyond the reach of banks branch networks. Informal banking services such as village savings and loan associations remain limited in their reach.

Banks plays a key role in improving economic efficiency by channeling funds from resource surplus unit to those with better productive investment opportunities. Banks also play key role in trade and payment system by significantly reducing transaction costs and increasing convenience (Nordic competition authorities, 2006).

In Ethiopia modern banking began in 1905 with the Bank of Abyssinia, a private company controlled by the Bank of Egypt. In 1931 it was liquidated and replaced by the Bank of Ethiopia which was the bank of issue until the Italian invasion of 1936. During the Italian occupation, Bank of Italy banknotes formed the legal tender. Under the subsequent British occupation, Ethiopia was briefly a part of the East Africa Currency Board.

In 1943, the State Bank of Ethiopia was established, with 2 departments performing the separate functions of an issuing bank and a commercial bank. In 1963, these functions were formally separated and the National Bank of Ethiopia (the central and issuing bank) and the Commercial

Bank of Ethiopia were formed. The period 1974 were the period in which banks and several other financial institutions emerged.

Compared to most countries, Ethiopia has taken a cautious approach toward the liberalization of its banking industry. For all intents and purposes, its industry is closed and generally less developed than its regional peers. It contrasts with regional and international peer countries where banking industries have a much higher share of private sector and foreign participation.

The financial sector remains shallow with a limited range of services, it's still closed to foreign participation and capital markets are non-existent. Lending is mainly collateral based and the vast majority of small entrepreneurs lack the necessary collateral. According to the 2014/15 Global Competitiveness Report, Ethiopia scored 3.3 out of 10 and ranked 120th out of 144 countries in financial market development, lower than the average of "factor driven economies". The percentage of adults with an account in Ethiopia rose to 35%, up from 22% in 2014. Account usage improved as well. Now 26% of adults save at financial institutions (as compared to 14% in 2014) and 11% borrow from financial institution as compared to 7% in 2014, (World Bank group report, 2017).

Currently, the industry comprises one state-owned development bank and 17 commercial banks, of which the only a state-owned and the dominant Commercial Bank of Ethiopia (CBE), with assets accounting for approximately 70 percent of the industry's total holdings. CBE accounted for 34.2% of the total capital of the banking system (Ethiopian Business Review Magazine, 2017). And the rest 16 are privately owned, and they form the country's main financial institutions.

Access to financial services contributes immensely to economic growth. This is why nations come up with the right mix of policies to expand financial services. Ethiopia, too, has been reforming its financial sector for the last two decades. However, the sector remains immature as its stated, even in comparison to other Sub-Saharan African countries.

Following the rapid changes and innovations in technology, especially the spread of mobile phones, has led to the expansion of access to formal financial services and financial inclusion.

By comparing the level of access to financial services in a neighboring country such as Kenya, it can be deduced that there is considerable room for expansion of these services in Ethiopia.

Kenya has 5.2 commercial bank branches and 9.5 ATMs per 100,000 adults, in contrast with Ethiopia's 2.0 and 0.3, respectively. In 2017 the ratio shows a bit increment and become 4.6 and 3.01 respectively. This lack of financial access extends to Ethiopian businesses. The 2012 Ethiopia Enterprise Survey highlights access to finance as the major developmental constraint for small (38 percent of those surveyed) and medium-sized (30 percent) businesses. This compares to a sub-Saharan African average of 21 percent and 15 percent, respectively.

In general, despite the under development shown in the past decades, a deep-dive into the Ethiopia's banking sector, in the very recent years there is a relative improvement in the sector which are stated below:

❖ Reforms underway or upcoming are addressing areas such as diaspora shareholding, collateral rules, leasing, and others.

❖ The banking sector has enjoyed high growth, high profits, and high returns almost without interruption for over a decade. Growth over the past ten years has been a very high annual rate of 28 percent for deposits, 31 percent for loans, and 22 percent for profits (Cepheus Investment Consulting, 2019).

❖ Access to financial services has been improving, the total number of bank branches reached 4,227 in 2017 bringing the ratio of bank branches to population from 49,675 to 39,834 and the sector is being automated (Cepheus Investment Consulting, 2019).

❖ The big giant in Ethiopian banking CBE enjoys a dominant 62 percent market share in terms of assets and deposits (not much changed from a decade ago). However, CBE's market share fell to just below 50 percent of sector profits for the first time in the year 2018.

❖ Electronic banking services have become more common in recent years, including ATMs, POS, online banking, and mobile banking. Other recent innovations include interest-free banking (in the year 2020 onward), consumer/diaspora loans (for mortgages, vehicles, personal use, in the year 2018 onward), and online payments services.

1.3. Statement of the Problem

The remarkable progression and development of the ICT sector all over the world has gave the banking industry an exclusive chance for delivering financial services through electronic medium. Nonetheless, due to the under-development of the information and communication technology sector and lower internet access in the developing countries when compared to the developed countries electronic banking service at large and agency banking specifically has not able to diffuse into society well.

In Ethiopia, Cash is still the most dominant medium of exchange. Recognizing the rapid expansion of Agency banking service throughout the developed and in some developing countries, Ethiopia's financial sector cannot remain an exception in expanding the use of the system. With the development of inter and intra country trade, import-export businesses, increased involvement in international trades, increased demand of the customers and international relations, the current banking system is in short of providing efficient and dependable electronic banking services at large and agency banking specifically (Gardachew, 2010).

A lot of researches have been done on Agent Banking in different countries in the world regarding its importance, factors that affects it's adoptions as well as the challenges and opportunity of the adoption and development of the service. However, very limited number of research has been done to highlight the factors that affect the adoption of agency banking in developing countries like Ethiopia. In Ethiopia most of the research papers focus on electronic banking services in general. Thus, more studies are still need to assess the factors affecting the adoption of agent banking in the country in order to identify areas in which the country lags behind that inhibit the adoption and development agent banking.

Therefore, the research was sought to identify the factors affecting the adoption of Agent banking service in Ethiopian banking industry.

1.4. Research Questions

Based on the above stated objectives, the following research questions were answered:

- ❖ What was driving forces towards the adoption of agent banking?
- ❖ What are the factors affecting the adoption of Agent banking in Ethiopian banking industry?
- ❖ What are the benefits realized by the Ethiopian banks in the adoption of agency banking service?
- ❖ What are the existing opportunities for the adoption and development of agency banking service in Ethiopia?

1.5. Objective of the study

1.5.1. General objective

The main objective of the study was to identify the factors affecting the adoption of Agent Banking service in Ethiopian banking industry.

1.5.2. Specific Objective

- ❖ To identify the driving forces towards the adoption of agent-banking service in Ethiopia
- ❖ To identify the factors affecting the adoption of agent-banking service in Ethiopia
- ❖ To find benefits realized from the adoption of agent banking service.
- ❖ To identify the existing opportunities for the adoption and development of agent banking service in Ethiopia.

1.6. Significance of the Study

- ❖ The acceptance of agent banking is the very recent topic in Ethiopia, and so it's worthwhile to conduct this study, whose result could be used to improve banking sector and enhances the quality of agent banking in Ethiopia for the future.

- ❖ Since agent banking service is in an infant stage in Ethiopia, identification of factors that affects upon and post adoption can impact positively on the performance of banks that wish to adopt and for those who already adopted.

- ❖ Provide an opportunity for decision-makers and managers of the Bank's to consider and evaluate the opportunities and problems observed in the existing practices, in order to

take appropriate corrective measures in the area or to accelerate the positive factors (if any) for the promotion of agent banking practices.

❖ The finding will provide a structure for the Banks for the design of their future directions and to adjust their goals and objectives as per real opportunities and factors.

❖ This study would also assist all stakeholders in the banking industry to identify and formulate strategies that will promote agent banking.

❖ Since there is the limited number of studies made on agent banking adoption in developing countries such as Ethiopia, this study will try to fill the gap.

❖ In addition, the study will also provide input for further research on the area, especially with respect to the factors that affects the adoption of agent banking services to customers or the public at large.

1.7. Scope and Limitation of the Study

1.7.1. Scope of the study

Geographically: The research was focused on identifying the factors affecting the adoption of agent banking in some selected private banks. In fulfillment of the objective of the study and so as to answer the research questions, the research will focus only on 3 (three) bank's electronic banking employees that are found in Addis Ababa.

Conceptually: Even though most of banks began the service with inclusion of mobile banking (both mobile and agent banking together) the thesis will focus only on Agent banking since mobile banking by itself needs a broad study.

Methodologically: The study was used mixed research approach, descriptive research design, data collected by using purposive sampling method which helps to select the representative samples from the population and primary data collect through questioner and interviews, some secondary data are also included.

1.7.2. Limitation of the study

Since the study that's going to be conducted, Agent banking is at the infancy stage it's difficult to get enough secondary data as well as literatures from country perspective. In addition time and financial constraints will also be the main limitation of the study.

CHAPTER TWO

2. Review of Related Literature

The theoretical and Empirical literatures of this chapter presents the general overview of Electronic banking and its channels, the concept & global development of Agent banking, and briefly discusses the agent banking models and the success factors of agent banking adoption and some researches on the related title will be reviewed and finally conceptual frame work for the study will be highlighted.

2.1. Theoretical literature Review

2.1.1. Electronic banking: Definition and Services

E-banking, a term used for new age banking system, represents an automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. It is a service that provides customers the opportunity to gain access to their accounts, execute transactions, and obtain information on financial products and services through a public or private network, including the Internet.

Electronic banking services have been around for quite some time in the form of automatic teller machines and telephone transactions. In more recent years, modern e-banking services such as internet and mobile banking has revolutionized banking services. The evolution of the e-banking industry can be traced to the early 1970s when banks began to look at these types of services as an alternative to some of their traditional bank functions. First, such a choice was considered appropriate since it ensures reduced costs as branches were very expensive to set up and maintain. Second, e-banking products and services like ATMs and electronic fund transfer were an important qualitative element of differentiation for banks that used them (Mobarek, 2007). Given that banks operate in a fiercely competitive industry, their ability to differentiate themselves on the basis of price is limited. Thus, in order to remain on the market it is imperative for banks to adjust their strategies in response to changing customers' needs and developments in technology.

The term electronic banking is described in many ways. A common definition for electronic banking comes from the Basel Committee on Banking Supervision (BCBS): "E-banking includes the provision of retail and small value banking products and services through electronic channels as well as large vale electronic payments and other wholesale banking services delivered

electronically" (BCBS, 1998). Likewise, different authors have defined it in different ways based on their understanding of the application of e banking. The following are few of them.

Electronic banking is the use of a computer to retrieve and process banking data (statements, transaction details, etc.) and to initiate transactions (payments, transfers, requests for services, etc.) directly with a bank or other financial service provider remotely via a telecommunications network (Yang, 1997, pp.2) same is shared by (Malak, 2007).

Sathye (1999) also asserted that electronic banking can be defined as a variety of the following platforms: (a) Internet banking (or online banking), (b) telephone banking, (c) television-based banking, (d) mobile phone banking, and (e) PC-banking (or offline banking).

Daniel (1999) explained E-banking is online banking (or Internet banking) which allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society. This implies that E-banking is a service that allows an account holder to obtain account information and manage certain banking transactions through a personal computer via the financial institution web site on the internet.

Burr (1996) describes it as an electronic connection between bank and customer in order to prepare, manage and control financial transactions.

According to Singh & Malhotra (2004), E-banking can be defined as the deployment of banking services and products over electronic and communication networks directly to customers.

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

Vis a vis the stated electronic banking definitions and platforms, different forms of E-banking channels are discussed below:

Automated Teller Machines (ATM) - It is an electronic terminal which gives consumers the opportunity to get banking service at almost any time. To withdraw cash, make deposits or

transfer funds between accounts, a consumer needs an ATM card and a personal identification number (PIN) (Malak, 2007).

Internet / Extranet Banking- It is an electronic home banking system using web technology In which Bank customers are able to conduct their business transactions with the bank through personal computers (Esayas, 2016). Banks offer Internet banking in two main ways. An existing bank with physical offices can establish a Web site and offer Internet banking to its customers in addition to its traditional delivery channels. A second alternative is to establish virtual branchless or Internet-only, Bank almost without physical offices. Virtual banks may offer their customers the ability to make deposits and withdraw funds via ATMs or other remote delivery channels owned by other institutions (Furst & Nolle, 2002).

Point-of-Sale Transfer Terminals (POS) - The system allows consumers to pay for retail purchase with a check card, a new name for debit card. This card looks like a credit card but with a significant difference. The money for the purchase is transferred immediately from account of debit card holder to the store's account (Malak, 2007).

Mobile banking- Mobile banking is a service that enables customers to conduct some banking services such as account inquiry and funds transfer, by using of short text message (SMS) (Ivatury & Layman, 2006).

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

In general, E-banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting branch out late. Under E-banking umbrella, agency banking is one of the emerging digital banking services which are discussed here.

2.1.2. Global Development of Agent Banking

The banking industry is constantly responding to changes in customer preferences and needs; increasing competition from non-banks, changes in demographic and social trends, information technology advances, channel strategies, and government deregulations of the financial service sector (Byers & Lederer, 2001). Success or failure of many retail banks is dependent upon the capabilities of management to anticipate and react to such changes in the financial market place. In the search for sustainable competitive advantages in the competitive and technological financial service industry, banks have recognized the importance to differentiate themselves from other financial institutions through distributions channels. This has resulted in banks developing, and utilizing new alternative distribution channels to reach their customers (Daniel, 1999; Thornton & White, 2001).

A survey carried out by the World Bank in 2016, established that 90 percent of the Ethiopian population did not operate a bank account, compared to 75 percent in Kenya, 25 percent in South Africa, 55 percent in Swaziland, 85 percent in Uganda and 92 percent in Malawi. Another World Bank report of 2012 revealed that on average only about 26 percent of people around the world had access to formal financial services. Out of these, only 20 percent of the population in Sub-Saharan Africa; 30 percent in Europe and Central Asia; 35 percent in Latin America; 32 percent in the Middle East and North Africa; and 25 percent in South Asia had accounts in formal financial institutions.

The limited access to financial services is attributed to three main challenges: limited scale (outreach), depth and the high cost of providing financial services. Essentially, the provision of financial services to many more people, especially in the depth of rural areas, using traditional branch networks entails high costs (Helms, 2006). In an attempt to overcome these challenges, financial service providers in a growing number of countries are finding innovative ways of delivering financial services. The use of ICT is indeed providing a means to increasing scale and depth, while reducing costs in the provision of financial services. Studies suggest that technology plays a significant role in improving financial access by taking financial services in a sustainable way to under-served and unserved areas (Stegman et al., 2005, Claessens, 2006, and UNDP, 2007). Studies also reveal that technologies such as ATMs, mobile phones and points-of-sale (POS) devices are increasingly being used to reduce costs and increase access for low-income

clients (Ivatury, 2006). These technologies are providing alternative delivery channels for the delivery of financial services.

Agent banking has been adopted and implemented with varying degrees of success by a number of developing countries. Brazil is often recognized as a global pioneer in this area since it was an early adopter of the model and over the years has developed a mature network of Agent banks covering more than 99% of the country's municipalities. Other countries have followed suit, including Mexico, Peru, Colombia, Ecuador, Venezuela, Argentina, Bolivia, Pakistan, Philippines, Kenya, South Africa, Uganda and India. In many countries among the channels, agent banking is fast gaining momentum. it leverages heavily on ICT, is a component of branchless banking that allows financial institutions to offer financial services outside the traditional brick and mortar bank premises (Mas and Siedek, 2008). It allows customers conduct a limited range of financial transactions at third party retail outlets. These retail agents are mandated to manage transactions (deposits, payments and cash withdrawals or cash in and cash out services) on behalf of the financial institution and are remunerated on a fee-for-service basis.

Brazil, as a pioneer in agent banking since 1999 more than 100,000 retail outlets have been turned into bank agents, reaching 13 million extra unbanked people. In Brazil, bill payments and the payments of government benefits to individuals comprised 78% of the 1.53 billion transactions conducted at the country's more than 95,000 agency's in 2006 (CGAP 2006). A private and state owned banks deliver financial services through retail agents including small supermarkets and pharmacies, post offices, and lottery kiosks (Kumar et al., 2006). These agents are called banking correspondents.

In Russia, more than 100,000 automated payment terminals have sprung up in the larger cities in the recent year. One provider, cyber plat, claims to have processed 1.2 billion transactions worth US & 4.7 billion through the first three quarter of 2007. The research study also found out the average mobile banking customer of WIZZIT (a mobile phone banking provider in south Africa) bought airtime with WIZZIT twice as often 2.6 times as they withdrew funds from a branch or ATM 1.3 times and five times as often as they made a money transfer 0.5 times (Ivantury and Pickens 2006).

In January 2006, India's central bank issued a circular permitting banks to use post offices and specializes micro finance institutions (MFI), including nonprofit organizations (NGO), cooperatives, and for profit companies as retail agents. The circular calls these agents business correspondents. (Harper et al. 2006) in South Africa, branchless banking through retail agents is permitted only for licensed financial institutions. In Kenya the most basic version of agent banking is whereby a licensed financial institution typically a bank delivers financial services through a retail agent. The bank develops financial products and services but distributes them through retail agents who handle most customer interaction.

Available literature puts forward a case that the use of retail agents is opening up new windows of opportunities for financial service providers to reach out to more people, especially in remote, rural areas, while bringing down costs of operation. For example, in Peru the cost of setting up a bank branch is about $200,000, while an agent costs just $5,000. Literature also points to the fact that agent banking is a more convenient and efficient way of extending financial services to the poor, unbanked and marginalized communities (Lyman, Ivatury & Staschen, 2006). For example, in 2001, agent banking (also referred to as correspondent banking) was introduced in Brazil. In a short span of 9 years, this alternative delivery channel has radically transformed access to financial services in the

Today in the Latin American country's agents including supermarkets, lottery kiosks, pharmacies and post offices allowed to provide services such as account opening, deposits, withdrawals and bill payments on behalf of commercial banks. Millions of new savings accounts have been opened. Given the success of Brazil's agent banking, other developing economies are looking into ways of developing innovative channels and proportionate regulations to enhance access to financial services for the poor through alternative channels like agent banking.

In Africa also, some countries like Kenya after the adoption of agent banking, 2014's estimates from the World Bank's Findex survey program suggest that nearly 3 in 4 adults have an account. In the recent Brookings Financial and Digital Inclusion Project (FDIP), Kenya ranks 1st among 21 emerging economies in enabling access to and usage of financial services among people excluded from formal finance. Kenya is making headlines and emerging as a globally recognized leader in financial inclusion.

Despite these impressive gains, currently there are still many more poor individuals and households that remain without access to formal financial services. According to the World Bank, over 3 billion people, representing 45% of the world's population, are still submerged in poverty, living on less than 2 dollars a day, and locked outside the formal financial system. As a result, they have little or no access to formal financial services that can help them increase their incomes and improve their lives (World Bank, 2009).

2.1.3. Agent Banking in Ethiopia

A banking agent is defined as retail or postal outlet contracted by a financial institution or a mobile network operator to process clients transactions. Rather than a branch teller, it is the owner or an employee of the retail outlet who conducts the transaction and lets clients deposit, withdraw, and transfer funds, pay their bills, inquire about an account balance, or receive government benefits or a direct deposit from their employer. Banking agents can be pharmacies, supermarkets, convenience stores, lottery outlets, post offices and many more (Kumar et al, 2006).

In a growing number of countries, banks and other commercial financial service providers are finding new ways to make money delivering financial services to unbanked people. Rather than using bank branches and their own field officers, they offer banking and payment services through postal and retail outlets, including grocery stores, pharmacies, and gas stations. Among others for poor people retail agents may be far more convenient and efficient than going through a bank. Banking through retail agents uses information and communication technology through cell phones to transmit transaction details from the retail agent or customer to the bank.

Despite agent banking is fast growing and gaining strong roots in Latin America, Asia and South Africa, it remains untapped in most of Africa countries. To keep up with international trends regarding the use of agent banking and to enhance financial inclusion, National bank of Ethiopia (NBE) amended mobile and Agent Banking Regulations in 2013. The regulation No.FIS/01/2012 allows commercial banks contract third party retail agents to provide financial services on their behalf through the use of mobile devices.

Accordingly NBE directive No.FIS/01/2012, Agent banking is the conduct of banking business on behalf of a financial institution through an agent using various service delivery channels. As

stated in the directive "Agent" means a person or an institution engaged in a commercial/business activity and has been contracted by a financial institution to provide the services of the financial institution on its behalf in a manner specified in the directives.

Mobile banking is performing banking activities which primarily consists of opening and maintaining mobile accounts and accepting deposits; furthermore, it includes performing fund transfer or cash in and cash out services using mobile devices.

The international trained of agent banking is practiced in various kinds of delivery channels, like POS-enabled bank agent (which is an agent managed by a bank that uses a payment card to identify customers). But here in Ethiopia the service is being provided only by mobile phones, therefore this study will only focuses on agent banking through mobile phone as a delivery channels.

The Regulation was drafted to answer the ever-increasing demand of banks to engage in the business, states the National Bank of Ethiopia (NBE). Unlike other countries, such as Kenya where the cash transaction service M-Pesa is popular, the Ethiopian regulatory framework obliges service providers, such as Hello Cash, to work with banks to expand the service.

At the outset banks were adamantly opposed to adapting the system. Even though they know that 78% of the population is still unbanked, they dragged their feet to throw themselves into the waters of uncertainty. But things are rapidly changing. Now, banks are enthusiastic in recruiting service providers and sending recruiters to small business owners.

Although the financial sector in Ethiopia has been growing rapidly for the past two decades, it is still under developed. According to the NBE, bank branch network commercial banks stood at 4227 at the end of the last fiscal year; meanwhile, there are 1745 branches of micro finance institutions. On the other hand among the electronic banking services there are 8800 point of sell (POS) and 2743 ATMs. The number of account holders at the banks and micro finance also stood at 43.8 million (Ethiopian business review, 2015).

Subsequently, bank branch to population ratio moved from 1:39,833.84 people to 1:33,448.25. The number of bank branches and ATM per 100,000 adults stood at 4.6 and 3.01 respectively. These indicators are below the average of sub Saharan economies. For instance an average of 10

bank branches and 7.5 ATM's are available for every 100,000 people in most sub-Saharan African countries (World Bank, 2016)

Following the stated NBE's directive, on December 2014 Dashen Bank S.C (DB) introduces agent banking, and becoming the first bank in Ethiopia to do so. Following DB, United bank (with the name of Hibir agent banking), Lion international bank, Wegagen bank, Cooperative bank of Oromia (Hellocash), and Somali micro finance in the name of (Hello cash), Addis Credit and Saving Institution, Amhara Credit and Saving Institution (Mbirr), Abay Bank (Abay Bedeje), Commercial Bank Of Ethiopia (CBE Birr), Oromia International Bank s.c. (Oro agent) launched the service. And currently in Ethiopia eleven commercial banks and six microfinance institutions have got permission to provide agent banking service (NBE, 2017).

According to business review magazine (2017), M-birr has over 1 million mobile accounts holding customers and over 15,000 agent banking outlets. To date a total of 6 million transactions worth ETB 8.5 billion, have taken place through M-Birr's platform. Out of the total transaction 6 million are registered in 2017 alone.

Belcash technology solution is the second foreign company providing mobile banking solution in Ethiopia. It provides mobile banking solution for the above stated banks in the name of Hellocash.

Currently, Hellocash has more than 1 million customers and 6000 agents of which 1350 are located in Addis Ababa. Some 25,000 mobile banking customers at Hellocash are government beneficiaries in the state of Somalia. Hellocash facilitates 50,000 transactions each day that are worth between 45 million and ETB 50 million (business review magazine, 2017). In addition to deposit, withdrawal and transfer services, customers can also buy bus and air ticket, and air time top up through mobile banking platform.

2.1.4. Advantages of Agent Banking

Chaia, Schiff and Silva (2010) report that agent banking is a powerful approach in the quest for financial inclusion because of its ability to reduce bank costs to serve. Many banks are deterred from setting up branches in remote, poor and sparsely populated areas because of the high set up costs which do not correspond to the perceived business from such areas. By setting up agent banks and making use of existing infrastructure offered by retailers a bank is able to penetrate

underserved areas and at low cost. Chaia et al (2010) also report that agent banking has become one of the most promising strategies for offering financial services in emerging markets because of its cost effectiveness both to the customer and the financial institution.

According to Kumar, Nair, Parsons and Urdapilleta (2006) financial institutions are able to reach a vast new customer segment. Another attractiveness of agent banking to the financial institution is that costs are only realized when transactions actually occur.

Veniard (2010) assets that agent banking systems are up to three times cheaper than traditional bank branches because they minimize fixed costs by leveraging existing retail outlets thus reducing the need for the financial institution to invest in their own infrastructure. Agent banks are a cheaper delivery channel because of the lower acquisition costs than for traditional methods due to lower Know Your Client (KYC) requirements.

For the poor communities who are perennially underserved agent banking enables the poor to gain convenient access to financial services in their own communities. According to Jayanty (2012) agent banking brings banking services to the doorstep of those who are reluctant or otherwise unable to make a trip to the nearest bank. This may result in a more inclusive financial system.

Kumar (2006) concedes by stating that agent banking offers customers flexibility in banking hours and reduced travelling costs. The research also find that people who use agent banks are most likely to be poor, less educated, employed in the informal sector, female and people living in small towns or settlements that are not easily accessible.

Agent banking offers advantages to the retailers themselves. Chaia et al (2010) find that through agent banking retailers are able to increase their sales volumes and have an opportunity to develop deeper relationships with customers. This is because customers will be now be able to receive many services in one place. For example a supermarket that is an agent may offer the services such as groceries, deposits, bill payments and withdrawals.

In addition to their cost minimization benefits ICT and mobile banking technologies increase the market share of microfinance institutions and contribute to their growth through providing technologies that are reliable, accessible and safe (Kpodar & Andrianaivo, 2011).

2.1.5. Challenges of Agent Banking

Since Agency banking is not without its fair share of challenges. Mwangi (2014) reports that, the level of liquidity that bank agents maintain influences the use of agency banks. Agents do not always maintain enough cash demanded by customers and this discourages repeat business. They also highlight that lack of security, malfunctioning equipment and errors also discourage the uptake of agent banking.

Atandi (2013) shows that network problems also deter the use of agent banks by customers as they sometimes suffer from connectivity problems. Another challenge is agents may not always prioritize agent banking transactions. Preference will most likely be given to their existing business transactions. This validates the agency theory by (Jensen and Meckling, 1976). This situation may frustrate agent banking customers and some may stop use these facilities altogether. Another challenge emanates from the fact that agent bank operators are not employees of the financial institution. This means the corporate culture of the financial institution may ordinarily not be ingrained in them. Many banks due to excessive competition in their industry are concerned about customer services and experience. They endeavor to give positive customer experiences to their customers. On the other hand the retailers engaged to offer agent banking services may not value customer experiences. This may result in them being rude or harsh to customers, discouraging customers from using the facilities.

2.1.6. Technologies Used in the Banking Sector

Nowadays, banks can use advanced technologies and internet, networks, payment cards, Automated Teller Machine (ATMs) and so on. This is one of the prospects that enable banks to increase the efficiency and productivity.

The banking business has continued realizing the advantages of the cutting-edge information and communication technology. It has become essential to effectively implement the appropriate technology to have faster decision support and effective data integration in the financial intermediary process and also to look for other avenues to augment income.

Concerning the sectorial outlook, there are emerging initiatives to invest in electronic multi-service channels and also a tendency to optimally utilize the available resources in a consortium, which partly supports the effective implementation of the envisaged national payment system.

Additionally, the ongoing efforts of emplacing the electronic laws focusing on the retail banking business are expected to have a positive effect on the growth of the payment card business. These are other opportunities for banks to expand their activities and ultimately realize a second-generation reform in the Ethiopian financial sector (Dashen Bank, 2009/10)

In this regard, private commercial Banks are still at the forefront in effectively implementing modern banking technology and value-added service provision. Withstanding the prevailing long attachment of branch-based service channel, which is perceived to lead the society to only value human interaction, now day private banks are on the way in effectively implementing both the branch-based and impersonal banking service channels. Though they have gone through various challenges in popularizing and penetrating the market through electronic delivery channels, they are now at the level of encouraging recognition and flexibility to adopt the new habits as alternate service channels.

As it is known that the retail banking business requires heavy investments to increase the number of branches, expand the ATM network and establish various delivery channels.
Anticipating a further reduction in the processing time and upholding service efficiency, banks attempting to continue introducing modern banking services and further leverage technologies to provide the highest level of customer services and convenience, while keeping cost of access to the minimum.

Ethiopian banking system is one of the most underdeveloped compared to the rest of the world. In Ethiopia cash is still the most dominant medium of exchange and electronic-banking is at infancy stage, let alone used for transacting banking business. All banks in Ethiopia except Dashen Bank are too late to move with technological advancement and they should clearly chart out the time schedule for their integration and technological advancement. But it is a forerunner in introducing e-banking in Ethiopia, has installed ATMs at convenient locations for its own cardholders.

To realize high quality service delivery standards, Dashen Bank has kept on playing a leading role in the adoption of appropriate modern banking technologies. Accordingly, the Bank has launched its mobile banking and agent banking service as well during December 2014. The

service will entitle customers to conduct banking transactions using their mobile phones anytime, anywhere.

2.1.7. Agency Theory

Agency theory is concerned with resolving problems that can exist in agency relationships; that is, between principals and agents of the principals. It explains the relationship between principal and agent in business. The two problems that agency theory addresses are: (1) The problems that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify what the agent is actually doing; and (2) The problems that arise when the principal and agent have different attitudes towards risk. Because of different risk tolerances, the principal and agent may each be inclined to take different actions. The first scholars to propose, explicitly, that a theory of agency be created, and to actually begin its creation, were Stephen Ross and Barry Mitnick in the early, 1970s. Research on agency theory has had several findings. Most notably, an agent is more likely to adopt the goals of the principal, and therefore behave in the interest of the principal, when the contract is outcome-based. Also, when the agent is aware of a mechanism in place that allows the principal to verify the behavior of the agent, he is more likely to comply with the goals of the principal.

2.1.8. Theories - New Technological Innovations

Many researchers have been used different frameworks in the study of adopting new technological innovation. Among frameworks that have been developed based on the past studies includes, Theory of Planned Behavior (TPB), Innovation Diffusion Theory (IDT) and Theory of Reasoned Action (TRA).

A. Theory of Planned Behavior (TPB)

TPB is developed originally based on the theory of reasoned action (TRA) which explains almost any human behavior. In predicting and explaining human behavior across various application contexts, it has been proven successful. According to TRA, a person's behavioral intention guides his actual behavior of performing some certain action and where subjective norm and attitude toward the behavior determine the behavioral intention (Liao et al., 2007).

According to Ajzen (1991) quoted in Liao et al., (2007, p. 2809), "behavioral intention is a measure of the strength of one's willingness to try while performing certain behaviors". As in the original model of TRA, there are some limitations when dealing with behavior for which there is

incomplete volitional control of people. Therefore, TPB is proposed to eliminate these limitations; and in fact, TPB differs from TRA because of the addition of perceived behavior control, which potentially effects behavioral intention.

Ajzen (1991), the theory of planned behavior proposes three independent determinants of intention which are attitude towards the behavior, subjective norm and perceived behavioral control. Attitude as defined by Fishbein and Ajzen (1975) quoted in Liao et al., 2007, p. 2809), is "the degree of one's favorable or unfavorable evaluation of the behavior in question". The attitudes are developed reasonably from one's beliefs about object of the attitude. Subjective Norm refers to "the perceived social pressure to perform or not to perform the behavior" (Ajzen, 1991 quoted in Liao et al., 2007, p. 2809). It can be said that it is related to the normative beliefs about other people's expectations on either to perform or not to perform the behavior. Perceived behavioral control refers to people's perception of ease or difficulty in performing the behavior of interest" (Ajzen, 1991 quoted in Liao et al., 2007, p. 2809) and is assumed to reflect past experiences as well as the predicted difficulties and barriers. The construct of the perceived behavioral control in the TPB is added to cope with the situations in which people may lack the complete volitional control over the behavior of interest. Perceived behavioral Control is directly connected to the beliefs of the control factors that can facilitate or hinder the performance of the behavior (Ajzen, 2002 qouted in Liao et al., 2007). Control factors can be referred to as the internal or external constraints where internal constraints are related to self-efficacy and external constraints to the environment (Ajzen, 1991 quoted in Liao et al., 2007).

Generally speaking, the more favorableness and un-favorableness of the attitude, subjective norm and the higher perceived behavior control are directly proportional to the strength of one's intention to perform the behavior under consideration (Ajzen, 1991).

B. Diffusion of innovations theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or

product gains momentum and diffuses (or spreads) through a specific population or social system. Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation. There are five established categories of adopters, and while the majority of the general population tends to fall in the middle categories, it is still necessary to understand the characteristics of the target population. When promoting an innovation, there are different strategies used to appeal to the different adopter categories.

Innovators - These are people who want to be the first to try the innovation. They are venturesome and interested in new ideas. These people are very willing to take risks, and are often the first to develop new ideas. Very little, if anything, needs to be done to appeal to this population.

Early Adopters - These are people who represent opinion leaders. They enjoy leadership roles, and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. Strategies to appeal to this population include how-to manuals and information sheets on implementation. They do not need information to convince them to change.

Early Majority - These people are rarely leaders, but they do adopt new ideas before the average person. That said, they typically need to see evidence that the innovation works before they are willing to adopt it. Strategies to appeal to this population include success stories and evidence of the innovation's effectiveness.

Late Majority - These people are skeptical of change, and will only adopt an innovation after it has been tried by the majority. Strategies to appeal to this population include information on how many other people have tried the innovation and have 16 adopted it successfully.

Laggards - These people are bound by tradition and very conservative. They are very skeptical of change and are the hardest group to bring on board. Strategies to appeal to this population include statistics, fear appeals, and pressure from people in the other adopter groups.

C. Theory of Reasoned Action (TRA)

The theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975 quoted in Belleau et al., 2007) is based on the assumption "that individuals are rational and make systematic use of information available to them".

According to theory of reasoned action, behavioral intention (BI) of an individual is a measure of the strength of one's intention to perform a specified behavior. BI is determined by two factors: 1) Attitude towards the behavior (AB), which is a function of beliefs (bi) that performing the behavior possesses certain attributes and the evaluation of those beliefs (EI) 2) Subjective Norm (SN), which is the perception of social groups i.e. what specific individuals or groups think that a person should or should not perform (Belleau et al., 2007). "An individual's Subjective Norm (SN) is determined by a multiplicative function of his or her normative beliefs (NBI), i.e., perceived expectations of specific referent individuals or groups, and his or her motivation to comply (MCI) with these expectations" (Fishbein and Ajzen, 1975, p. 302 quoted in Davis et al., 1989).

Apart from the above mentioned factors, Ajzen and Fishbein (1980) quoted in Belleau et al., (2007) mentioned that some external variables might also have influence on behavioral intention, for instance, demographics, traditional attributes towards targets and personality traits. Some researchers have proposed additional external variables, which could be included in the model for predicting the behavior. Those variables are: past behavior, past experience or involvement (Bagozzi, Wong, Abe, & Bergami, 2000; Bunce & Birdi, 1998; Shim et al., 1989 quoted in Belleau et al., 2007).

According to Fishbein and Ajzen (1975) quoted in Sheppard et al., (1988) "a behavioral intention measure will predict the performance of any voluntary act, unless intent changes prior to performance or unless the intention measure does not correspond to the behavioral criterion in terms of action, target, context, time-frame and/or specificity".

TRA model predicts consumers" intention and behavior very well. Armitage and Conner (2001) quoted in Belleau et al., (2007); state that behavior that is comparatively straightforward i.e. under volitional control can be predicted adequately by theory of reasoned action. As it is understood that an intention to buy a product is volitional and few constraints are associated with it, so the usage of theory of reasoned action can lead to valid prediction of purchase intention.

However, there is a constraint associated with the TRA model regarding the distinction between a goal intention and a behavioral intention, which has also been acknowledged by Fishbein and Ajzen. The limitation is that they established their model to cope with behaviors, for example, taking weight loss pill, applying for a loan or purchasing a new car; but not with outcomes that result from behaviors, for example, losing 10 pounds, getting a loan or owning a brand new car. Moreover, only those behaviors are dealt by model that is under an individual's volitional control. The conditions of the model can't be fulfilled, whenever the performance of some action needs resources, knowledge, skills or environmental hurdles need to be overcome (Sheppard et al., 1988).

In this study, Technology-organization-environment framework will be used to have more precise forecast on the factors affecting the adoption of agent banking service in Ethiopian banking industry.

2.1.9. Success Factors in Agent Banking Adoption

There are many technological and operational factors in employing a successful agent banking strategy. Technology should be in place to enable banks and their customers to interact remotely in a trusted way through existing local retail outlets. Agent banking requires a generally good infrastructure in terms of road network, communication and information technology. Considerations should be made for areas that are hard to reach due to a poor fixed infrastructure and poor transport system.

There are various risk implications of use of agents by banks. Entrusting retail customer contact to the agents is riskier than these same functions in the hands of bank tellers in a conventional bank branch. Special attention should be paid to credit risk, operational risk, liquidity risk and reputation risk. The use of retail agents potentially raises special concerns regarding consumer protection and compliance with rules for combating money laundering and financing of terrorism which deserves the institution's attention. The time lag between collection from customers and depositing the same to the bank by the retail agents generates credit risk. There are chances of customer or retail agents committing fraud, loss of bank's equipment or other property from a retail agent's premises, data leaks or data loss from hacker attacks, inadequate physical or electronic security or poor backup systems. All these factors lead to operational risk.

Retail agents that are relatively small, unsophisticated and remote may not have enough cash to meet customer's requests for withdrawals and may lack experience in the more complex liquidity management required for offering financial services. When retail agents underperform or are robbed, the bank's image may suffer causing reputational risk which may also be caused by operational risks such as loss of customer records or leakage of confidential customer data, as can liquidity shortfalls in the retail agents' cash drawer. Banks bear the risks that customers are improperly identified and that they use the retail agent to launder money or channel funding to terrorists, with or without the agent's knowledge or complicity. There is need to consider all of the above risks and extend the risk management program to cover the same.

Proper dispute resolution mechanisms should be in place as should proper communication of its complaints redressed set up to the customers (The State Bank of Pakistan, 2007). Appropriate customer protection against risks of fraud, loss of privacy, and loss of service is needed for establishing trust among consumers as trust and customer confidence is the single most necessary ingredient for growth of any branchless banking model. As it deals with a large number of first time customers with low financial literacy level, agent banking requires that adequate measures for customer protection, awareness and dispute resolution are in place.

The competition amongst commercial banks to offer banking services to the population has increased greatly, thus increasing efficiency and access. Early movers are able to partner exclusively with businesses that have the largest number of local retail outlets thereby patching together a sizable agent network relatively quickly. Ivatury and Mas, (2006) stated that a bank that is first to introduce banking services in a given geographical area is likely to capture the greatest market share among the local population. Demographic factors for instance age, gender, income and education levels impact on the ability of customers to use technology.

Availability of agent channels is vital in ensuring a wide reach by the bank through its retail agents especially in rural areas. Urban areas have numerous delivery channels for example shops, supermarkets and pharmacies.

Physical security can pose a challenge with regard to security of cash and even the people managing and working with agents. The specific security challenges are robbery, theft and fraud. Distance to the nearest bank branch may be a challenge particularly in the rural areas. In Brazil for instance, some commercial banks have accounts with other banks with branches near the

location of their agents to enable their agent's bank their cash. This has solved the problem of distance. In Columbia however, an agent has to travel to his own branch to deposit cash received.

While developing an agent channel for a bank presents a range of technological and Operational challenges that may be new for a bank, the main challenge is strategic; Understanding specifically how this new channel fits within its customer segmentation, service proposition, and branding objectives. The challenge is particularly important for banks pursuing agents as a way to offer banking services to those previously with no bank accounts. Banks will need to tackle basic financial education barriers to these potential customers, develop appropriate product that target their needs and economic means, find efficient ways to reach them with effective marketing messages and put in place a mechanism for checking customer identities as many of them may not have any form of formal education.

2.2. Empirical Literature

2.2.1. Challenges and Opportunities in the Adoption of Electronic banking in Ethiopia

A lot of related studies were conducted by different researchers in different countries. Since the service is at early development stage in Ethiopia, there are only few researches that are conducted regarding the challenges and opportunities of agent banking. Most of them are made on electronic banking in general, among them, Gardachew (2010) conducted research on the opportunities and challenges of E-banking in Ethiopia. The aim of his study was focused on analyzing the status of E-banking in Ethiopia and investigates the main challenges and opportunities of implementing E- banking system.

The author conducted a survey on the existing operating style of banks and identifies some challenges of using E-banking system, such as, lack of suitable legal and regulatory frame works for E-commerce and E- payments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks. According to Gardachew (2010), Opportunities offered by ICT through e-learning programs and Commitment of the governments on development of ICT infrastructures is considered as drivers of using E-commerce and E-payment systems.

According to (Gardachew, 2010) Banking in Ethiopia faces numerous challenges to fully adopt E-banking application and seize the opportunities presented by ICT applications in general. Part of key challenges for e banking applications are low level of internet penetration and poorly developed telecommunication infrastructure, lack of infrastructure for telecommunications, lack of suitable legal and regulatory framework for e-commerce and e-payment, high rate of illiteracy, high cost of internet, absences of financial institutions networks that link different banks, frequent power interruption, resistance to changes in technology among customers and staff due to lack of awareness on the benefits of new technologies, fear of risk, lack of trained personnel in key areas, tendency to be content with the existing structures and people may be resistance to new payment systems.

Gardachew in his study figured out the following points as opportunities of electronic banking service Ethiopia:

❖ Opportunities offered by ICT through e-learning programs. The School Net program introduced in Ethiopia to connect more than 500 Schools creates opportunities to citizens to be familiar with ICT applications and increases the awareness of the public (Yayehyirad, 2006).

❖ Late adopter opportunities- The commercial banks in Ethiopia should take advantage of already developed best and existing software applications.

❖ UNECA, World Bank and UNCTAD are helping developing countries to design national e-strategies, including e-commerce, via National Information and Communication Infrastructure plans (UNCTAD, 2004).

❖ Commitment of the governments: The Ethiopian government considers ICT as an indispensable tool to alleviate poverty and facilitate a state-transformation aiming an effective and efficient service delivery. It has initiated commendable ICT policy frameworks and several E-Government projects, including the WoredaNET Project (ITU4D, 2006)

Among very few researchers that are attempted to assess the challenges and opportunities for adoption of the service, (Ayana, 2012), (Elfagid, 2015), (Kassahun, 2016) and (Afework, 2015) have been conducted a study intended to assess opportunities and challenges of adopting agent banking service and Drivers and Barriers of adopting electronic banking system in Ethiopia and

point out technological factors, the services perceived benefit and risk, organizational factors in the way of financial and human resource factors, lack of suitable legal framework, competitive advantages and government support under environmental factors, inadequate banking system and high rates of illiteracy in the way of technology acceptance among challenges.

2.2.2. Challenges and Opportunities of Mobile and Agent Banking in Ethiopia

Following the issuance of the NBE Directive number FIS/01/2012 on Mobile and Agent Banking business in Ethiopia, currently just half of existing commercial banks including the state owned bank has adopted the service. As the service is at the introductory stage, very few researchers attempted to assess regarding its adoption and development. Among them Wolela (2014), Henok A (2015), Hayat Nesibu (2017), Yikeber Zigale (2017) has conducted there study to assess the "Challenges and opportunities on the Implementation of Mobile and Agent Banking in Ethiopia".

Accordingly, the research papers pointed out technological factors, the services perceived benefit and risk, organizational factors in the way of financial and human resource factors, lack of suitable legal framework, competitive advantages and government support under environmental factors, inadequate banking system and high rates of illiteracy in the way of technology acceptance among challenges.

The studies also identified perceived ease of use and perceived usefulness as a driver for the frequent use of agent banking system. The researchers suggested that a series of measures which could be taken by the bank to address various challenges. These measures include: Establishing a frequent training to minimize knowledge gap between agents also work on creating awareness to the society, supporting agent banking by working with Ethio telecom to work on ICT infrastructure and network problem, banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition so the bank have to be work on providing other channels.

2.2.3. Assessments on Factors Affecting the Adoption of Agent Banking

Anuwar Abdulkadir in his research named "Assessment of Factors Affecting Adoption of Agent Banking and Electronic Banking in Ethiopian Banking Industry" 2015. The aim of his research

was to answer the factors affecting adoption of Agent banking & Electronic banking in Ethiopia and the benefits of Agency banking and Electronic banking in Ethiopia.

Thus the findings of his study revealed that the main challenges face 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 and lack of competition between local and foreign banks. This study found that the introduction of third party retail agents presents several risk factors with regard to effective regulation and supervision of banks. The study also identified perceived ease of use and perceived usefulness as prospects of adopting agent banking and e-banking system.

The study recommends that Ethio telecom should support banking industry by investing on ICT infrastructure developments, government should support the banking industry by introducing financial education program, establishments of a comprehensive legal and regulatory frame works on the use of technological innovation and the use of third party retail agents in banking sector, regulator closely monitors the banking sector and strictly enforces compliance with the agent banking guidelines, while the banks continuously ensure careful vetting of agents.

Meron Derese in her study "Assessment of Agent Banking Service: Case Study on Lion International Bank Agents" tried to answer the environmental factors that affect the service of agent banking and the Customer attitudes based on agent observation.

As per the assessment, the result of the study indicated that the major barriers agent banking industry faces in the provision of the service are, lack of awareness, be deficient in trust, lack of supportive training, Lack of ICT infrastructure as well as be deficient in competitiveness' with other banks. The study also identified perceived ease of use and perceived usefulness as a driver for the frequent use of agent banking system. The study suggests a series of measures which could be taken by the bank to address various challenges identified in the thesis. These measures include: Establishing a frequent training to minimize knowledge gap between agents also work on creating awareness to the society, supporting agent banking by working with ethio tel come to work on ICT infrastructure and network problem, banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition so the bank have to be work on providing other channels.

2.3. Conceptual Framework

Researchers have been used different frameworks in the study of adopting new technological innovation. Among frameworks that have been developed in different studies includes, Technology-Organization-Environment (TOE) framework and Technology Acceptance Model (TAM)

A. Technology-Organization- Environment (TOE) Framework.

TOE framework was developed by Tornatzky and Fleischer; it is designed for studying the likelihood of adoption success of technology innovations. This framework is a comprehensive and well received framework in the context of innovation adoption by organizations and has been used in many studies (Salwani, et al., 2009, Ellis, 2009, Chang et al., 2007, Zhu & Kraemer, 2006). According to Tornatzky and Fleischer (1990), technology adoption within an organization is influenced by factors pertaining to the technological context, the organizational context, and the external environment.

The technological factor refers to adopter's perception of agent banking attributes. Typical characteristics of technology considered in technology adoption studies are based on the assumption of Rogers diffusion of innovation which include relative advantages (perceived benefits), and relative disadvantages (perceived risks).

Perceived Benefits: - It covers both the direct and indirect benefits for the banking industry as well as for the consumers; where direct benefits include savings on operational cost, improved organizational functionality, improved efficiency, increased profitability and productivity gain. Indirect benefits, on the other hand, include the opportunity or intangible benefits such as improved customers' satisfaction through improved services, improved banking experience and fulfillment of their changing needs and lifestyle (Iacovou 1995, Kuan & Chau 2001 and Lu et al. 2005).

Perceived Risks: - One of risk faced by bank institutions in offering agency banking service is the customers' resistance to use the services that significantly hinder the growth of agent banking. Issue related to security is also a concern when dealing with technologies related to online transactions such as agent banking (Chang 2007 & Rogers 2003). Therefore, the

perception of the risks regarding the agent banking is expected to influence its adoption (Ayana, 2012).

Technological factors include complexity, compatibility, relative advantage, ease of use and usefulness. The technological factors are related to challenges to technology adoption and its perceived benefits. The perceived benefits for manager could be direct, such as cost savings or income generation, or indirect, such as potential opportunities in new market, marketing, or publicity (Rogers 2003).

Organizational Factor refers to the organizations characteristics that influence its ability to adopt and use of agent banking. The organizational factors that have been mostly cited in literature include: Information Technology (IT) users" community; organizational structure; firms process; firm size; technological capabilities of the organizations members; the technological and financial resources available; process of selecting and implementing the IT; management banking and support for the project (Harrison, 2012).

Environmental Factor refers to the external environment in which an organization operates and its condition for supporting the development of agent banking services. Environmental factors relating to IT adoption (and specifically the adoption of internet technologies) includes pressure from competitors, customers or suppliers; the role of government (incentives); partners, alliances; technological infrastructure; technology consultants; image of internet technology; and users expectations (Harrison, 2012).

Environmental factors

- Legal framework
- ICT infrastructure (country wide)
- Competitive pressure
- Government support
- technology; and
- users' expectations
- etc…

Organizational factors

- Financial resource available
- Human resources
- organizational structure
- etc…

Agent banking

Technological factors

- Perceived risks (relative disadvantage)
- Perceived benefits (relative advantage)

Diagram-1: *Technology-Organization- Environment (TOE) Framework on Agent banking adoption, Ayana (2010), Rogers (2003), Harrison (2012).*

B. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) was introduced by Davis (1986) quoted in Davis et al., (1989). Technology acceptance model is an adaptation of Theory of Reasoned Action (TRA), developed to specifically deal with modeling user acceptance of information systems. As compared to TRA, Technology Acceptance Model is significantly less general. The model was developed to particularly explain the computer usage behavior. But since, TAM includes

findings collected from over a decade of Information System (IS) research, so it is particularly well-suited for modeling computer acceptance.

TAM defines the casual relationship between perceived usefulness, ease of use, system design features, attitude towards using and actual usage behavior. In general, an informative representation of the mechanisms by which design choices influence user acceptance is provided by TAM. Hence, Technology acceptance model is useful in applied contexts for forecasting and evaluating user acceptance of information technology (Davis, 1993).

According to Technology Acceptance Model (TAM), perceived usefulness (PU) and perceived ease of use (PEOU) are two key beliefs that are mainly relevant for computer acceptance behavior. Theory of Reasoned Action (TRA) is used by TAM as a theoretical basis to specify causal association between these two key beliefs i.e. PU and PEOU.

Perceived usefulness (PU) is defined as the degree to which a potential user thinks that using a particular system would increase his/her job performance. The term usefulness is derived from the word "useful", which means the advantage of using particular, IS. Whereas, perceived ease of use (PEOU) is defined as the degree to which a potential user thinks that using a particular system would be free of effort. The word "ease" means, freedom form difficulty, hardship or effort. In short, ease of use means "user-friendliness" of IS (Davis, 1989).

CHAPTER THREE

3. Research Methodology

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically and it should be consistent with the aims and objectives of the research or it should be able to answer and solve the research questions and research problem respectively.

Therefore this chapter aims in general to identify the research methodologies and methods used to meet the research aims and objectives. Study area, research design, research approach sampling, data source and method of collection and method of data analysis are presented below respectively.

3.1. Research Approach

The research conducted used mixed research approach; the rationale for combining both quantitative and qualitative data is to better understand the research problem by combining both numeric values from quantitative research and the detail of qualitative research and to neutralize limitations of applying any of a single approach. According to Creswell (2009), the mixed research approach uses separate quantitative and qualitative methods as a means to offset the weaknesses inherent within one method with the strengths of the other method.

3.2. Research Design

A research design as a plan for a study provides the overall framework for collecting data (Leedy, 1997). According to Durrheim (2004), a research design is a strategic framework for action that serves as a bridge between research questions and the execution, or implementation of the research strategy. Therefore in short it can be considered as the structure of research or it is the "Glue" that holds all of the elements in a research project together.

According to Kothari (2004), the three purposes of conducting research are generally the following: explorative, descriptive and explanative. Explorative research studies are also termed as formative research studies. The main purpose of such studies is formulating a problem for more precise investigation or of developing the working hypotheses from an operational point of view. The major emphasis in such studies is on the discovery of ideas and insights. As such the research design appropriate for such studies must be flexible enough to provide opportunity for

considering different aspects of a problem under study. Explanative research aims at gaining an explanation of a specific situation or problem, generally in the form of causal relationships. Finally, Descriptive research is a type of research that is mainly concerned with describing the nature or condition and the degree in detail of the present situation. Creswell (2003) stated that the descriptive method of research is used to gather information about the present or existing condition.

Since the study focuses on describing the current situation of the problem and answer the research questions which are in the form of "what", and to highlight the most important factors that can negatively or positively affect the adoption and development of agent banking in Ethiopia. Moreover, this research aims to explain the phenomenon and assess the current practice of agency banking in addition. Therefore, descriptive research is used to achieve the research objectives.

3.3. Population, Sample Size and Sampling Techniques

According to Polit and Hungler (1999), the population is an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. In this study the population will be private commercial banks that adopted agency banking. Hence, according to National Bank of Ethiopia Quarterly Bulletin (2019), the total number of Banks that are operating in the year 2019 is eighteen (18), of which (sixteen)16 commercial banks owned privately. Among the private banks half of them (eight banks) adopted agency banking service.

In order to undertake this study, the researcher purposely takes three private commercial banks which adopted agent banking service as a sample. The criteria used for choosing the under stated banks for drawing as a sample is mainly due to they are pioneers of Agent banking in Ethiopia and as such have accumulated a wealth of data which will be relevant to the study. Vis a vis, their familiarity with agent banking, long years services in providing agent banking service to the public, there intimacy with banking technology is considered upon selection. And then their electronic banking department's all employees will be drawn for the questioner.

Those banks are Dashen Bank S.C., United Bank S.C., and Lion international bank S.C. DB first bank to launch agent banking services (2014) and become the first private commercial bank in ATM services as well, UB is well known in its use of a dozens of E-banking products & the

second private bank to adopt agency banking (2014) and LIB is among the top three banks in Ethiopia whose inaugurates agent banking products (2015). Thus, this research thesis will use purposive sampling method to draw the sample from the population.

Studies on the three financial institutions allows an in depth assessment of the agency banking development at hand. It is also bring deeper insights, better understanding of its role, factors affecting on its adoption and opportunities as well.

3.4. Sources of Data

The study is conducted by collecting data mainly from primary sources. Some secondary data's are also part of the data source. Primary data that are collected from the employees of the specified private commercial banks Electronic banking Department based on a structurally designed questionnaire. The conducted questioner includes both closed ended and open-ended questions, which gives the respondents an opportunity for adequately express their view on the questions. In addition, semi-structured interview is conducted with each private bank's E-banking department managers.

Vis a vis, the target population is employees who reside in Addis Ababa head office. The researcher selected professional employees of the electronic banking department aiming at getting full information both from the organizations' and customers' point of view.

Therefore based on the selected scenarios and other issues the sample is quite enough to show the factors affecting the adoption of agent banking in Ethiopia at large, since they holds diverse attachment with agent banking.

Different documents, records and reports of the industry, Regulatory organ reports, web sites, books, annual reports and magazines, articles and journals are secondary data's will also be analyzed and revised.

3.5. Data Collection Instruments

In order to collect sufficient data so as to answer the research questions the researcher designs two surveys; the first is a questionnaire to get quantified results. The second survey interviews aimed to collect data from E-Banking managers and for triangulation as well. In addition to questionnaire and interview, secondary data sources are used as mentioned in the above.

3.5.1. Questionnaires

Structured questionnaires are those questionnaires in which there are definite, concrete and pre-determined questions. The questions are presented with exactly the same wording and in the same order to all respondents. Resort is taken to this sort of standardization to ensure that all respondents reply to the same set of questions (Kothari, 2014). It further allows the researcher to be well focused on the specific research topic. Therefore the structured questionaries' was prepared or taken through reviewing various related literatures.

In addition since questioner is considered to be more convenient as respondents could answer at their convenience. The researcher will use open and closed-ended type of questionnaires, which gives the respondents an opportunity for adequate expression of their view on the questions. The questionnaire is a close ended questionnaire to produce guided responses and for easy analysis and to obtain additional information, the respondents are requested to provide open-ended responses if they have opinions which they feel the researcher would find useful.

The questionnaire begins with an introductory statement, which specified the purpose of the research as purely academic. Respondents are encouraged for being objective in their responses since they were assured of confidentiality.

The respondents were asked to indicate their level of agreement on a five point likert scale with the following ratings. Strongly agree (SA; or 5), agree (A; or 4), neutral (N; or 3), disagree (DA; or 2), and strongly disagree (SD; or 1). The use of Likert scale is to make it easier for respondents to answer question in a simple way. In addition, this research instrument is permitting an efficient use of statistics for the interpretation of data. Moreover, the central issue to argue that Likert scales is that it produce ordinal data.

3.5.2. Interview

In the qualitative strategy, semi-structured interview are conducted with each bank's electronic banking department managers. The major purpose of this interview was to corroborate certain facts that the investigator already thinks have been established (Yin, 1989; pp. 89). Therefore, the semi-structured interview was conducted to enhance and supplement the results of questionnaires.

3.5.3. Secondary data Sources

The secondary sources of data constituted data gathered from records and reports of the industry, websites of respective private banks, and literature on agent banking & E banking, books and journals.

The most important use of this secondary data source will be to corroborate and augment evidence from other sources (Yin, 1989; pp. 86). Thus, the document examination helps to substantiate the patterns that evolved from the data collected via questionnaires and interview, so that the validity of the findings could be enhanced through secondary sources.

3.6. Method of Data Analysis

For the purpose of achieving the objectives of the study, the data's that's going to be collected are processed and analyzed with descriptive statistics using Statistical Package for Social Scientists (SPSS). Throughout the analyzing process, percentages, ratios and other statistical methods are employed. Moreover, tables and graphs are used to present the findings of the study.

Furthermore, Wolcott (1994) cited in Creswell (2003; pp. 184), suggested that qualitative research is fundamentally interpretative i.e. the researcher makes an interpretation of the data. Thus, the data that was collected from the interview and reviews of documents were interpreted qualitatively. To sum, the analysis of quantitative data and interpretation of qualitative data combines to seek convergence among the results (Creswell, 2003).

Thus, the data that are collected was summarized using descriptive statistics. This enables meaningful description of distribution of scores or measurements using a few indices or statistics. Descriptive statistics assisted in comparing and contrasting different situation under study and helped to answer the research questions or assisted in qualitative analysis. For easy

analysis and interpretation of data, tables, frequency tables' and graphs are used. This enabled visual analysis for easy data comparison and interpretation.

3.7. Reliability and validity of the study

Reliability refers to the consistency or stability of a measuring instrument. In other words, the measuring instrument must measure exactly the same way every time it is used. This consistency means that individuals should receive a similar score each time they use the measuring instrument (Jackson, 2010). This level of reliability of the instrument is measured by the consistency of the variables and the researcher tested by using Cronbach's alpha statistics.

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability.

Table 3.1 Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.838	60

Theoretically, Cronbach's alpha results should give you a number from 0 to 1, the minimum acceptable value for Cronbach's alpha is 0.70; below this value the internal consistency of the common range is low. Meanwhile, the maximum expected value is 0.90; above this value is perceived as redundancy or duplication. Alpha values between 0.80 and 0.90 is usually preferred (www.researchgate.net). As shown in the above table the research result entails Cronbach's alpha 0.838, which implies preferred reliability level.

Moreover in order to measure the reliability of the collected data, in this study the researcher will also use both triangulation and saturation measures. Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Patton, 1999). Triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources. In this study the in addition to asking the participants some same questions in different forms in the form of questionnaire and interview, the researcher will also observes actual activities and communications between customers and service providers.

Another measure of reliability in qualitative study is saturation. Data saturation refers to the point in the research process when no new information is discovered in data analysis, and this redundancy signals to researchers that data collection may cease. Saturation means that a researcher can be reasonably assured that further data collection would yield similar results and serve to confirm emerging themes and conclusions. When researchers can claim that they have collected enough data to achieve their research purpose, they should report how, when, and to what degree they achieved data saturation (Sandra L. Faulkner Stormy P. Trotter, 2017). Based on this concept having an interview with agent banking managers could also help the researcher as a means to cross checking the reliability of the questioner responses.

Validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested (Kothari, 2004). In other words, Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. In order to ensure the quality of the research design content and construct validity of the research will be checked.

Validity in qualitative study can be checked using various techniques i.e. spending "prolonged time", "peer debriefing", "triangulation" and "member checking" are among the techniques to check validity in qualitative study (Creswell, 2014). Some techniques like "prolonged time" require the researcher to spend longer time with the participants of the study. In this research "peer-debriefing" and "member checking" are used to check the validity of the result. In addition to this the validity of the findings could also be enhanced through secondary sources.

Chapter Four
4. Data Analysis and Interpretation

According to C.R.Kothari (1989), "The term Analysis refers to the computation of measures along with searching for patterns of relationship that exist among data-groups". Or it involves estimating the values of unknown parameters of the population and testing of hypotheses for drawing inferences.

Therefore, Data analysis and interpretation is the process of assigning meaning to the collected information and determining the conclusions, significance and implications of the findings. It is an important and exciting step in the process of research. In all research studies, analysis follows data collection.

4.1. Introduction

As it is discussed in the methodology part of this study, data collected by using different techniques were analyzed in this chapter by using descriptive statistic analyzing approach. In the analysis, a total of 58 questionnaires were distributed to E-banking department employees of the three purposely sampled private commercial banks and held interview with electronic banking department managers too.

This chapter gives the analysis and findings of the questionnaire administered. Generally, each question thereon has been analyzed through the use of Statistical Package for Social Sciences – version 20.0 (SPSS) and the findings presented in frequency tables computed to show the mean, mode, standard deviation and the percentage of each response. The analysis was presented in the form of pie charts, bar charts and tables.

4.2. Response Rate

A response rate is a mathematical formula that is calculated by survey researchers and is used as a tool to understand the degree of success in obtaining completed interviews from a sample. Thus as it is shown in the analyzed chart below, out of 58 distributed questionnaires 49 were returned hence the response rate was 84.5%. According to Mugenda (2003) a response rate of 60% is good and a response rate of 70% and over is very good. Therefore this research meets and even excels the standard requirement of response rate. While a response return rate per category/bank

was 77.27% from Dashen bank, 81.25% from United Bank and 95% from Lion banks. Furthermore this is shown in the chart 4.1 below.

Figure 4.1: Response rate of each sampled banks
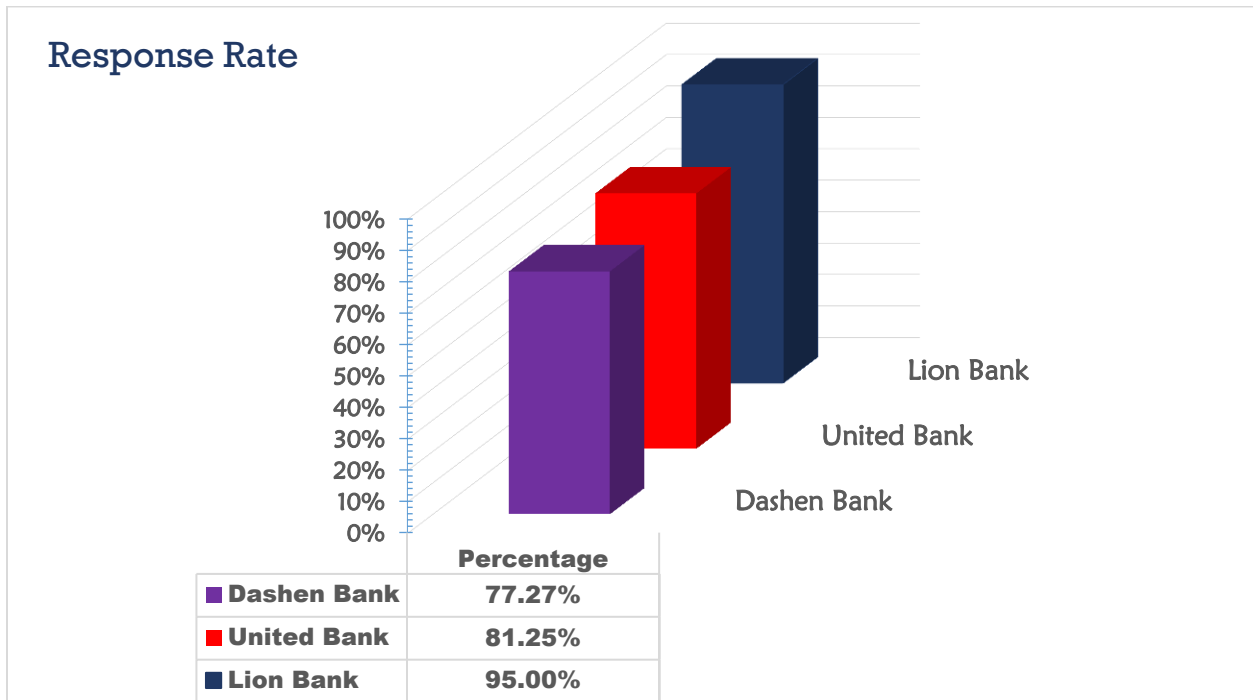
Source: Research Data, 2020

4.3. Respondents' demographic profile

It was appropriate that demographic factors of those who completed the questionnaires be analyzed in order to provide insight into the general characteristics of the sample studies. The relevant key demographic factors identified by the researcher were; Name of the bank, gender, age, position held within the bank, the period within which the person/respondent has operated in the bank and in the electronic banking department. The demographic profile of respondents, participated in this study was shown in the table 4.1 below.

Table 4.1. The demographic profile of respondents

Bank		Dashen Bank		United Bank		Lion int. Bank		Total	
		Frequency	%	Frequency	%	Frequency	%	Frequency	%
Gender	Male	11	68.8 %	9	64.3%	11	57.9 %	31	63.3%
	Female	5	31.2	5	35.7	8	42.1	18	36.7
							TOTAL	49	100%
Age	20 - 30	5	31.2	8	57.1	13	68.4	26	53.1%
	31 - 40	11	68.8	6	42.9	6	31.6	23	46.9
	> 41	-	-	-	-	-	-	-	-
							TOTAL	49	100%
Educational level	Below Degree	-	-	-	-	-	-	-	-
	Degree	13	81.3	10	71.4	14	73.7	37	75.5%
	Masters	3	18.7	4	28.6	5	26.3	12	24.5
	Above Masters	-	-	-	-	-	-	-	-
							TOTAL	49	100%

Source: survey result, 2020

As it is shown on the above table, the highest percentage of participants in this study was Males which holds 63.3% of the respondents and females are 36.7%. Regarding with respondents' classification with age most of the respondents lay between 20-30 years age which is 53.1% and the remaining 46.9% lie within 31-40 years age group. While, there is no respondent who is above 41 years age. Among them DB's most respondents are between 31-40 age groups while UB and LIB's most respondents lay within 20-30 years age group, 68.8%, 57.1 & 68.4%

respectively. In regard with educational level of the study respondents, the highest percentage of them has bachelor degrees holders (75.5%) while the rest 24.5% holds Masters' Degree. Among them DB's holds 81.3% respondents are degree holders, LIB 73.37 and UB 71.4%. As per the result shown in the above there is no respondent who is below degree and above masters' degree holder.

In the section below the driving forces, factors affecting, benefits and opportunities of adoption of agent banking service in Ethiopia banking industry are discussed.

4.4. Factors affecting the adoption of agent banking in Ethiopia banking industry
4.4.1. Overview

Upon studying the likelihood of adoption success of technological innovations like Agency banking there are many factors that negatively affect its adoption and development. The factors could be cost of technological implementation, resistance of the public; limitations of well framed legal frameworks, fear of risk for using new technological outputs, societal literacy level… etc. Taking this in mind, Tornatzky and Fleisher (1990) designed a comprehensive and well received framework called technology organization environment framework (TOE) in the context of technological innovation adoptions by organizations.

Technology organization environment framework (TOE) explains that three different elements of factors affects the firms' adoption and implementation of technological innovations. These are organizational factors, technological and environmental factors. As it is stated in the conceptual framework section too so as to answer the factors affecting the adoption of agency banking the researcher presents questioner and analyzed the data as per TOE framework.

Vis a vis, those statistical results that are found under each section are presented using the table including the number of frequencies, the Mean, Mode and Standard Deviation of the data points. As it's analyzed in the above all questions in the questioners are answered (valid) and have no missing variable.

In the tables presented below the mean tried to tell the average where the data points fall for each specific variable.

As it is stated in the reliability and validity section of the research in addition to interpreting the mean data obtained from SPSS output, so as to get the valid result the researcher also tried to triangulate with the result obtained from the interview and open ended questions.

4.4.2. Driving Force for the Adoption of Agency Banking Service

Here under a total number of nine (9) questions on the "driving forces" for adoption of agency banking services in Ethiopia banking industry were asked to indicate the extent to which each respondent agrees to corresponding closed ended statements rated on a five-point Likert type scales ranging from '1' "Strongly Disagree" to '5' "Strongly Agree".

The summary of the results for all statements or variables under the research study and the result with respect to each statement is indicated below.

Table 4.2 The Driving Forces for the adoption of agent banking

No	Driving forces	SA	A	N	D	SD	Total	Mean
1.1	Desire to cover wide geographical area	47	2	-	-	-	49	4.96
		95.9%	4.1%	-	-	-	100%	
1.2	Desire to improve customer service	24	20	5			49	4.39
		49	40.8	10.2			100%	
1.3	Desire to improve the relationship with customers;	4	41			4	49	3.92
		8.2	83.7			8.2	100%	
1.4	Desire to reduce transaction cost	7	25	17			49	3.796
		14.3	51	34.7			100%	
1.5	Desire to build organizational reputation	7	33	4	7		49	3.857
		14.3	67.3	8.2	10.2		100%	
1.6	Desire to improve productivity and Organizational Performance	38	10	1			49	4.75
		77.6	20.4	2			100%	
1.7	Desire to satisfy rapid change of customer needs and Preferences	41	8	-	-	-	49	4.84
		83.7	16.3	-	-	-	100%	
1.8	Legal frame works that enforce banking industries to adopt technological innovation	7	9		2	31	49	2.16
		14.3	18.4		4.1	63.3	100%	
1.9	The increase in competition in the banking industry in conventional banking sections	29	18		1	1	49	4.51
		59.2	36.7		2	2	100%	

Source: Survey result, 2020

As its shown in the Table 4.2, most respondents agreed that the desire to cover wide geographical area and desire to satisfy rapid change of customer needs and preferences are the main driving forces that initiates private commercial banks to adopt agent banking in Ethiopia, in

which mean score are 4.96 and 4.86 respectively. The desire to improve productivity and Organizational Performance has also significant portion of respondents' response, which is 4.75 mean. The result of the study is also confirmed by semi structured interview held with E-banking Mangers and agent banking division heads of sampled bank. Accordingly, they entails that the desire to reach unutilized/uncovered market is the major issue that drives them towards the adoption of the system. The desire to satisfy rapid change of customer needs and Preferences and the increase in competition in the banking industry in conventional banking sections is also raised by managers as a major driving force for the adoption of agent banking.

The desire to improve customer service Desire to improve the relationship with customers, desire to build organizational reputation and desire to reduce transaction cost has also takes a significant portion of respondents' response, which is mean value of 4.39, 3.92, 3.86 and 3.79 respectively.

In spite of all, Legal frame works that enforce banking industries to adopt technological innovation scores the least mean value (2.16). Also as the mode result indicates most of the respondents responds strongly disagree towards this question. Therefore in addition to the interview held with electronic banking managers and agency banking section heads, the respondents' response indicates that there is no any law enforcement by NBE for the adoption of agent banking.

4.4.3. Organizational Factors

According to Technological-organization-environment framework, organizational Factors refers to the characteristics and resources of the firm, including linking structures between employees, intra-firm communication processes, firm size, and the amount of slack resources. There are several ways in which this context affects adoption and implementation decisions. According to Ayana (2012) mainly relates with availability of financial and skilled human resources in implementing a system. In this study costs related with technical and managerial skills required to implement agency banking system were considered as organizational factors. In this section organizational factors that affect the adoption of agency banking are analyzed here under.

Table 4.3. Organizational factors that affects the adoption of agent banking

S. No	Organizational Factors	SA	A	N	D	SD	Total	Mean
2.1	Lack of sufficient skills man power to implement agent banking system	2	27	1	17	2	49	3.2
		4.1%	55.1%	2%	34.7%	4.1%	100%	
2.2	Board of directors, top management and staffs resistance to change in technology	18	24	3	2	2	49	4.1
		36.7	49	6.1	4.1	4.1	100%	
2.3	Lack of proper coordination among stakeholders of the bank - in setting goals and following up the implementation process of the service	15	25	5	2	2	49	4
		30.6	51	10.2	4.1	4.1	100%	
2.4	Lack of giving proper attention to the service as its given to other conventional banking services	36	6	1	4	2	49	4.43
		73.5	12.2	2	8.2	4.1	100%	
2.5	High cost of implementation of agent banking (Such as cost of ICT equipment and network, software and training)	25	4	3	16	1	49	3.73
		51	8.2	6.1	32.7	2	100%	

Source: Survey result 2020

As shown in the above table, lack of giving proper attention to the service as its given to other conventional banking services is the major organizational factor that affects the effective adoption agent banking, with mean score 4.43. Board of directors, top management and staffs resistance to change in technology, Lack of proper coordination among stakeholders of the bank - in setting goals and following up the implementation process of the service and high cost of implementation of agent banking (Such as cost of ICT equipment and network, software and training) are also among organizational factor with the mean value 4.1, 4 and 3.73 respectively. While, Lack of sufficient skills man power to implement agent banking system is the least organizational factor upon the adoption of agent banking service, mean score 3.2.

4.4.4. Environmental factor

The environmental context includes the structure of the industry, the presence or absence of technology service providers, and the regulatory environment. Industry structure has been investigated in several ways. For instance, intense competition stimulates the adoption of innovation (Mansfield 1968; Mansfield et al. 1977). Also, dominant firms within the value chain can influence other value chain partners to innovate (Kamath and Liker 1994).

Here under in the table 4.4, 11 environmental factors are analyzed, adequate public awareness, level of societal technology literacy, infrastructure, government regulation and law are among the environmental factors that affect the adoption agency banking in Ethiopia.

Table 4.4. Environmental factor affecting the adoption of agency banking

S.NO	Environmental factors	SA	A	N	D	SD	Total	Mean
2.6	Low/limited quality of internet connection and mobile network (limitation of sufficient ICT infrastructure in general)	7	22	2	18		49	3.4
		14.3%	44.9%	4.1%	36.7%		100%	
2.7	Lack of sufficient legal frameworks which attracts banking industries to adopt technological innovation	19	21	5	4		49	4.12
		38.8	42.9	10.2	8.2		100%	
2.8	Lack of adequate public awareness	31	17		1		49	4.6
		63.3	34.7	-	2		100%	
2.9	Insufficient cash in the agents out late (cash vs. electronic money in balance)	18	5	9	17		49	3.48
		36.7	10.2	18.4	34.7		100%	
2.10	Entry barrier on foreign banks	5	21	20	3		49	3.57
		10.2	42.9	40.8	6.1		100%	
2.11	Lack of Uniform Platform by Banks (so that customers can perform Enter-bank transaction/transfers via mobile phones)	22	9	17	1		49	4.06
		44.9	18.4	34.7	2		100%	
2.12	low level of customers & agents technology literacy (mobile phones)	36	8	2	3		49	4.57
		73.5	16.3	4.1	6.1		100%	
2.13	Poor level of competition among local bank	3	21	2	2	21	49	2.65
		6.1	42.9	4.1	4.1	42.9	100%	
2.14	Lack of adequate coordination between banks and other decision making centers in agent banking	36	6	2	2	2	49	4.47
		73.5	12.2	6.1	4.1	4.1	100%	
2.15	Lack of adequate infrastructural	32	10	2	5		49	4.41

	facilities in the remote area	65.3	20.4	4.1	10.2		100%	
2.16	Lack of strong push from the Government to promote mobile and agent banking	22	21	2	4		49	4.24
		44.9	42.9	4.1	8.2		100%	

Source: Survey result, 2020

The result presented in the above table shows that, the respondents' degree of agreement regarding the environmental factors affecting the adoption of agency banking. Accordingly, lack of adequate public awareness and low level of customers & agents' technology literacy (mobile phones) is the major environmental factors that affect the adoption of agency banking with mean value 4.6 and 4.57 respectively. Following that Lack of adequate coordination between banks and other decision making centers in agent banking; Lack of adequate infrastructural facilities in the remote area; lack of strong push from the government to promote mobile and agent banking and Lack of sufficient legal frameworks which attracts banking industries to adopt technological innovation are also among the leading environmental factors affecting the adoption of agency banking with mean score 4.57, 4.47, 4.41 4.24, 4.12 and 4.06. This indicates that all the stated environmental factors are major factors the private banks in Ethiopia faces upon the adoption of agency banking service.

Despite this research finding, most of researches that have been done in the previous years on agency banking in Ethiopia (i.e. Meron, 2017; Yikeber, 2018, Tilahun, 2017) shows lack of available ICT infrastructure and Limitation in network infrastructure and internet related support services was there leading/major environmental factor that affects the successful adoption of agency banking. Currently as per this thesis result and the interview held with electronic banking managers' shows that there is a relative improvement in the information communication and technology and telecom sector.

The last but not the least Entry barrier on foreign banks and insufficient cash in the agents out late (cash vs. electronic money in balance) and Low/limited quality of internet connection and mobile network (limitation of sufficient ICT infrastructure in general) with mean value 3.57, 3.48 and 3.4 respectively. While, Poor level of competition among local bank got the least mean and mode score 2.65 and 1 respectively. And this actually an indication for the existence of high

level of competition in the banking industry and couldn't be taken as the factor that hinders the successful adoption of agency banking service.

4.4.5. Technological Factors

The technological context includes all of the technologies that are relevant to the firm – both, technologies that are already in use at the firm as well as those that are available in the marketplace but not currently in use. A firm's existing technologies are important in the adoption process because they set a broad limit on the scope and pace of technological change that a firm can undertake (Collins et al. 1988).

The issues raised here under are the technological factors that hinder the successful adoption of agency banking service. i.e. customer fear of risk, security risk, lack of trust with the technology, loss of the audit trail and all of the respondents participated in this study were asked that such factors are consider as factors that the banks faced while adopting agency banking and the survey result is shown on table 4.5 as follows.

Table 4.5. Technological factors affecting the adoption of agency banking

S.NO	Technological Factors	SA	A	N	D	SD	Total	Mean
2.17	Lack of confidence in relation with the security aspects	9	21	2	15	2	49	3.41
		18.4%	42.9%	4.1%	30.6%	4.1%	100%	
2.18	Loss of Audit Trail	5	25	4	13	2	49	3.36
		4.1	26.5	8.2	26.5	4.1	100%	
2.19	Financial crimes can easily be facilitated through Agent banking. i.e such as money laundering	5	6	3	3	32	49	1.96
		10.2	12.2	6.1	6.1	65.3	100%	
2.20	loss of trust in transacting through mobile phone; cashless and paperless characteristics)	24	12	1	10	2	49	3.94
		49	24.5	2	20.4	4.1	100%	
2.21	Customer fear of risk to use	30	12	1	5	1	49	4.31

	agent banking services	61.2	24.5	2	10	2	100%	
2.22	Absence(limited) of networks that links different banks;	20	25	3	1		49	4.3
		40.8	51	6.1	2		100%	

Source: Survey result, 2020

According to the responses gained in the above table, the largest number of respondent were agreed with the idea that customer fear of risk to use agent banking service; absence of common network that links different banks and lack of confidence in relation with the security aspects are the major technological factor that hinders banks in Ethiopia from/upon the adoption of agency banking with mean score 4.31, 4.3 and 3.94 respectively. This result is in line with the finding of Anwar (2015), Customers fear risk of new technology innovation and Lack of confidence with the security aspects are the major technological factor in the adoption of agency banking.

In addition, Loss of Audit Trail and Users do not trust the agent banking services (loss of trust in transacting through mobile phone; cashless and paperless characteristics) are among technological factors that affect the adoption of agency banking with mean score 3.41 and 3.36 respectively.

While financial crimes such as money laundering and other can easily be facilitated through Agent banking got the least mean and mode score which is 1.96 and 1 respectively. According to the interview held with the electronic banking managers and heads of agency banking section, the NBE's restriction of daily transaction limit which is 6000 birr hinders from using the service to criminal acts. Dashen bank's electronic banking deputy manager response such restriction is made is even for avoidance of any king of criminal act.

4.4.6. The benefits Banks realized from adoption of agent Banking Service

The benefit realized both perceived ease of use and perceived usefulness is a major deciding factor affecting for the acceptance of any information system. The benefits are divided in to service and operational benefits. Thus table 4.6 shows that the respondents' levels of agreement on the operational benefit realized from the adoption of the agency banking service.

4.4.6.1. Operational benefits

Table 4.5 Operational Benefits realized from Adoption of agent banking

S. No	Operational benefits	SA	A	N	D	SD	Mean	Mode	Std dev.
3.1	Reduced paper work	37	12				4.75	5	0.43
		75.5%	24.5%						
3.2	Low transaction cost	29	6	14			4.31	5	0.89
		59.2	12.2	28.6					
3.3	Enhance productivity in the banking industry	42	7				4.86	5	0.35
		85.7	14.3						
3.4	Enhance foreign currency generation	7	19	21	2		3.63	3	0.78
		14.3	38.8	42.9	4.1				
3.5	Increase reliability and reducing errors	5	31		13		3.57	4	1
		10.2	63.3		26.5				

Source: Survey result, 2020

As the score of mean value shown in the above agency banking enhancement of productivity in the banking industry; Reduction paper work and having low transaction cost are the leading operational benefits realized from the adoption of agency banking service, with mean score 4.86, 4.75 and 4.31. This research finding is in line with Yikeber (2018) and Anuwar (2017) findings in which the major operational benefits gained from implementing of agency banking system are that it increases the productivity of bank. In addition Enhancement of foreign currency generation and Increase reliability with reduction of errors is also other operational benefits banks realized from the adoption of agency banking (mean value equals 3.63 and 3.57 respectively).

4.4.6.2. Service benefits

In addition to operational benefits, there are also services benefits that the banking industry can attain from adoption agency banking.

Table 4.7 Service benefits from the adoption of agency banking

S.no	Service benefits	SA	A	N	D	SD	Total	Mean
3.6	Agent Banking service is more accessible to users than visiting a bank	42	7				49	4.86
		85.7%	14.3%				100%	

3.7	Overcome geographical limitations	44	5				49		4.89
		89.8	10.2				100%		
3.8	Agent banking is convenient, 24/7	21	27	1			49		4.38
		42.9	55.1	2			100%		
3.9	Improve customer service	22	27				49		4.44
		44.9	55.1				100%		
3.10	Encourages price transparency	20	9	20			49		4
		40.8	18.4	40.8			100%		
3.11	Facilitates development of new products and new business in the banking industry	21	10	18			49		4.06
		42.9	20.4	36.7			100%		
3.12	Improving transaction speeds	31	14	4			49		4.55
		63.3	28.6	8.2			100%		
3.13	Reduce queues in the banking hall	44	5				49		4.89
		89.8	10.2				100%		
3.14	Facilitates marketing & market access	37	10	2			49		4.71
		75.5	20.4	4.1			100%		
3.15	Create better relationship among banks And clients	18	30	1					4.34
		36.7	61.2	2					

Source: Survey result, 2020

As it's shown in the Table 4.7, according to the respondents response the agent banking benefit of overcoming geographical limitations and Reduce queues in the banking hall are the leading service benefit banks in Ethiopia realized from the adoption of agency banking service as both

values mean value indicates 4.89. This is indicate that the bank would not be limited by location to provide banking service to customer, since the service could be provided through hiring retail agents in a remote area and also provision of the service through agents (can be shop, super market…etc.) will also enhance to reduce queues of customer in the branch since customer are able to access the service in agents out late.

In addition accessibility to users than visiting a bank; Facilitating marketing & market access; Improving transaction speeds and Improve customer service are other major service benefit with mean value of 4.86, 4.71, 4.55 4.44. Similarly, as per the interview held with sampled banks E-banking Mangers supported that in light of advancing the motive of financial inclusion in Ethiopia, agency banking plays great role to inundate access to finance through agency banking using mobile phones. The finding is in line with Kassahun (2016), accordingly his finding E-banking technology enhances accessibility of the bank services to both existing and new customers, facilitates development of new products and new business in the banking industry; improve customer service and transaction speeds.

4.4.7. The Existing Opportunity for the Adoption of Agency Banking

A total number of 8 questions on existing opportunities for the adoption of agency banking in Ethiopia are raised here under in the table 4.8.

No	The existing opportunities	SA	A	N	D	SD	Total	Mean
4.1	Increment of educated potential customer	22	24	3			49	4.35
		44.9%	49%	6.1%			100%	
4.2	Commitment of the government to strengthen the banking industry;	7	25	5		12	49	3.31
		14.3	51	10.2		24.5	100%	
4.3	Late adopter opportunities	3	28	4	14		49	3.41
		6.1	57.1	8.2	28.6		100%	
4.4	The existence of high demand;	5	27	4	13		49	3.49
		10.2	55.1	8.2	26.5		100%	
4.5	Improvement in the banking habit of the society	9	36	4			49	4.1
		18.4	73.5	8.2			100%	
4.6	Commitment of the government to facilitate the expansion of ICT infrastructure, and	25	18	6			49	4.4
		51	36.7	12.2			100%	
4.7	Expansion of mobile	39	10				49	4.79

	phone users	79.6	20.4			100%	
4.8	The relative increase of the public awareness about the service	17	29	3		49	4.3
		34.7	59.2	6.1		100%	

Source: Survey data, 2020

Accordingly, the sampled respondents extent of agreement towards the variable indicates that Expansion of mobile phone users, Commitment of the government to facilitate the expansion of ICT infrastructure, Increment of educated potential customer, the relative increase of the public awareness about the service and Improvement in the banking habit of the society are the leading opportunities that initiates banks towards the adoption of agency banking service. This is evidenced by the data collected from the respondents with mean score of 4.79, 4.4, 4.35, 4.3 and 4.1 respectively.

The finding supported by the stated sampled banks E-banking managers, accordingly the yearly increment of mobile phone users, Ethio-telecom's penetration into different geographical location and the government's plans to offer two new mobile telephony licenses and to sell minority stake initiates the banks for the adoption of agency banking. Addis fortune's may, 2020 data reveals that by the first half of the current fiscal year (2020), the number of telecom service users in Ethiopia reached 45.6 million, showing 10.9 percent increase from the same period of previous year. Out of the total customer base 44 million of them use mobile device. 22.7 million Use data. The telecom penetration has reached 45.4%.

The last but not the least, the existence of high demand; late adopter opportunities and commitment of the government to strengthen the banking industry, with mean value 3.49, 3.41 and 3.31 respectively are also some existing opportunity that initiate banks for the adoption of agency banking.

Chapter Five
5. Conclusion and Recommendation of the Study

This chapter as a whole presents the concluding remarks for the main findings in chapter four and important recommendations as per the main problems investigated in this research study respectively.

5.1. Conclusion

Despite the fact that Ethiopia has achieved rapid financial sector growth in the last couple of years, many households are still excluded from access to financial services in the jurisdiction. Data's on the access and usage to financial services by individuals shows that only 33.86 percent of adults have account with formal financial institutions (2017 FY). Accordingly, from the existing around 6000 bank branches in the country wide 40% of it found in Addis Ababa. This concentration of banking service entails that there is still a vast unutilized market in the country. Considering the stated facts in mind and from the analysis made in the preceding chapter too, the following conclusions are drawn.

The research study result indicates that the desire to cover wide geographical area, the desire to satisfy rapid change of customer need & preference and the desire to improve productivity & Organizational Performance are the main driving forces that initiate banks for the adoption of agency banking service. In addition the desire to improve customer service, the desire to improve the relationship with customers, desire to build organizational reputation and desire to reduce transaction cost are also among the main driving forces that led towards the adoption of agent banking service.

As it is discussed in the conceptual framework part of the study, factors upon the adoption of technology in general are framed into three as per TOE model. I.e. Organizational, environmental and technological factors. Since this research is also adopted TOE model, the factors related to the adoption of agent banking are categorized accordingly.

Despite the research findings that has been made in the previous year's entails the low development levels of ICT infrastructure and the poor quality of internet connection & mobile network as a major obstacle for the adoption of agent banking. The data's and the electronic banking managers of the three sampled banks confirmed that currently there is a relatively

significant change in the ICT and telecom sector in Ethiopia, though this research finding reveals that lack of adequate public awareness and low level of customers & agents' technology literacy (mobile phones) is the major environmental factors that affects the adoption of agency banking. This indicates that the vast majority is still lacks adequate awareness about the service, in addition even though mobile phones have grown to be the most widely used in the country, still the understanding of the people toward the usage for further services(beyond receiving/making calls) is relatively low and this hinders the effective adoption of agency banking services. In addition to that Lack of adequate coordination between banks and other decision making centers in agent banking; Lack of adequate infrastructural facilities in the remote area; lack of strong push from the government to promote mobile and agent banking and Lack of sufficient legal frameworks which attracts banking industries to adopt technological innovation are also among the environmental factors affecting the adoption of agency banking.

Lack of giving proper attention to the service as its given to other conventional banking services, High implementation cost (Such as cost of ICT equipment and network, software and training) and Board of directors, top management and staffs resistance to change in technology are the major factors within the organization that hiders the effective adoption of agency banking. In addition lack of proper coordination among stakeholders of the bank - in setting goals and following up the implementation process of the service is also another organizational factor.

Besides the stated environmental and organizational factors, the study concluded that there are also some technological factors that banks in Ethiopia faced in the adoption of agency banking. This are customer fear of risk to use agent banking service, absence of common network that links different banks and lack of confidence in relation with the security aspects are the major/leading technological factor. Result of the study also shows that Loss of Audit Trail and loss of trust in transacting through mobile phone (due to its cashless/paperless characteristics) are also other technological factors that affect the adoption of agency banking.

In spite of all the above stated factors, there are also dozens of benefits banking sector in the country realized from the adoption of agency banking service. The benefits here under are sect in to service and operational and service benefits. Thus the research concluded that benefit of overcoming geographical limitations and Reduction of queues in the banking hall are the leading service benefits realized from the adoption of the service. In addition accessibility to users rather

than visiting a bank, Facilitating marketing & market access; Improving transaction speeds and Improve customer service are other major service benefit.

The major/ leading operational benefits realized from the adoption of the services are enhancement of productivity in the banking industry, Reduction paper work and low transaction cost. In addition Enhancement of foreign currency generation and Increase reliability with reduction of errors are also other operational benefits banks realized from the adoption of agency banking.

Vis a vis, there are some existing opportunities in the adoption of agency banking service in Ethiopia. The expansion of mobile phone users, Commitment of the government to facilitate the expansion of ICT infrastructure, Increment of educated potential customer, the relative increase of the public awareness about the service and Improvement in the banking habit of the society are the leading opportunities in the country. In addition the existence of high demand of the banking service, late adopter opportunities and commitment of the government to strengthen the banking industry are also some other opportunities for the adoption of agent banking in Ethiopian banking industry.

5.2. Recommendations

Based on the findings stated in the above the researcher came up with the following possible recommendations to the banks that are already adopted the agency banking and for those that are going to adopt most importantly. In addition, the recommendations aims to the government and policy makers in order to overcome the factors affecting its adoption, exploit the untapped opportunities in adoption of agency banking and to ensure a successful practice of agency banking in Ethiopia banking industry.

> ➢ As it is stated in the beginning part of the study, the 2012 directive had allowed only banks and microfinance to provide agency banking service via agents (bank-led model). Nonetheless for the effective implementation the service, to rise the competition and to overturn some challenges faced in the adoption of the service I recommend the government/NBE to allow companies (like Fintech, telecom) to be a service provider for mobile money and other digital payment instruments. This move will partly be wake up

call for the low performing banks and microfinances in delivering their promise of effective agency banking.

➢ The government should consider the liberalization of the financial sector for foreign bank or should lift entry barrier to enhance the introduction of modern technology in the banking sector

➢ The government should also legalize the acceptance of electronic receipts as a mode of transaction confirmation. This removes the past requirement of providing paper-based receipts for cash in and cash-out transactions. In doing so the desire to use the agency banking service will rise.

➢ National Bank of Ethiopia, (NBE) needs to urgently establish a comprehensive legal and regulatory framework so as to attract the incoming banks and to let the development of the service for the existing ones.

➢ Public awareness on the use of ICT, e-commerce and e-Payment need to be raised and enhanced.

➢ Banks should launch campaigns to create direct awareness to the public so as to overturn the issues such as fear of the lack of privacy and security, together with relative advantages of using Agent banking services and E-banking products as a whole.

➢ The banks should facilitated proper and continuous training courses for their employees to have adequate understanding of the agency banking

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Appendixes

Questionnaire

St. Mary's university
Department of Marketing Management

Dear sir/madam,

I am Girum Getachew, student of **MA in Marketing Management** at St. Mary's university. I am undertaking a research on the topic "**Factors Affecting the Adoption of Agent Banking in Ethiopian Banking Industry**" in partial fulfillment for the requirements of degree of Master of Art in Marketing Management. The questionnaire here under is aimed to meet the research objectives. The results of the study will have a vital contribution to the banking sector, to clients, to concerned government offices and policy makers at large and others. More over the result of this study will be used as additional reference for those who want to conduct detailed research on these area. To this end, this questionnaire is prepared to gather relevant information.

Therefore, you are kindly requested to respond to the questions based on the instructions under each section. I sincerely assure you that the information you provide will be used only for academic purposes. Hence, I would be very grateful if you could assist in this study by completing the attached questionnaire. Your honest and thoughtful response is regarded as an invaluable input to the quality of the research results.

Yours faithfully
Girum Getachew
0910246527

General Information of the Banks

1. Name of the Bank_____

2. Gender   Male ☐   Female ☐

3. Age

       20-30 ☐   31- 40 ☐

        40-60 ☐   Over 61 ☐

4. How long have you worked in the bank?

    _____

5. How long have you worked in the E-banking department?

    _____

6. Educational level:

Diploma	Degree	Masters	above Masters
☐	☐	☐	☐

Part II. Questions here under are regarding driving forces, factors affecting its adoption, benefit realized and the existing opportunities of agent banking

Therefore please indicate whether you agree or disagree with each statement by ticking (√) on the spaces that specify your choice from the options that range from ""strongly agree" to "strongly disagree".

Key

SA= strongly agree   N= Neutral

SD=Strongly Disagree A=Agree   D=Disagree

No	1) Do you think that the following are among the driving forces for the adoption of agent banking services in Ethiopia Banking Industry?	SA 5	A 4	N 3	D 2	SD 1
1.1	Desire to cover wide geographical area					
1.2	Desire to improve customer service					
1.3	Desire to improve the relationship with customers;					
1.4	Desire to reduce transaction cost					
1.5	Desire to build organizational reputation					
1.6	Desire to improve productivity and Organizational Performance					
1.7	Desire to satisfy rapid change of customer needs and Preferences					
1.8	Legal frame works that enforce banking industries to adopt technological innovation					
1.9	The increase in competition in the banking industry in conventional banking sections					

Please kindly state any other Driving forces for adoption agent banking into Ethiopia banking industry.

_____

_____

_____

_____

_____

Factors	S. No	2) The following are some factors affecting the adoption of Agent Banking services, please indicate level of your choice.	SA 5	A 4	N 3	D 2	SD 1
Organizational Factors	2.1	Lack of sufficient skills man power to implement agent banking system					
	2.2	Board of directors, top management and staffs resistance to change in technology					
	2.3	Lack of proper coordination among stakeholders of the bank - in setting goals and following up the implementation process of the service					
	2.4	Lack of giving proper attention to the service as its given to other conventional banking services					
	2.5	High cost of implementation of agent banking (Such as cost of ICT equipment and network, software and training)					
Environmental Factors	2.6	Low/limited quality of internet connection and mobile network (limitation of sufficient ICT infrastructure in general)					
	2.7	Lack of sufficient legal frameworks which attracts banking industries to adopt technological innovation					
	2.8	Lack of adequate public awareness					
	2.9	Inadequate cash in the agents out late (cash vs. electronic money in balance)					
	2.10	Entry barrier on foreign banks					
	2.11	Lack of Uniform Platform by Banks i.e. lack of law mandating the banks to use common software; (so that customers can perform Enter-bank transaction/transfers via mobile phones)					
	2.12	low level of customers & agents technology literacy (mobile phones)					
	2.13	Poor level of competition among local bank					
	2.14	Lack of adequate coordination between banks and other decision making centers in agent banking					

	2.15	Lack of adequate infrastructural facilities in the remote area					
	2.16	Lack of strong push from the Government to promote mobile and agent banking					
Technological Factor	**2.17**	Lack of confidence in relation with the security aspects					
	2.18	Loss of Audit Trail					
	2.19	financial crimes such as money laundering and other can easily be facilitated through Agent banking					
	2.20	Users do not trust the agent banking services (loss of trust in transacting through mobile phone; cashless and paperless characteristics)					
	2.21	Customer fear of risk to use agent banking services					
	2.22	Absence (limited) of networks that links different banks;					

Please kindly state any other factors that the Banks faces in the adoption of Agent banking into Ethiopia banking industry?

_____

_____

_____

_____

If you agree on most of the above factors, what measures should be taken to reduce /overcome the stated factors?

_____

_____

_____

_____

Benefits	S. No	3) The following are some of the benefits Banks realized from adoption of agent Banking Service, please indicate your choice.	SA 5	A 4	N 3	D 2	SD 1
Operational Benefits	3.1	Reduced paper work					
	3.2	Low transaction cost					
	3.3	Enhance productivity in the banking industry					
	3.4	Enhance foreign currency generation					
	3.5	Increase reliability and reducing errors					
Services Benefits	3.6	Agent Banking service is more accessible to users than visiting a bank					
	3.7	Overcome geographical limitations					
	3.8	Agent banking is convenient, 24/7					
	3.9	Improve customer service					
	3.10	Encourages price transparency					
	3.11	Facilitates development of new products and new business in the banking industry					
	3.12	Improving transaction speeds					
	3.13	Reduce queues in the banking hall					
	3.14	Facilitates marketing & market access					
	3.15	Create better relationship among banks and clients					

Please kindly state any other benefits the banks gained from the adoption of agent banking in the delivery of service to customers?

_____

_____

_____

_____

No	4) What are the existing opportunities in the country that initiates the adoption of agent banking?	SA 5	A 4	N 3	D 2	SD 1
4.1	Increment of educated potential customer					
4.2	Commitment of the government to strengthen the banking industry;					
4.3	Late adopter opportunities					
4.4	The existence of high demand;					
4.5	Improvement in the banking habit of the society					
4.6	Commitment of the government to facilitate the expansion of ICT infrastructure, and					
4.7	Expansion of mobile phone users					
4.8	The relative increase of the public awareness about the service					

Please kindly state any other opportunities in the country that could initiate for the adoption and development of agent banking?

_____

_____

_____

In what ways do you think agent banking can be improved in Ethiopia Banking Industry?

_____

_____

_____

Any suggestions regarding agent banking service in the banking Industry?

_____

_____

_____

Interview

St. Mary's university

Department of Marketing Management

Dear sir/madam,

I am Girum Getachew, student of **MA in Marketing Management** at St. Mary's university. I am undertaking a research on the topic "**Factors affecting the adoption of Agent Banking in Ethiopian Banking Industry**" in partial fulfillment for the requirements of degree of Master of Art in Marketing Management. The interview questions here under is aimed to answer the research questions. The results of the study will have a vital contribution to the banking sector, to clients, to concerned government offices and policy makers at large and others. More over the result of this study will be used as additional reference for those who want to conduct detailed research on the area. To this end, this interview is prepared to gather relevant information.

Therefore, I sincerely assure you that the information you provide will be used only for academic purposes. Hence, I would be very grateful if you could assist in this study by completing the interview questions well. Your honest and thoughtful response is regarded as an invaluable input to the quality of the research results.

Yours faithfully
Girum Getachew
Tell: 0910246527

Name of the Bank _____

Your Position please_____

C.   how long have you served in the position_____

Interview questionnaires designed for the Agent Banking

What are the basic factors/challenges in the adoption of new technological innovations in banking sector at large in your institution specifically?

What are the benefits your bank gained from the delivery of agent banking service to customers?

What are the key factors that push your bank to adopt agency banking?

What are the existing opportunities in the country that initiates the adoption and development of agent banking service?

Is there any legal frameworks at national bank that enforces banking sector to use agent banking technology?

Does the existing ICT infrastructure provide agent banking service without interruption? If the answer is No, could you state the extent of interruption, i.e In what way it hinders the service

What sort of support would you expect from the government in relation to the agent banking improvement in Ethiopia?

Any suggestions for the development of agent banking service in the banking industry?

Appendix 3

Frequency table

Desire to cover wide geographical area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	2	4.1	4.1	4.1
	Strongly Agree	47	95.9	95.9	100.0
	Total	49	100.0	100.0	

Desire to improve customer service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	5	10.2	10.2	10.2
	Agree	20	40.8	40.8	51.0
	Strongly Agree	24	49.0	49.0	100.0
	Total	49	100.0	100.0	

Desire to improve the relationship with customers;

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	8.2	8.2	8.2
	Agree	41	83.7	83.7	91.8
	Strongly Agree	4	8.2	8.2	100.0
	Total	49	100.0	100.0	

Desire to reduce transaction cost

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	17	34.7	34.7	34.7
	Agree	25	51.0	51.0	85.7
	Strongly Agree	7	14.3	14.3	100.0
	Total	49	100.0	100.0	

Desire to build organizational reputation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	10.2	10.2	10.2
	Neutral	4	8.2	8.2	18.4
	Agree	33	67.3	67.3	85.7

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Agree	7	14.3	14.3	100.0
	Total	49	100.0	100.0	

Desire to improve productivity and Organizational

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	1	2.0	2.0	2.0
	Agree	10	20.4	20.4	22.4
	Strongly Agree	38	77.6	77.6	100.0
	Total	49	100.0	100.0	

Desire to satisfy rapid change of customer needs and Preferences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	8	16.3	16.3	16.3
	Strongly Agree	41	83.7	83.7	100.0
	Total	49	100.0	100.0	

Legal frame works that enforce banking industries to adopt technological innovation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	31	63.3	63.3	63.3
	Disagree	2	4.1	4.1	67.3
	Agree	9	18.4	18.4	85.7
	Strongly Agree	7	14.3	14.3	100.0
	Total	49	100.0	100.0	

The increase in competition in the banking industry in conventional banking sections

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.0	2.0	2.0
	Neutral	1	2.0	2.0	4.1
	Agree	18	36.7	36.7	40.8
	Strongly Agree	29	59.2	59.2	100.0
	Total	49	100.0	100.0	

Lack of sufficient skills man power to implement agent banking system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	17	34.7	34.7	38.8
	Neutral	1	2.0	2.0	40.8
	Agree	27	55.1	55.1	95.9
	Strongly Agree	2	4.1	4.1	100.0
	Total	49	100.0	100.0	

Board of directors, top management and staffs resistance to change in technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	2	4.1	4.1	8.2
	Neutral	3	6.1	6.1	14.3
	Agree	24	49.0	49.0	63.3
	Strongly Agree	18	36.7	36.7	100.0
	Total	49	100.0	100.0	

Lack of proper coordination among stakeholders of the bank - in setting goals and following up the implementation process of the service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	2	4.1	4.1	8.2
	Neutral	5	10.2	10.2	18.4
	Agree	25	51.0	51.0	69.4
	Strongly Agree	15	30.6	30.6	100.0
	Total	49	100.0	100.0	

Lack of giving proper attention to the service as its given to other conventional banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	4	8.2	8.2	12.2
	Neutral	1	2.0	2.0	14.3
	Agree	6	12.2	12.2	26.5
	Strongly Agree	36	73.5	73.5	100.0

		Frequency	Percent	Valid Percent	Cumulative Percent
	Total	49	100.0	100.0	

High cost of implementation of agent banking (Such as cost of ICT equipment and network, software and training)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.0	2.0	2.0
	Disagree	16	32.7	32.7	34.7
	Neutral	3	6.1	6.1	40.8
	Agree	4	8.2	8.2	49.0
	Strongly Agree	25	51.0	51.0	100.0
	Total	49	100.0	100.0	

Low/limited quality of internet connection and mobile network(limitation of sufficient ICT infrastructure in general)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	18	36.7	36.7	36.7
	Neutral	2	4.1	4.1	40.8
	Agree	22	44.9	44.9	85.7
	Strongly Agree	7	14.3	14.3	100.0
	Total	49	100.0	100.0	

Lack of sufficient legal frameworks which attracts banking industries to adopt technological innovation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	8.2	8.2	8.2
	Neutral	5	10.2	10.2	18.4
	Agree	21	42.9	42.9	61.2
	Strongly Agree	19	38.8	38.8	100.0
	Total	49	100.0	100.0	

Lack of adequate public awareness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	2.0	2.0	2.0
	Agree	17	34.7	34.7	36.7
	Strongly Agree	31	63.3	63.3	100.0
	Total	49	100.0	100.0	

Insufficient cash in the agents out late(cash vs. electronic money in balance)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	17	34.7	34.7	34.7
	Neutral	9	18.4	18.4	53.1
	Agree	5	10.2	10.2	63.3
	Strongly Agree	18	36.7	36.7	100.0
	Total	49	100.0	100.0	

Entry barrier on foreign banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	6.1	6.1	6.1
	Neutral	20	40.8	40.8	46.9
	Agree	21	42.9	42.9	89.8
	Strongly Agree	5	10.2	10.2	100.0
	Total	49	100.0	100.0	

Lack of Uniform Platform by Banks i.e. lack of law mandating the banks to use common software;(so that customers can perform Enter-bank transaction/transfers via mobile phones)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	2.0	2.0	2.0
	Neutral	17	34.7	34.7	36.7
	Agree	9	18.4	18.4	55.1
	Strongly Agree	22	44.9	44.9	100.0
	Total	49	100.0	100.0	

low level of customers & agents technology literacy (mobile phones)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	6.1	6.1	6.1
	Neutral	2	4.1	4.1	10.2
	Agree	8	16.3	16.3	26.5
	Strongly Agree	36	73.5	73.5	100.0
	Total	49	100.0	100.0	

Poor level of competition among local bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	21	42.9	42.9	42.9
	Disagree	2	4.1	4.1	46.9
	Neutral	2	4.1	4.1	51.0
	Agree	21	42.9	42.9	93.9
	Strongly Agree	3	6.1	6.1	100.0
	Total	49	100.0	100.0	

Lack of adequate coordination between banks and other decision making centers in agent banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	2	4.1	4.1	8.2
	Neutral	3	6.1	6.1	14.3
	Agree	6	12.2	12.2	26.5
	Strongly Agree	36	73.5	73.5	100.0
	Total	49	100.0	100.0	

Lack of adequate infrastructural facilities in the remote area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	10.2	10.2	10.2
	Neutral	2	4.1	4.1	14.3
	Agree	10	20.4	20.4	34.7
	Strongly Agree	32	65.3	65.3	100.0
	Total	49	100.0	100.0	

Lack of strong push from the Government to promote mobile and agent banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	8.2	8.2	8.2
	Neutral	2	4.1	4.1	12.2
	Agree	21	42.9	42.9	55.1
	Strongly Agree	22	44.9	44.9	100.0
	Total	49	100.0	100.0	

Lack of confidence in relation with the security aspects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	15	30.6	30.6	34.7
	Neutral	2	4.1	4.1	38.8
	Agree	21	42.9	42.9	81.6
	Strongly Agree	9	18.4	18.4	100.0
	Total	49	100.0	100.0	

Loss of Audit Trail

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	13	26.5	26.5	30.6
	Neutral	4	8.2	8.2	38.8
	Agree	25	51.0	51.0	89.8
	Strongly Agree	5	10.2	10.2	100.0
	Total	49	100.0	100.0	

financial crimes such as money laundering and other can easily be facilitated through

Agent banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	32	65.3	65.3	65.3
	Disagree	3	6.1	6.1	71.4
	Neutral	3	6.1	6.1	77.6
	Agree	6	12.2	12.2	89.8
	Strongly Agree	5	10.2	10.2	100.0
	Total	49	100.0	100.0	

Users do not trust the agent banking services (loss of trust in transacting through

mobile phone; cashless and paperless characteristics)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.1	4.1	4.1
	Disagree	10	20.4	20.4	24.5
	Neutral	1	2.0	2.0	26.5
	Agree	12	24.5	24.5	51.0
	Strongly Agree	24	49.0	49.0	100.0

		Frequency	Percent	Valid Percent	Cumulative Percent
	Total	49	100.0	100.0	

Customer fear of risk to use agent banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.0	2.0	2.0
	Disagree	5	10.2	10.2	12.2
	Neutral	1	2.0	2.0	14.3
	Agree	12	24.5	24.5	38.8
	Strongly Agree	30	61.2	61.2	100.0
	Total	49	100.0	100.0	

Absence (limited) of networks that links different banks;

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	2.0	2.0	2.0
	Neutral	3	6.1	6.1	8.2
	Agree	25	51.0	51.0	59.2
	Strongly Agree	20	40.8	40.8	100.0
	Total	49	100.0	100.0	

Reduced paper work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	12	24.5	24.5	24.5
	Strongly Agree	37	75.5	75.5	100.0
	Total	49	100.0	100.0	

Low transaction cost

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	14	28.6	28.6	28.6
	Agree	6	12.2	12.2	40.8
	Strongly Agree	29	59.2	59.2	100.0
	Total	49	100.0	100.0	

Enhance productivity in the banking industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	7	14.3	14.3	14.3
	Strongly Agree	42	85.7	85.7	100.0

| | | Total | 49 | 100.0 | 100.0 | |

Enhance foreign currency generation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	4.1	4.1	4.1
	Neutral	21	42.9	42.9	46.9
	Agree	19	38.8	38.8	85.7
	Strongly Agree	7	14.3	14.3	100.0
	Total	49	100.0	100.0	

Increase reliability and reducing errors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	13	26.5	26.5	26.5
	Agree	31	63.3	63.3	89.8
	Strongly Agree	5	10.2	10.2	100.0
	Total	49	100.0	100.0	

Agent Banking service is more accessible to users   than visiting a bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	7	14.3	14.3	14.3
	Strongly Agree	42	85.7	85.7	100.0
	Total	49	100.0	100.0	

Overcome geographical limitations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	5	10.2	10.2	10.2
	Strongly Agree	44	89.8	89.8	100.0
	Total	49	100.0	100.0	

Agent banking is convenient, 24/7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	2.0	2.0	2.0
	Agree	27	55.1	55.1	57.1
	Strongly Agree	21	42.9	42.9	100.0
	Total	49	100.0	100.0	

Improve customer service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	27	55.1	55.1	55.1
	Strongly Agree	22	44.9	44.9	100.0
	Total	49	100.0	100.0	

Encourages price transparency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	20	40.8	40.8	40.8
	Agree	9	18.4	18.4	59.2
	Strongly Agree	20	40.8	40.8	100.0
	Total	49	100.0	100.0	

Facilitates development of new products and new business in the banking industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	18	36.7	36.7	36.7
	Agree	10	20.4	20.4	57.1
	Strongly Agree	21	42.9	42.9	100.0
	Total	49	100.0	100.0	

Improving transaction speeds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	4	8.2	8.2	8.2
	Agree	14	28.6	28.6	36.7
	Strongly Agree	31	63.3	63.3	100.0
	Total	49	100.0	100.0	

Reduce queues in the banking hall

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	5	10.2	10.2	10.2
	Strongly Agree	44	89.8	89.8	100.0
	Total	49	100.0	100.0	

Facilitates marketing & market access

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	2	4.1	4.1	4.1

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	10	20.4	20.4	24.5
Strongly Agree	37	75.5	75.5	100.0
Total	49	100.0	100.0	

Create Relationship among banks and better clients

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	1	2.0	2.0	2.0
	Agree	30	61.2	61.2	63.3
	Strongly Agree	18	36.7	36.7	100.0
	Total	49	100.0	100.0	

Increment of educated potential customer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	3	6.1	6.1	6.1
	Agree	24	49.0	49.0	55.1
	Strongly Agree	22	44.9	44.9	100.0
	Total	49	100.0	100.0	

Commitment of the government to strengthen the banking industry;

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	24.5	24.5	24.5
	Neutral	5	10.2	10.2	34.7
	Agree	25	51.0	51.0	85.7
	Strongly Agree	7	14.3	14.3	100.0
	Total	49	100.0	100.0	

Late adopter opportunities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	14	28.6	28.6	28.6
	Neutral	4	8.2	8.2	36.7
	Agree	28	57.1	57.1	93.9
	Strongly Agree	3	6.1	6.1	100.0
	Total	49	100.0	100.0	

The existence of high demand;

	Frequency	Percent	Valid Percent	Cumulative Percent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	13	26.5	26.5	26.5
	Neutral	4	8.2	8.2	34.7
	Agree	27	55.1	55.1	89.8
	Strongly Agree	5	10.2	10.2	100.0
	Total	49	100.0	100.0	

Improvement in the banking habit of the society

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	4	8.2	8.2	8.2
	Agree	36	73.5	73.5	81.6
	Strongly Agree	9	18.4	18.4	100.0
	Total	49	100.0	100.0	

Commitment of the government to facilitate the expansion of ICT infrastructure,

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	6	12.2	12.2	12.2
	Agree	18	36.7	36.7	49.0
	Strongly Agree	25	51.0	51.0	100.0
	Total	49	100.0	100.0	

Expansion of mobile phone users

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	10	20.4	20.4	20.4
	Strongly Agree	39	79.6	79.6	100.0
	Total	49	100.0	100.0	

The relative increase of the public awareness about the service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	3	6.1	6.1	6.1
	Agree	29	59.2	59.2	65.3
	Strongly Agree	17	34.7	34.7	100.0
	Total	49	100.0	100.0	