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**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT
(GRADUATE PROGRAM)**

**ASSESSMENT OF ADOPTION OF AGENCY BANKING
INNOVATION IN ETHIOPIA: BARRIERS AND DRIVERS**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE AWARD OF DEGREE OF EXECUTIVE MASTERS OF
BUSINESS ADMINISTRATION (EMBA)**

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Declaration

I, the undersigned, declare that this research project is my original work and has not been presented for a degree award in any other university.

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Date _____

Afewerk Gugsu

This research project has been submitted for examination with my confirmation as a supervisor to the candidate.

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Date _____

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Abstract

This research project aims to describe factors that affect the adoption of agency banking in Ethiopian banking industry with respect to the barriers and benefits derived from adopting the system. In order to achieve the objective of this study and answer the research questions the researcher adopted quantitative research approach.

This descriptive study was conducted based on the data gathered from the following four banks in Ethiopia; Dashen Bank, United Bank, Lion International Bank and Cooperative Bank of Oromia. The data collected was analyzed using descriptive statistics. A research framework developed based on the Technology - Organization - Environment (TOE) framework and Technology Acceptance Model (TAM) was used to guide the study.

The study revealed the following major driving factors in adopting agency banking among commercial banks in Ethiopia; the prospects of cost reduction, availing services beyond restriction of space and time through established third party with the application of technology. The benefits were also classified as Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). The barriers identified in this study came from the external environments like; lack of legal framework, under developed ICT infrastructure including poor network connectivity, lack of competition among banks and lack of sufficient government support, security risk and lack of customer trust towards the service.

The study recommended banks to consider technology based competition focusing on customer base expansion, cost reduction, awareness creation, credibility, security, ease of use, and availability to exploit the benefit of agency banking while the government should support banking sector by facilitating sufficient ICT infrastructure development and issue workable legal frameworks to ease the adoption of agency banking system.

Keywords: *Banking industry, Agency banking, Mobile Banking, Adoption of Agency Banking by Ethiopian Banks, Branchless banking*

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Acronyms

AB- Agency Banking Services

MB- Mobile Banking

NBE- National Bank of Ethiopia

ICT- Information Communication Technology

E-Banking- Electronic Banking

GTP - Growth and Transformation Plan

KYC - Know Your Customer

CGAP - Consultative Group to Assist the Poor

EFInA - Enhanced Financial Innovation & Access

TOE - Technology-Organization-Environment framework

PEoU - Perceived Ease of Use

PU - Perceived Usefulness

Chapter One: Introduction

1.1 Background of the Study

Like all other social entities financial institutions in Ethiopia are being constantly expanding with technological innovations. For instance, till recently bank customers were used to stand in line to get financial services, but now because of the multi channel service outlets they can perform it from anywhere at any time. Funds are transferred electronically between financial institutions and individual accounts, and between individual accounts using e-banking system (Shyamapada et al, 2011).

The business environment has globally changed and it has been characterized by stiff competition and this is not an exception to banks. Competition has pushed commercial banks towards becoming more innovative. These innovations include credit cards, ATMs, internet banking, mobile banking, youth oriented accounts, women oriented banking, Interest free banking and agency banking which is most recently introduced in the banking sector (Bold, 2011).

Agency banking is branchless banking based on ICT that allows financial institutions to offer financial service outside the traditional bank premises (Mas, 2008; 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, and gas stations etc located in remote areas (Warii, 2011).

Agent Bank is a company or organization that acts in some capacity on behalf of another bank but it cannot accept deposits or extend loans in its own name and it acts as agent for the parent bank. A retail outlet contracted by a financial institution or a mobile network operator that processes clients' transactions could be cited as instance. It is the retail outlets that conduct the transaction and lets clients deposit or withdraw cash, transfer funds, effect bill payment, inquire about an account balance, or receive government benefits or a direct deposit from their employer rather than a branch teller (Siedek, 2008).

Though commercial banks continue to invest in opening brick and mortar branches complimented by various delivery channels and access to formal financial services remains a

big impediment to financial performances. Customers from the remote areas are forced to travel long distances and spend huge amounts of money and time on transport in order to access a branch. To curb these challenges, a number of central banks around the world have issued legislation that allows commercial banks to contract third party retail networks as agents (Ivatury and Lyman, 2006).

Globally, retailers and post offices are highly utilized as important distribution channels for financial institutions. The point of services range from the post offices in Australia where clients from all banks can conduct their transactions, to rural France where the bank Credit Agricole uses corner stores to provide financial services, to small lottery outlets in Brazil at which clients can receive their social payments and access their bank accounts (Ivatury and Lyman, 2006). However, agency banking can be traced to Brazil in 1999 where it exponentially grew from 1,600 agents in 2000 to 170,000 agents in 2010 (McKay, 2011).

Thus technological innovations play a crucial role in the banking industry in creating value for banks and customers to enable customers perform banking transactions without visiting a conventional brick and mortar banking system. Agency banking service has enabled banking institutions to compete more effectively in different countries by extending their products and services beyond restriction of space and time through established third party with the application of technology. However, the adoption of the agency banking system is a recent phenomenon in Ethiopia. Thus, the researcher is interested to assess factors that affect the adoption of the agency banking in the Ethiopian Banking Industry where the numbers of bank branches are ever increasing to outreach customers with significant amount of investment.

The number of banks operating in Ethiopia has reached nineteen (19) of which sixteen (16) are private while the remaining three are state-owned. During the fiscal year (2013/14) these banks opened 480 new branches raising the total branch network in the country to 2,208 from 1,728 previous year. As a result, bank branch to population ratio declined from 1:49,826 people to 1:39,402 in 2013/14. (NBE, 2013/14 Annual Report) E-banking services in Ethiopia commenced in late 2001 while Commercial Bank of Ethiopia (CBE) introduced about eight ATMs to deliver service to the local users but not found successful due to lack of appropriate infrastructure. Later on in the year 2005 Dashen bank started delivering; Cash withdrawal,

Fund transfer between accounts attached to a single card, Mini statement, Balance Inquiry, and Personal Identification Number (PIN) change services through ATMs located at different convenient locations. Dashen's ATM is available 24 hours a day, seven days a week and 365 days a year providing service to Debit Cardholders and International Visa Cardholders coming to the country (Ayana, 2012). Dashen Bank also commenced delivering mobile banking service in Ethiopia for the first time to acquire E-commerce and mobile merchant transactions that allows transfer of funds from one's account to others during 2009 (Ayana 2012). Zemen Bank operating in a single branch banking model launched internet banking service, which is new to Ethiopian banking industry, in the year 2010.

Ethiopia's five-year Growth and Transformation Plan (GTP) envisages increasing the number of fixed line subscribers from 1 million in 2009/10 to 3.1 million by the end of 2014/15. The number of mobile-telephone subscribers is expected to pick up to 40 million from 6.5 million. Similarly, the number of internet users will increase to 3.7 million from 187,000 by the end of the plan period. In 2013/14, the number of mobile subscribers surged by 19.2 percent and reached 28.3 million from 23.8 million a year ago. Meanwhile, the number of internet subscribers surged by 39.2 percent on annual basis and reached 6.2 million from 4.4 million recorded. (NBE, 2013/14 Annual Report)

1.2 Statement of the Problem

The agency banking services, which operates by integrating transactions with ATMs, Debit cards, Credit cards, Mobile banking, Point-of-Sale (POS) devices and others through third party operators are new to the Ethiopian banking sectors. Agency banking system mainly uses modern technology and it allow customers to access banking services electronically through mobile devices and Bank agents to deposit and withdraw cash, transfer fund, make bill payments, obtain content trading. However, these are not well known in Ethiopia.

As per the researcher's observation on Agency banking services, review of literatures on the issue and preliminary discussions made with staff of E-banking Service Department at different banks that already commence the service, some of the challenges faced in providing the agency banking are poor internet and mobile network connectivity, lack of skilled man

power, absence of suitable legal and regulatory framework are challenges to provide and enhance the service. Moreover, the cost that involved in servicing low-value accounts, availing physical infrastructure to remote rural areas and cost (in money and time) incurred by customers in remote areas to reach bank branches are among the major concerns (Ndungu, 2014).

The challenges enumerated above and other challenges are serious to pose further scientific investigations to give appropriate fix by the concerned. Thus this study is designed to assess benefits and challenges of agency banking service with special emphasis to commercial banks that already commenced the service; Dashen Bank S.C., United Bank S.C., Lion International Bank S.C. and Cooperative Bank of Oromia S.C. The agency banking as a strategy to increase revenue from additional investments, to increase customer base and market share, to improve indirect branch productivity by reducing congestion in the branches and to offer low cost solutions in areas with potentially less volume and number of transactions. It is further intended to enhance easy financial accessibility both for the unbanked and the banked population (Ivatury and Mars, 2008). It is said that low income earners often feel more comfortable in banking at their neighbours than walking into bank branches.

1.3 Research Questions

To gain a comprehensive understanding of the phenomenon under investigation, the following questions need to be addressed.

1. What are the drivers/benefits of agency banking service adoption in Ethiopian banking industry?
2. What are the barriers to agency banking service adoption in Ethiopia?

1.4 Objectives of the Study

The objectives of the study are:

1. Identify perceived benefits/drivers that can be obtained from the adoption of Agency Banking services in Ethiopia.
2. Describe barriers/challenges that inhibit banking industries in Ethiopia to adopt Agency Banking innovations.

1.5 Significance of the Study

This study is important to the government in that it will shed light on areas to be improved in an effort to provide financial inclusion to the unbanked low income and rural population. It will also benefit commercial banks by bringing factors that they deem to be critical to the acquisition of customers to their attention and have a clear understanding of factors that would be important in embracing and adopting agency banking as a product. Students and researchers may also use the research findings as a reference in their subsequent effort to search for answers to their queries, thus it will add to the existing body of knowledge.

1.6 Scope and Delimitation of the Study

The researcher is intended to describe factors in adopting agent banking innovation among commercial banks in Ethiopia through questionnaires to be filled by sample branch managers and experts of the sampled four banks (Dashen Bank S.C, United Bank S.C, Lion International Bank and Cooperative Bank of Oromia)) that commence Agency Banking Services. Thus, the study is limited to the Bank management that serve as agents and recruiters, but it would have been more productive if the study includes customers/subscribers and agents of the service.

1.7 Organization of the Study

This study is organized in five chapters. The first chapter deals with introduction. The second chapter focuses on the literature review followed by the third chapter that deals with research methodology. The research results and discussion is presented in chapter four. The last chapter presents the conclusion and recommendation part of the study.

Chapter Two: Literature Review

2.1 Definition of Terms

2.1.1 Agency

Agency addresses the relationship where in a contract ‘one or more persons (the principal(s)) engage another person, the agent, to perform some service on their behalf by delegating authority to make some decisions to the agent (Jensen and Meckling,1976). Agency is a contract where by a person, the agent, agrees with another person (the principal) to represent him and perform on his behalf one or several legally binding acts (Ethiopian Civil Code art, 2199).

As per the National Bank of Ethiopia Directive (FIS-01-2012) issued to regulate the Mobile and Agent Banking services “**agent**” means a person engaged in a commercial or business activity and has been contracted by a financial institution to provide the services of the financial institution on its behalf in a manner specified in these directives; and “**agent banking**” means the conduct of banking business on behalf of a financial institution through an agent using various service delivery channels as permitted under these directives (NBE Directive, FIS-01-2012).

2.1.2 Mobile Banking

It means performing banking activities which primarily consists of opening and maintaining mobile/regular accounts and accepting deposits; furthermore, it includes performing fund transfer or cash-in and cash-out services using mobile devices (NBE Directive, FIS-01-2012).

2.1.3 Agency Banking

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

2.1.4 Bank-led Model

In the basic version of the bank-led model, a licensed financial institution (typically a bank) delivers financial services through a retail agent. The financial products and services are developed by banks but distributed through retail agents (Lyman, Ivatury and Staschen, 2006). The bank led model composed of three main entities; the bank, the retail agents, and the customer. In this model, the bank must carry out an audit of its agents to ensure that the agents operate within the generally accepted rules and regulations in order to safeguard the interests of the bank, agents and the customers (Sunguti, 2013).

2.1.5 Nonbank-led Model

The non-bank-led model is a model where a bank does not come into the picture (except possibly as a safe-keeper of surplus funds) and the non-bank performs all the functions. In this model, therefore, customers neither deal with the bank nor maintain a bank account. Instead customers deal with a non-bank firm, either a mobile network operator or prepaid card issuer and retail agents serve as point of customer contact (Sunguti, 2013).

2.1.6 Financial Inclusion

Financial inclusion is provision of a broad range of high quality financial products, such as savings, insurance, credit, pensions, and payment, which are relevant, appropriate and affordable for the entire adult population, especially those low income segments. Inclusive financial sector is characterized by the level of competition between them, the diversity of financial service providers and the legal and regulatory environments that ensure integrity of the financial sector and access for all (EFInA , 2015).

2.2 Legal Framework on Agency Banking in Ethiopia

In late 2012, National Bank of Ethiopia has issued a directive cited as “Regulation of Mobile and Agent Banking Services under Directives No. FIS/01/2012” with effective date of January 1, 2013. This directive has clarified and framed the business modality of the agent and mobile banking services in Ethiopia. Only financial institutions that are licensed by the National Bank of Ethiopia are allowed to engage in the mobile banking services as we follow a bank led model in the financial services. Mobile and agency banking service shall be carried

out only within Ethiopian geographic boundary and only with Ethiopian Birr. Banks can deliver mobile banking through their agents as specified in the directives.

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

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

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

2.3 Innovation Adoption

Today the world is witnessing profound transformations and acceleration as a result of the tremendous development of information technology and steady growth of volume of information that has led to the emergence of new types of activities and transactions in

various fields (Joseph N, 2005). The banking sector has been one of the first area that adopted different electronic applications to improve performance and gain a competitive advantage strategy. In light of the extensive use of information and communication technologies, the financial services industry and banking has provided new systems and applications that maximizes the use of modern technology and are now available (Francis, 2014). According to Rogers (1983), the rate of adoption is defined as the relative speed with which members of a social system adopt an innovation. Therefore, it has become necessary for banks to change the concept of traditional banking service to because of the rapid growth of electronic banking services and ever increasing competition among banks to raise efficiency, reduce costs and attract more customers (Francis, 2014).

2.4 Theoretical 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 framework (TOE) and Technology Acceptance Model (TAM) are the major ones. The researcher is also intending to use TOE and TAM to describe the barriers and drivers of adopting agency banking innovation in Ethiopian banking industry.

2.4.1 Technology-Organization-Environment (TOE) Framework

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

The *technological factor* refers to adopter's perception of E-banking attributes. Typical characteristics of technology considered in technology adoption studies are based on the assumption of Roger's diffusion of innovation (Rogers 2003) that include relative advantages (perceived benefits), and relative disadvantages (perceived risks). While the *organizational factor* refers to the organization's characteristics that influence its ability to adopt and use of

e-banking system. The environmental factor refers to the external environment in which an organization operates and its condition for supporting the development of e-banking services. Various factors have been identified from the literature for each context with reference to the frameworks developed by Tornatzky and Fleischer (1990) but only those factors that are considered relevant for e-banking adoption are included in the following framework (Ayana, 2012). No new constructs have been added to the framework but little theoretical synthesis has occurred.

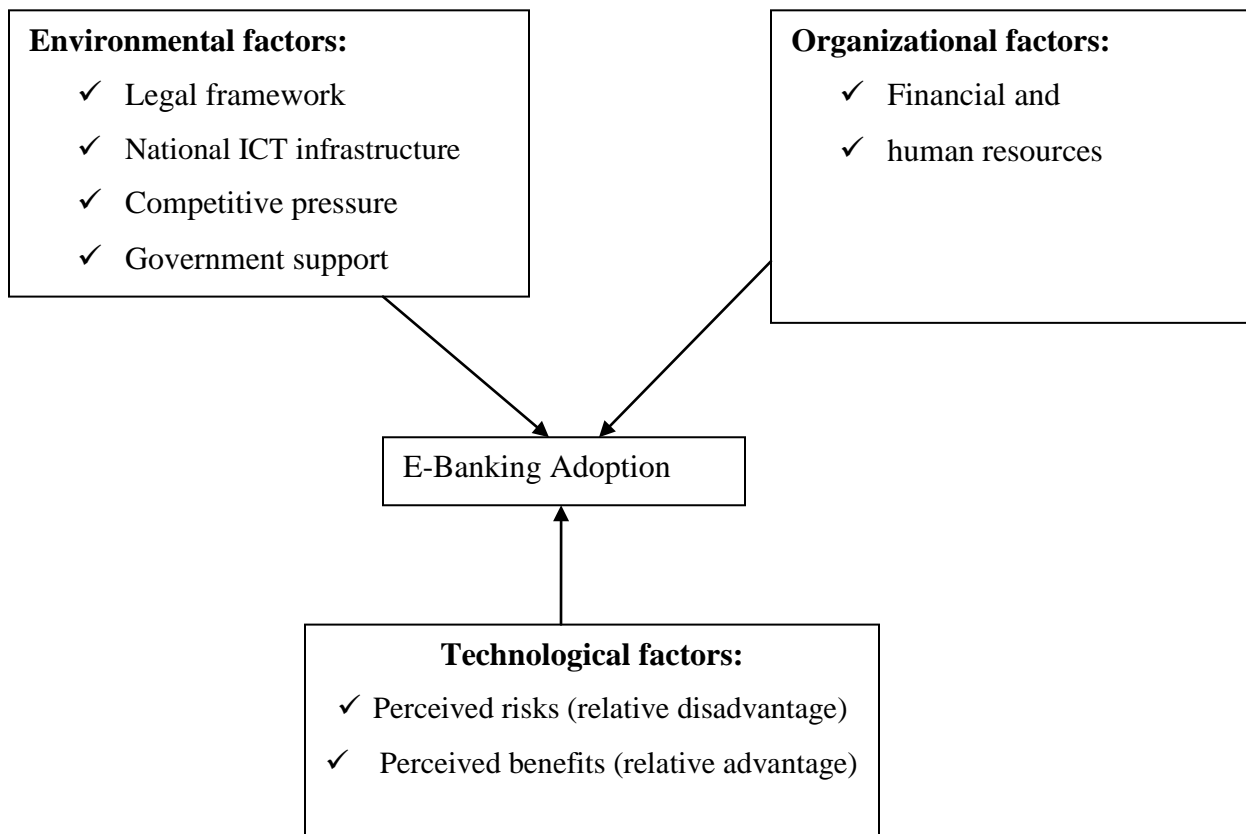


Figure1. Technology-Organization-Environment (TOE) framework

Source: Ayana (2012)

2.4.1.1 Technological Factors

Different researchers described technological factors differently Hart O. et al, (2012) for example explained that adoption depends on the pool of technologies both inside and outside the firm as well as the application’s perceived relative advantage (gains), complexity (learning

curve), compatibility (both technical and organizational), observability (visibility/imagination), trialability (pilot test/experimentation). Salwani (2009) also explained technology competence covering the existing technology infrastructure and skills that enables to utilize the technology. Tornatzky and Flieischer (1990) considered characteristics of technologies and availability while Kvin Z. et al. (2004) described technological context as both external and internal technologies relevant to a firm, which includes existing technologies inside the firm as well as in the market. Perceived benefits and perceived risks are considered suitable from the technological factors as presented by Ayana (2012) for this study to avoid overlap between organizational and technology contexts.

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 organisational 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 fulfilment 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 e-banking services is the customers' resistance to use the services that significantly hinder the growth of e-banking (Laforet 2005 and Zhao *et al.* 2008). Issue related to security is also a concern when dealing with technologies related to online transactions such as e-banking (Chang 2007 & Rogers 2003). Therefore, the perception of the risks regarding the e-banking is expected to influence its adoption (Ayana, 2012).

2.4.1.2 Organizational Factors

Organizational factor captures firm's business scope, organizational culture, top management support, complexity of organizational structure measured in terms of centralization, vertical differentiation, and formalization, the quality of human resource, and size related issues such as specialization and internal slack resources (Jeyaraj A. Et al, 2006). Iacovou (1995) and Grover (1993) also argued that organizations influenced by a number of factors, like firm size, top management support and financial and human resources in their preference to adopt

technological innovation. As per Kvin Z. et al. (2004) and Tornatzky and Fleisher (1990) it is defined in terms of several descriptive measures: firm size and scope; the formalization, centralization and complexity of its managerial structure; the quality of its human resources and the amount of internally available slack resources. Accordingly, the researcher considered the financial and human resources as the organizational factor in the framework for the study as discussed below.

Financial and Human Resources: - Financial resources are an important factor in facilitating innovation adoption for any organization and they are often correlated with the firm size (Iacovou 1995 and Kuan 2001). The availability of financial resources and costs related with adoption of innovations has paramount importance and deserves consideration. Human resources that enable banks to obtain the required technical and managerial skills and expertise to adopt and implement technological innovations like that of agency banking system are also found important to consider as factors without disregarding the customer sides.

2.4.1.3 Environmental factors.

Environmental factors mainly relates to different facilitating and inhibiting factors in areas of operations (Al-Qirim, 2006). The arena in which a firm conduct its business in adopting technological innovations; its industry, competitors, access to resources supplied by other externals and dealings with government are claimed to be covered under environmental contexts (Kvin Z. et al. 2004). Legal frameworks, the National ICT infrastructure, Competitive pressure and Government supports are amongst significant factors to be considered in the study (Ayana, 2012) as described here under.

Legal Frameworks: - The existence and maturity of legal frameworks on the e-commerce within a country to influence the diffusion of online transactions including electronic banking as indicated in various studies (Tan & Wu, 2002 and Martinson, 2001).

National ICT Infrastructure: - National ICT infrastructure is a major factor that supports the adoption of e-banking system as the case for other initiatives. Without an adequate development and quality of a national ICT infrastructure, e-banking adoption and use cannot

do well (Efendioghu 2004 & Scupola 2003).

Competitive pressure: - Competitive pressure can strongly influence any bank to develop and adopt e-banking initiatives and it may affect the bank's perception towards innovation (Quaddus & Hofmeyer 2007). Intense competition stimulates the adoption of innovation (Mansfield et al. 1977).

Government Support:-Government can either directly or indirectly affect the adoption of E-banking in terms of creating a favourable environment and momentum for banking institutions and their customers so that the services can be diffused with the community (Kuan 2001 & Iacovou 1995)

2.4.2 Technology Acceptance Model (TAM)

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

Perceived Ease of Use refers to the level of degree where an individual believes that using a particular system would be free of physical and mental effort. It measures the prospective user's assessment of the mental efforts required of the use of the target applications (Davis, 1993). Opia (2008) claimed that innovations with perceived complexities of user interface and steep learning curve, which thought risky to adopt. Empirical findings confirm the positive relationships between attitude towards use and ease of use (Venkatesh & Davis, 2000) and show that PEOU is a proven key determinant of users' intention to accept IT (Venkatesh, 2000). Thus, ease of use is a powerful determinant of intention to accept innovation(s) (Hart O. et al, 2012).

Perceived Usefulness on the other hand is related to users' perception of the degree to which using a system will be beneficial (Alsabbagh & Molla, 2004). It provides diagnostic lenses into how actual use and intention to use or attitude towards using are influenced. The near-

term results are synonymous with postulates of PU; and the long-term consequences refer to consequential results in one's career or social image, which reflects Rogers' (1995) important motivation for adoption of innovation. The attainment of perceived near-term usefulness paves way for long-term usefulness (Hart O. et al, 2012). It relates with the cost and time saving and it considered from the perspective of improving service delivery and creating more access to users. Decomposing PU as (Triandis, 1980) and (Chau, 1996) did explicitly provides more specific lenses into understanding user perception of IT's usefulness.

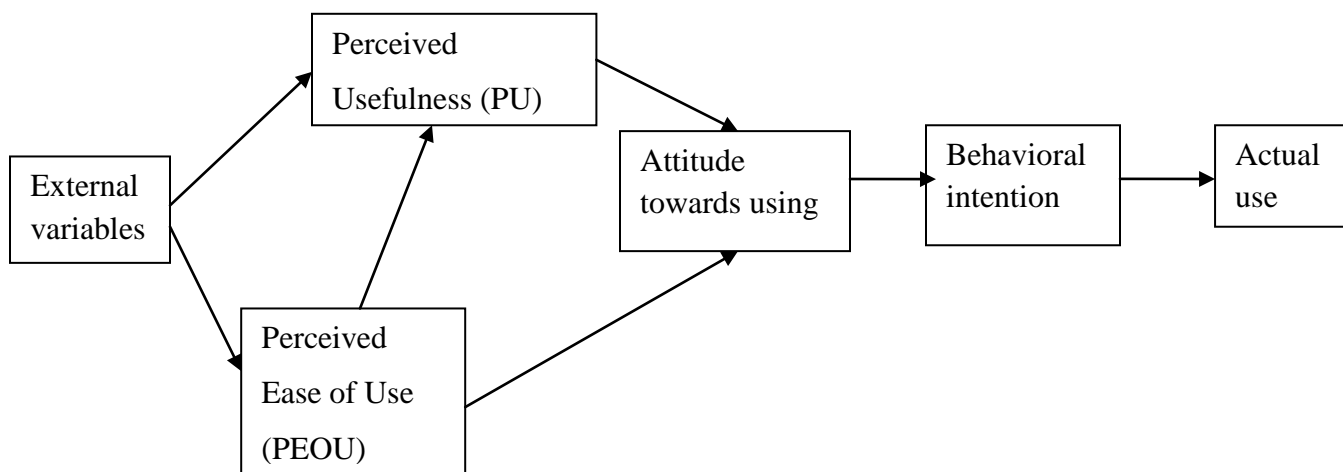


Figure -2. Technology Acceptance Model (TAM)

Source: Davis & Venkatesh (1996)

2.4.3 Integration of TAM and TOE Frameworks

The Technology Acceptance Model (TAM) of (Davis, 1989), is adapted from the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1975) where the TAM states that a users' adoption of innovation is determined by that users' intention to use the system, which in turn is affected by the users' beliefs about the system. Consequently, this study will employ the TAM theory by investigating how customers perceived adoption of agency banking. However, TAM is not sufficient model to deal adoption of innovation hence there will be a need to adopt other theories that include other factors. The perceived ease of use and perceived usefulness may not fully explain behavioral intentions towards the use of agency banking; necessitate a search for supplementary factors that can better predict the adoption of agency banking (Hanna & Muturi, 2014)

As per the explanation of Hart O. et al, (2012) upgrading constructs of original TAM and T-O-E models to a more comprehensive level promote and facilitate improved explanatory and predictive lenses of IT adoptions.

Thus, the researcher considered the TOE framework to summarize possible key factors affecting agency banking adoption as shown in Figure-1 above.

- ✓ the technological factor refers to the adopter's perception of agency banking attributes. Typical characteristics considered in technology adoption studies are based on the assumption of Roger's diffusion of innovation (Rogers, 2003), which include relative advantages (perceived benefits), and relative disadvantages (perceived risks).
- ✓ the organizational factor refers to the organization's characteristics that influence its ability to adopt and use of agency banking innovation.
- ✓ the environmental factor refers to the external environment in which an organization operates and conditions that support the development of the agency banking services.

TAM was developed to explain and predict particular IT system usages and it has been used by many researchers to study the adoption and diffusion of various IT technologies (Ayana, 2012). For this study, the researcher used two basic factors of TAM, i.e. perceived ease of use and perceived usefulness to describe the perception of users in adoption of agency banking in Ethiopia. Various factors have been identified from literatures but only those considered relevant to the agency banking adoption are included in the context of each framework like time saving, cost saving and other benefits in connection with the PEU and some other lists of items in connection with minimizing effort to adopt Agency banking system. Thus, the researcher opted to use the following integrated frameworks.

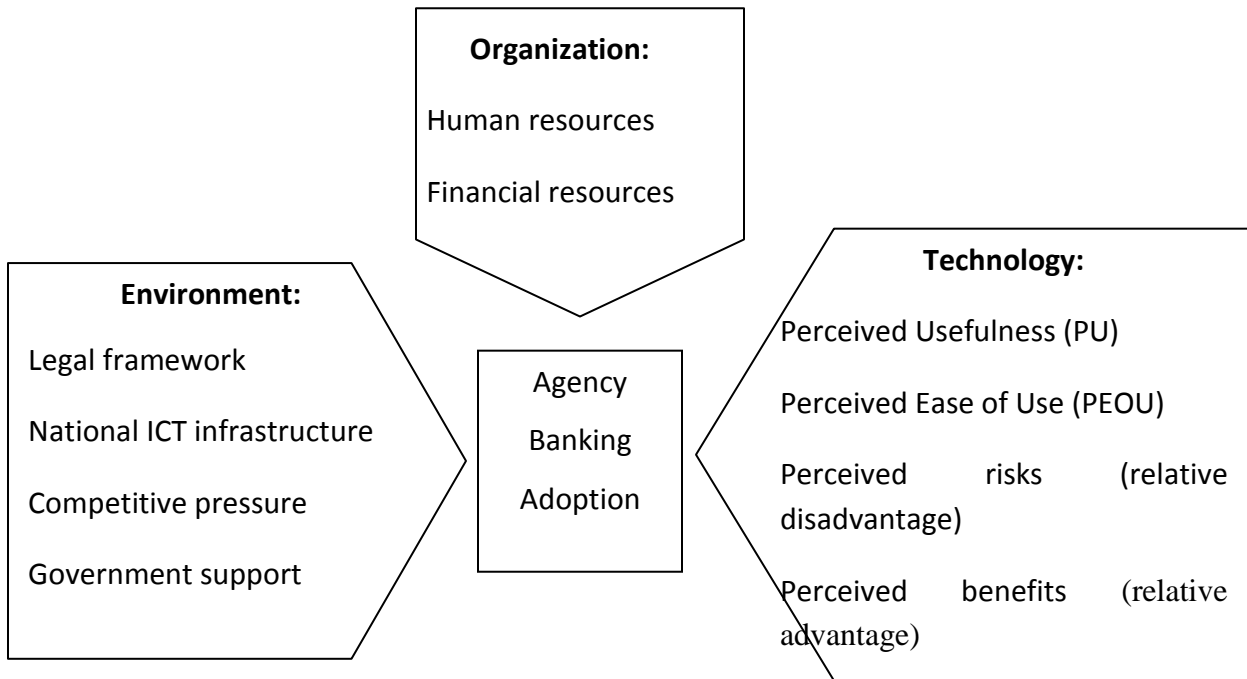


Figure 3. Integrated TAM and TOE Framework

2.5 Empirical Studies Related with Agency Banking Adoption

Some related studies were conducted by different researchers in different parts of the world but the researcher could not find one that conducted on Agency Banking innovation in Ethiopia. But different studies have been conducted on the related e-banking services. Specifically, (Wondwossen and Tsegai, 2005) (Gardachew, 2010), (Ayana, 2012) have conducted researches on the challenges and opportunities of E-banking in Ethiopia. The aims of their study were to analyze the status of e-banking in Ethiopia and investigate challenges and opportunities in implementation of same. Accordingly, they have spotted low level of internet penetration, poorly developed telecommunication infrastructure, lack of infrastructure for telecommunications, lack of suitable legal and regulatory framework for e-commerce and e-payment, inadequate banking system, political instabilities, high rates of illiteracy, high cost of internet, absence of financial institutions networks that link different banks and frequent power interruptions among the challenges.

Despite much international attention and enthusiasm from many development organizations and private businesses, agency banking does not provide a fit-for-all solution of financial

inclusion (Ivatury & Pickens, 2008). Admittedly, the development of any agency banking system takes quite longer time and preparation as it implies analyzing and taking action regarding the business case of each stakeholder, the customer value proposition, and the local legal and regulatory environment (Sunguti, 2013).

According to the Consultative Group to Assist the Poor (CGAP) Technology Program (2007) in the paper; banking the unbanked that describe different approaches pioneers in Latin America have taken in establishing and managing network of banking agents and the benefits to the different actors involved, it was observed that banking agents increase customer convenience, productivity and efficiency, expands customer base and reduces upfront cost by leveraging on existing infrastructures. The study also observed that the cost of establishing and operating one branch is equal to forty banking agents.

Brazil has the highest banking agent network in the world with more than 113,000 agents in the year 2009 out of which close to 40,000 offers a broad range of banking services such as cash-in, cash-out, bill payments, account opening and loan application according to CGAP (2009). The study concluded that the growing interest in agency banking was mainly as a result of reduced costs.

As per the literatures reviewed, the major reason for the adoption of agency banking in many countries relates with the effort to reach the unbanked at minimal cost. The unbanked can simply be described as those individuals who have no any form of account with a bank. As defined by Anderson (2007) the unbanked are diverse group of individuals who remain outside the banking mainstream for different reasons. Ladipo (2008) also revealed a survey carried out by Enhanced Financial Innovation & Access (EFInA) that cuts across all the states of Nigeria over a five year period on national integrated survey of sampled households, which is 74% i.e. equivalent to 64 million adult population in the country that have never been banked. The results of the EFInA access to the financial service in Nigeria 2012 showed that 34.9 million or 39.7% of the adult population were financially excluded www.efina.org.ng.

2.6 Research Gap

In different parts of the world various research studies have been conducted on agency banking services. However, none of these studies focused on factors affecting the adoption of agency banking services in Ethiopian banking context. Different frameworks and theories are also used in different studies like Diffusion of Innovation theory (DOI) by (Nidungu, 2014I), (Gichuki E., 2013)

Different research have also been conducted in the area of E-Banking, Mobile Banking and Internet Banking in Ethiopian Banking, like that of (Ayana, 2012), (Wondwossen and Tsegai,2005), (Gardachew,2010) this research study, however, will shed light on factors affecting the adoption Agency banking in Ethiopia to fill the research gap in this regard. This study is, therefore, intending to fill the gap by describing the challenges and benefits of Ethiopian commercial banks in adopting agency banking services.

Chapter Three: Research Design and Methodology

This chapter explains the detail methodology, showing the research design that discusses research purpose, research approaches, research strategy, data collection and data analysis method.

3.1 Research Design

This study adopted descriptive survey design aimed to describe factors affecting adoption of agency banking innovation amongst commercial banks in Ethiopia. The design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample. Its purpose is to generalize from a sample to a population so that inferences can be made and it is also economical and rapid turnaround in data collection (Creswell, 2003).

Descriptive surveys are designed to measure the characteristics of a particular population, either at a fixed point in time, or comparatively over time (Gay, 2004). The design was considered appropriate for this study because according to Kothari (2003) survey was concerned with describing, recording, analyzing, and reporting conditions that exist or existed. Gay (2004) argues that survey method was widely used to obtain data useful in evaluating present practices and in providing basis for decisions. The main advantage of survey is its ability to accommodate large sample size at relatively low cost, ease of administration and ability to tap into factors that are not directly observable (Hair et al., 2006). In order to achieve the objective of this study and answer the research questions the researcher adopted a quantitative research approach to describe the factors affecting the adoption of Agency Banking innovation in Ethiopian banking industry.

3.2 Data Collection

The study incorporated primary data. The primary data is collected through questionnaires with open and close ended questions. The close ended questions are used Likert rating scale of 1 to 5 where; Strongly Agree (SA) = 5, Agree (A) = 4, Neutral (N) = 3, Disagree (D) = 2 and Strongly Disagree (SD) = 1. The use of Likert scale is to make easier for respondents to answer question in a simple way. Section 1 of the questionnaire consists of general

information about the banks and the respondents, while Section 2 covered factors influencing the adoption of agency banking that further divided into two parts; factors related with barriers and drivers.

According to the National Bank of Ethiopia 2013/14 annual report, there are nineteen commercial banks operating in Ethiopia, which comprises three state owned and sixteen private commercial banks which is the population of this research. However, only four banks commenced the delivery of the Agency Banking services. Accordingly, the researcher considered all of these four banks for this study applying judgmental or purposive sampling. A questionnaire is floated to eighty professional staff of Dashen Bank S.C, Lion International Bank S.C., Cooperative Bank of Oromia S.C. and United Bank S.C selected from Head Offices and branches that involve in the delivery of the agency banking services. The respondents are considered as they are deemed to be knowledgeable in due course of implementing the Agency Banking system in their line of work and could provide important perspectives on its adoption as they are involved in implementation of the project. The survey is to be used through distributing self-administered questionnaires.

Samples are chosen to represent the relevant attributes of the population. The researcher also notes the caution by Graziano and Raulin (1997) where the samples are not perfect representative of the population from which they are drawn, therefore the researcher unlikely to be able to generalize the conclusions to the entire population.

3.3 Data Analysis

Descriptive statistics is used to analyze the research data. Descriptive statistics describe the main features of a collection of data quantitatively using frequency tables, percentages, arithmetic mean, and standard deviation using Statistical Package for Social Scientists (SPSS) (Creswell, 2003).

Chapter Four: Data Analysis and Interpretation

4.1 Introduction

This chapter contains the findings and analysis of the research study based on interpretation of the data collected. The researcher distributed a total of 80 questionnaires (20 to each bank) to four purposely sampled commercial bank staff members; Dashen Bank, United Bank, Lion International Bank and Cooperative Bank of Oromia who have commenced agency banking services in Ethiopia. Out of the total 80 questionnaires, 71 useable questionnaires were obtained to enable a meaningful analysis of the data with 89% response rate. Statistical Package for the Social Sciences (SPSS) software is used to analyze the research findings. SPSS fit with quantitative approach and survey strategy were adopted in this research as it has many features that can provide appropriate outcome that lead to achieve the research purposes.

4.2 Demographic Information of the Respondents

The respondents of the survey questionnaire have different personal information. The demographic profile of respondents participated in the study are shown in the table 4.1 below.

Table 4.1, Respondents' Demographic profile

Variable	Classification of variables	Frequency	Percent
Employer	Dashen Bank	20	28.2
	United Bank	16	22.5
	Lion Int'l Bank	17	23.9
	Co Bank of Oromia	18	25.4
	Total	71	100.0
Gender	Male	58	81.7
	Female	13	18.3
	Total	71	100.0

Age group	20 - 30	35	49.3
	31- 40	30	42.3
	41- 50	5	7.0
	51- 60	1	1.4
	Total	71	100.0
Educational Level	Diploma	2	2.8
	First degree	63	88.7
	Masters degree	6	8.5
	Total	71	100.0

As indicated in the above table, male participants took the lion share in this study which is about 82% of the total respondents. With respect to classification of respondents by age, the highest percentage of participants are the youngsters (20-30 years old) that form about 49% of the total respondents followed by those with the age group of 30-40 years old which took about 42%. About 89% of the study participants are first degree holder.

The following sections discuss the barriers and drivers to the adoption of Agency Banking systems in Ethiopia. These barriers and drivers are identified based on the framework that developed based on the TAM and TOE framework.

4.3 Barriers of Adopting Agency Banking System in Ethiopia

So many reasons could be sited that challenge implementation of the Agency banking system. The Ethiopian banking industry is a bit late to adopt the agency banking system since its adoption in the rest of the world in general and its neighbours in particular. Wondwossen & Tsegai (2005) cited lack of appropriate infrastructure for e-payment, lack of internet facilities with customer and learning how to interact with technological products as challenges. Different factors that can affect adoption of agency banking in the country regarding the technological factors, organizational factors and environmental factors were analyzed as presented here below.

4.3.1 Technological Factors

The issues raised herein under the technological factors were relative disadvantages (perceived risk) that hinder banking industries from the adoption of the new technological innovations. One of the basic barrier a firm faces, while adopting technological innovations is the perceived risks. For example the study of Sohail and Shanmugham (2003) suggests that one of the barriers in the adoption of electronic banking is fear of security risks.

Moreover, all of the respondents participated in this study was asked whether security issue is raised with the use of technological facility in the banking industries as a concern to hinder banks from the use of technological facilities and the survey result is shown on table 4.2, as follows:

Table 4.2, Technological factors

	Fear of risk to use Agency Banking	Lack of confidence with the security aspects	Security risk affect users decision to use the system	Customers do not trust the technology provided by the banks	Lack of trust	Technological factors (Perceived risk)
N Valid	71	71	71	71	71	71
Missing	0	0	0	0	0	0
<u>Mean</u>	<u>3.63</u>	<u>3.86</u>	<u>3.61</u>	<u>3.01</u>	<u>3.68</u>	<u>3.56</u>
Std. Deviation	1.02	.89	1.04	1.13	.97	.73

Note: N-Number of responses; Response measurements, 5-Strongly agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly disagree.

Responses captured in the above table shows that, the respondents asked on the Technological factors (Perceived risk) whether the customers of banks fear risk to use Agency Banking system, Lack of confidence with the security aspects considered as barrier for the adoption of Agency Banking, security risk affect users decision to use the system, or whether customers do not trust the technology provided by the banks and Lack of trust is considered as barriers for the adoption of Agency Banking in Ethiopia centres towards the agreement in the Likert scale as the average response of the respondents' found to be 3.56.

The descriptive statistics result gave an average result of 3.56 in the Likert scale where respondents were agreed on the issue, therefore fear of risk is found to be one of the possible factors that hinder adoption of agency banking system in the country. This result was consistent with the findings of Ayana (2012), Ghazi and Khalid (2012); Khalfan *et al* (2006) in which all indicated that, technological barriers, such as security risk as hindrance factor for the adoption of e-banking.

Respondents, however, found indifferent whether the customers do not trust the technology provided by the banks or not as the mean resulted in 3.01.

4.3.2 Organizational Factors

Organizational factors mainly relates with availability of financial and skilled human resources in implementing a system (Ayana, 2012). In this study costs related with technical and managerial skills required to implement agency banking system were considered as organizational factors.

As indicated in the table 4.3 below the respondents did not agree that using Agency Banking system increases cost to do banking task as the mean value is found to be 2.06. The average respondents also disagreed that the use of mobile to get banking service is relatively expensive for customers as the Mean value is 2.08; i.e. doing transaction through agents are not costly both for the bank as well as the customers.

Moreover, for the question requested whether the customers of the bank were not familiar with the Agency Banking service provided using mobile phone and for the lack of technical and managerial skills on the use technological innovation, the respondents on average replied positively agreeing on the existence of these challenges as the average result in the Likert scale is about 4.0. On the other hand, the respondents are indifferent on whether the lack of skills to implement Agency Banking existed or not. It is in general revealed that unfamiliarity with the banking service provided by agents, lack of technical and managerial skills on the use of technological innovation are considered as barriers for the adoption of the agency banking system.

Table 4.3. Organizational Factors

	AB increases cost to do banking task	Using Mobile to get banking service is expensive for customers	Customers are not familiar with the AB	Lack of technical and managerial skills	Lack of skills to implement AB	Organizational factors
N Valid	71	71	70	71	71	70
Missing	0	0	1	0	0	1
Mean	2.06	2.08	4.09	3.69	3.27	3.04
Std. Deviation	1.15	1.27	1.02	1.09	1.08	.68

Note: N-Number of responses; Response measurements, 5-strongly agree, 4-Agree, 3-Neutral, 2-Disagree and 1-strongly disagree

4.3.3 Environmental Factors

As indicated by Ayana (2012) another factor which can affect the adoption of technological innovation in banking industry is an external environment.

Table 4.4. Environmental Factors

	Difficulty due to low internet access	Lack of sufficient government support affect customers' willingness	Lack of ICT infrastructure	MB affected with network problem	Lack of legal framework	Cross-country legal and regulatory differences	Lack of competition among banks	Customers may not be willing to accept AB
N Valid	71	71	69	71	71	70	71	69
Missing	0	0	2	0	0	1	0	2
Mean	4.30	4.13	4.25	4.10	3.80	3.79	3.66	3.74
Std. Deviation	0.78	0.86	0.74	0.78	0.97	0.98	1.15	1.01

Note: N-Number of responses; Response measurements, 5-strongly agree, 4-Agree, 3-Neutral, 2-Disagree and 1-strongly disagree

As portrayed in the Table 4.4 above respondents agree that delivering Agency Banking by using internet is difficult due to low internet access in Ethiopia(Mean= 4.30), Lack of available ICT infrastructure is also agreed by respondents (Mean = 4.25) as a factor that impact delivering agency banking service. Mobile banking services may not perform well because of network

problems (Mean=4.1) as infrastructural back bones to deliver the agency banking service. It is also in line with the finding of Wondwossen and Tsegai (2005) where lack of sufficient telecommunication infrastructure is one of the basic challenges in the development of e-payment in Ethiopia.

Moreover, the average responses of the participants agreed that lack of sufficient government support will affect customers' willingness to use technological innovation (mean=4.13). Lack of legal frameworks that enforce banking industries to adopt technological innovation (Mean= 3.8) and cross-country legal and regulatory differences will have impact on the adoption of new technological innovation in the banking sector like Agency Banking (Mean=3.79) as per the response of the sampled participants.

Lack of competition among local banks and foreign banks are agreed to be one of the factor that would impact the adoption of agency banking (Mean=3.66). It is also consented by the respondents that customers may not be willing to accept Agency Banking service (Mean 3.74) which is considered as one of the perceived risk to the adoption of the agency banking.

4.4 Perceived Benefits/Drivers of Adopting Agency Banking Service in Ethiopian Banking Industry

The adoption of agency banking covers both direct and indirect benefits for the banking industries. Direct benefits include savings on operational cost, improved organizational functionality, productivity gain, improved efficiency, increased profitability and saving of time. Indirect benefits include the opportunity lost or intangible benefits such as improved customers' satisfaction through improved services, improved banking experience and fulfilment of their changing needs and lifestyle (Lu 2005; Kuan 2001 & Iacovou 1995). Perceived benefits considered in this study classified as Perceived Ease of Use (PEoU) and Perceived Usefulness (PU) in adopting Agency banking system

4.4.1 Perceived Ease of Use

Adopting e-banking/agency banking services reduces the workload of the bank staff and provides convenience not only to bank but also to its customers (Ayana, 2012). The data obtained from the survey in this study are shown in table 4.8 as follows.

Table 4.5 Perceived Ease of Use

		AB customers can simply use banking service by using cell phone	From the bank perspective it is easy to use AB to accomplish banking tasks	AB simplifies the activity of workers.	Guidelines are provided on the use of AB	Staff Training is provided to introduce AB	AB helps to perform banking task in a simple way
N	Valid	71	71	71	71	71	71
	Missing	0	0	0	0	0	0
	Mean	4.69	4.62	4.38	4.34	4.10	4.38
	Std. Deviation	0.55	0.57	0.70	0.67	0.86	0.64

Note: N-Number of responses; Response measurements, 5 - Strongly agree, 4 -Agree, 3 - Neutral, 2 - Disagree and 1 - Strongly disagree

Respondents were asked whether they ‘Strongly agreed, Agreed, Neutral, Disagreed or Strongly disagreed’ based on the seven questions shown in the table 4.8 above to confirm the ease of use as a benefit of adopting agency banking system, Accordingly, the sampled respondents agreed with the idea that perceived ease of use in simplifying banking activity both from the bank and employees delivering the services as a good factor for the ability to adopt agency banking system with the Mean value of 4.38. The findings confirm respondents’ strong agreements where Agency Banking makes easier to do banking activities (Mean =4.69) and, customers can simply use banking service by using cell phone in the case of Agency Banking (Mean 4.62).

4.4.2 Perceived Usefulness

Perceived Usefulness is a good factor to measure the success of e-banking adoption (Ayana, 2012). Hoppe et al. (2001) argued that perceived relative advantage has a positive influence towards the adoption of Internet Banking and it is compatible with their values to be adopted by users. Presented here below perceived usefulness in agency banking system with respect to time saving, cost saving and other general categories.

4.4.2.1 Time Saving

Using agency banking system to get banking service is fast and available 24 hours a day and 7 days a week. This were in line with the study of Karjaluoto et al. (2002), which identifies time

saving as a major benefit of adopting online banking system (Ayana, 2012). Respondents were asked whether they are Strongly agreed(5), Agreed(4), Neutral(3), Disagreed(2) or Strongly disagreed(1) regarding time saving as driver for the adoption of agency banking system and the result of survey were captured in the following table.

Table 4.6 Perceived Usefulness (Time Saving)

	AB enables users to do banking activities more quickly and easily	AB is convenient in terms of time saving	AB is convenient, in terms of 7 days and 24 hour services	AB is more accessible to users than visiting a bank
N Valid	71	71	71	71
Missing	0	0	0	0
Mean	4.39	4.52	4.37	4.42
Std. Deviation	0.75	0.67	0.78	0.73

Note: N-Number of responses; Response measurements, 5- Strongly agree, 4-Agree, 3 - Neutral, 2 - Disagree and 1- Strongly disagree

Out of the above four average responses of the participants as captured in the table 4.9 above three of them agreed on issues related with getting the banking service quickly, easily and available beyond the working time of the bank with the mean value of 4.39,4.37 and 4.42. The respondents also strongly agreed that the agency banking service is convenient in terms of time saving(Mean 4.52). These result implies, that using agency banking system helps to perform banking activities within a short period of time. Customers can simply check their bank account balance, transfer funds and pay their bills using their mobiles.

4.4.2.2 Cost Saving

Cost minimization is important both from the bank and the customer perspectives. Banks can save significant costs with the adoption of agency banking system by enabling the service delivery through the agents and the technological infrastructures by cutting the branch administrative costs (Ayana, 2012). Customers can get banking service at lower costs compared with traditional banking service in the bank premises as it is cheaper to make transaction over

electronic fund transfers and neighbouring bank agents. The survey result regarding cost factor is shown on in the table 4.10 below.

Table 4.7 Perceived Usefulness (Cost saving)

	The transactions in AB are at a lower price, or at no cost	AB improve customer service	AB improve speed and efficiency
N Valid	71	71	71
Missing	0	0	0
Mean	3.63	4.37	4.38
Std. Deviation	1.26	0.66	0.68

Note: N-Number of responses; Response measurements, 5 - Strongly agree, 4 - Agree, 3 - Neutral, 2 - Disagree and 1- Strongly disagree

As indicated in the table 4.10 above the average responses gathered in the survey confirms agreement of the respondents towards the lower transaction costs (Mean 3.63) and in improving customer services in delivering banking services through agency banking system with the mean value of 4.37 and 4.38.

4.4.2.3 Other Benefits

In addition to the perceived usefulness, in terms cost and time saving, there are also different benefits that the banking industry can attain from adoption of agency banking system. Such other benefits covered in the survey are presented here below in the table 4.11.

Table 4.8 Other Benefits of Agency Banking System

	AB reduce number of customers coming to the banking hall	AB increase productivity of the bank	AB increase reliability and accessibility	AB create better relationship among banks and clients	AB used as better information control tools	No time limit to access bank account and information
N Valid	71	70	71	71	71	71
Missing	0	1	0	0	0	0
Mean	4.49	4.53	4.25	4.14	3.83	4.28
Std. Deviation	0.63	0.53	0.73	0.91	0.96	0.85

Note: N-Number of responses; Response measurements, 5-Strongly agree, 4-Agree, 3 - Neutral, 2-Disagree and 1-Strongly disagree

Other benefits of agency banking system identified in this study as captured in the above seven likert scale questions; the respondents strongly agreed that the agency banking reduces the number of customers coming to the bank hall (Mean=4.49) and it increases productivity of the Bank (Mean 4.53). The respondents also agreed that the agency banking increase reliability and accessibility (Mean=4.25), create better relationship between the bank and clients (Mean=4.14), used as better information control tools (Mean 3.83) and it avails no time limit to access bank account and information (Mean = 4.28).

Chapter Five: Summary, Conclusions and Recommendations

5.1 Summary of the Findings

The research project objective was to describe factors that affect the adoption of agency banking system in Ethiopia under the cursory of integrated Technology-Organization-Environment (TOE) framework and Technology Acceptance Model (TAM) the study accordingly described a number of barriers and benefits/drivers in adopting agency banking.

Security risks and lack of trust on the technological innovations used by banking industry are described in the study as technological barriers. Financial cost and human resource are considered in the study as organizational factors. But participants confirm that financial costs were not found as barrier for the adoption of agency banking system in Ethiopian banking industry. But respondents agreed on the lack of technical and managerial skills to implement the agency banking system as barriers for the adoption of agency banking system in Ethiopia. Most barriers in adopting agency banking system conferred in this study come from the external environments like; lack of legal framework that enforce banking industries to adopt such technological innovation, lack of ICT infrastructure including poor network connectivity, absence of competition between local and foreign banks and lack of sufficient government support.

The study also revealed lists of benefits that Ethiopian banks could get from the adoption of agency banking system considered as driving forces for the adoption of the system. The benefits were classified as perceived ease of use (PEOU) and perceived usefulness (PU). PEOU refers to the degree where an individual believes that using a particular system would be free of physical and mental effort. In this regard, perceived ease of use is taken as a major benefit of using agency banking system in reducing the workload of the bank staff and in providing convenience to both the bank and its customers. The other benefits agreed by the respondents of study were users' perception towards using the system, which is found to be beneficial based on its usefulness in terms of time and cost saving among others. Implications related with time and cost savings are among the basic benefits that drive banking industry to adopt such technological innovations. The study has also described other lists of benefits in the adoption of agency banking system in Ethiopian banking industry as agreed by the participants, such as enhancements in customers satisfaction, reduce the number of customers coming to the bank

lobby, increase in productivity of the banks, increase in reliability and accessibility of the banking service, creating good relationship between clients and banks and it also used as a better information control mechanism.

5.2 Conclusion

The study findings revealed that the banking sector in Ethiopia is eager to adopt the agency banking system as an alternative service delivery channel by identifying its main barriers and drivers. The agency banking system presents an opportunity for speedy expansion at lower cost by leveraging on the existing investment of retail agents through implementation of information and communication technology. The study described that the main factors that influence agency banking adoption among commercial banks in Ethiopia are the prospects of cost reduction, availability of the services beyond the banking service time and related customer service enhancements.

However, agency banking system is not well adopted by Ethiopian banking industry due to lack of suitable legal frameworks, low level of ICT infrastructure, lack of customers trust and awareness towards the technology and customers' fear to use the technologies that holds banking industry to adopt the system. Improvements are required to enhance client confidence towards the system. Lack of competitions among banks is also another challenge in adopting the agency banking system in the country.

The prevailing technical and managerial skills available in the Ethiopian banking industry towards adopting the agency banking are found to be limited to influence the technological adoption rate. The study, in this regard, disclosed the benefits of the technological innovation to the banks to drive the adoption of the system. The Perceived Ease of Use, in general, is one of the basic benefits of agency banking system, which enables bank staff to perform banking activities in a simple way. The other driving force to adopt such system is perceived usefulness, where it is used for time saving and cost reduction among others. This and the other benefits identified in the study were considered as major driving force for banks in extending its service effectively and efficiently to cover the required market outreach.

In general, the findings of the study highlight factors influencing the adoption of the agency banking in Ethiopian Banking industry. Barriers identified in this study while adopting the agency banking services may help to cursor the best alternative course of actions to enhance its development. It will also be valuable by increasing awareness and understanding towards the system.

5.3 Recommendations

Agency banking system is new development in Ethiopian Banking industry with significant impact in extending the banking services effectively and efficiently to achieve the required objectives with concerted efforts of all stakeholders. As a result of the above conclusions, the researcher recommends the following points:

- ✓ the central bank should issue suitable legal frameworks to ease the adoption of the agency banking system,
- ✓ government should support banking sector by facilitating development of sufficient ICT infrastructure for the successful implementation of agency banking system,
- ✓ banks should consider technology based competition focusing on, customer expansion, cost reduction, awareness creations, credibility, security, ease of use, and availability in their endeavour and
- ✓ banks should work towards creating awareness of the community and their employees towards the processes and benefits of the agency banking system to exploit the benefits.

5.4 Suggestions for Further Research

This study described the factors affecting agency banking adoption among commercial banks in Ethiopia from the bank perspective. But it did not consider the customers/ agents perspective. Therefore, the researcher would like to recommend further research be made on the area especially to capture the customers' perspectives.

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I. Questionnaire

Dear Sir/Madam

My name is Afework Gugsu, EMBA student in the Department of Management at Addis Ababa University. The aim of this questionnaire is to assess factors affecting the adoption of Agency Banking innovation in Ethiopian Banking industry by identifying *Barriers and Drivers*. The results of the study are anticipated to supply to the understanding of the basic challenges and benefits of adopting agency banking innovation in delivering service to customers in commercial banks of Ethiopia.

I would like to assure you that the information you provide will be used only for the purpose of achieving academic award. Your involvement is regarded as a great input to the quality of the research results. Hence, I believe that you will enlarge your assistance by participating in the study. Your honest and thoughtful response is invaluable.

Thank you for your participation

Best regards,

Afework Gugsu,
EMBA Student at Addis Ababa University
College of Business & Economics
Department of Management

General Instruction

This questionnaire contains two sections and six pages that will be expected to take approximately 15 to 20 minutes to complete. You are kindly requested to respond to the questions based on the instructions under each section. If you have any comments or want to provide further explanations, please use the space provided at the end of the questionnaire.

Section I: Demographic profile of respondents

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

- 1. Gender: Male Female
- 2. Age: 20-30 31-40 41-50 51-60
- 3. Educational level: Diploma holder First degree holder
Masters degree
- 4. Monthly income (in Eth. Birr): 800-1400 1401-2000
2001- 3000 3001-4000 above 4000

Section II: Questionnaires related with barriers and drivers of adopting Agency Banking.

Instruction: Below are lists of statements pertaining to adoption of Agency Banking. 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". Each choice were identified by numbers ranged from 1 to 5.

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

Part one: Questionnaires related with barriers of adopting Agency Banking

The following are some barriers faced, when adopting Agency Banking, please indicate level of your choice.		SA	A	N	D	SD
		5	4	3	2	1
I. Technological factors (Perceived risk)						
1	Customers of our bank fear risk to use Agency Banking	()	()	()	()	()

2	Lack of confidence with the security aspects considered as barrier for the adoption of Agency Banking	()	()	()	()	()
3	In the case of using Agency Banking, security risk affect users decision to use the system	()	()	()	()	()
4	Customers do not trust the technology provided by the banks	()	()	()	()	()
5	Lack of trust is considered as barriers for the adoption of Agency Banking in Ethiopia.	()	()	()	()	()
II. Organizational factors						
6	Using Agency Banking increases cost to do banking task	()	()	()	()	()
7	Relatively using of Mobile to get banking service is expensive for customers	()	()	()	()	()
8	Customers of our bank were not familiar with the Agency Banking service provided using mobile phone	()	()	()	()	()
9	Lack of technical and managerial skills on the use technological innovation.	()	()	()	()	()
10	Lack of skills to implement Agency Banking	()	()	()	()	()
III. Environmental factors						
11	Delivering Agency Banking by using internet is difficult due to low internet access in the Ethiopia	()	()	()	()	()
12	Lack of sufficient government support will affect customers willingness to use technological innovation	()	()	()	()	()
13	Lack of available ICT infrastructure	()	()	()	()	()
14	Mobile banking services may not perform well because of network problems	()	()	()	()	()
15	Lack of legal frameworks that enforce banking industries to adopt technological innovation	()	()	()	()	()
16	Cross-country legal and regulatory differences will have impact on the adoption of new technological innovation in the banking sector like Agency Banking.	()	()	()	()	()

17	Lack of competition among local bank and foreign banks	()	()	()	()	()
18	Customers may not be willing to accept Agency Banking service	()	()	()	()	()

Please specify any other barriers?

Part two: Questionnaires related with the drivers of adopting E-banking system in Ethiopia.

The following are some of the perceived benefits derived from the adoption of Agency Banking, please indicate your choice.		SA	A	N	D	SD
		5	4	3	2	1
IV. Perceived Ease of Use						
19	Agency Banking makes it easier to do banking activities	()	()	()	()	()
20	In the case of Agency Banking, customers can simply use banking service by using cell phone	()	()	()	()	()
21	From the bank perspective it is easy to use Agency Banking to accomplish banking tasks	()	()	()	()	()
22	Using Agency Banking simplify the activity of workers to deliver service to customers.	()	()	()	()	()
23	Our bank provide guidelines on the use of electronic banking facility	()	()	()	()	()
24	The management of the bank provide training courses for its staff when introducing Agency Banking services.	()	()	()	()	()
25	Agency Banking services helps to perform banking task in a simple way	()	()	()	()	()

V. Perceived Usefulness						
26	Agency Banking services enables users to complete banking activities more quickly and easily	()	()	()	()	()
27	Agency Banking service is convenient in terms of time saving	()	()	()	()	()
28	Agency Banking service is convenient, in terms of 7 days and 24 hour services	()	()	()	()	()
29	Agency Banking service is more accessible to users than visiting a bank	()	()	()	()	()
30	The transactions in Agency Banking are at a lower price, or at no cost	()	()	()	()	()
31	Agency Banking service improve customer service	()	()	()	()	()
32	Agency Banking service improve speed and efficiency	()	()	()	()	()
33	Agency Banking reduce number of customers coming to the banking hall	()	()	()	()	()
34	Agency Banking service increase productivity of the bank	()	()	()	()	()
35	Agency Banking increase reliability and accessibility	()	()	()	()	()
36	Agency Banking service create better relationship among banks and clients	()	()	()	()	()
37	Agency Banking service used as better information control tools	()	()	()	()	()
38	No time limit to access bank account and information	()	()	()	()	()

Please specify any other benefits?

Survey Data

Frequency Tables

Banks

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid United Bank	16	22.5	22.5	22.5
Lion Int Bank	17	23.9	23.9	46.5
Dashen Bank	20	28.2	28.2	74.6
Oromia Co Bank	18	25.4	25.4	100.0
Total	71	100.0	100.0	

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	58	81.7	81.7	81.7
Female	13	18.3	18.3	100.0
Total	71	100.0	100.0	

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20-30	35	49.3	49.3	49.3
31-40	30	42.3	42.3	91.5
41-50	5	7.0	7.0	98.6
51-60	1	1.4	1.4	100.0
Total	71	100.0	100.0	

Educational level

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma	2	2.8	2.8	2.8
First degree	63	88.7	88.7	91.5
Masters degree	6	8.5	8.5	100.0
Total	71	100.0	100.0	

Monthly income (in Eth. Birr)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2001- 3000	1	1.4	1.4	1.4
3001-4000	5	7.0	7.0	8.5
Above 4000	65	91.5	91.5	100.0
Total	71	100.0	100.0	

Q1_ Customers of our bank fear risk to use Agency Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	4.2	4.2	4.2
Disagree	8	11.3	11.3	15.5
Neutral	12	16.9	16.9	32.4
Agree	37	52.1	52.1	84.5
Strongly Agree	11	15.5	15.5	100.0
Total	71	100.0	100.0	

Q2_ Lack of confidence with the security aspects considered as barrier for the adoption of Agency Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	2.8	2.8	2.8
Disagree	4	5.6	5.6	8.5
Neutral	10	14.1	14.1	22.5
Agree	41	57.7	57.7	80.3
Strongly Agree	14	19.7	19.7	100.0
Total	71	100.0	100.0	

Q3_ In the case of using Agency Banking, security risk affect users decision to use the system

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	4.2	4.2	4.2
Disagree	9	12.7	12.7	16.9
Neutral	12	16.9	16.9	33.8
Agree	36	50.7	50.7	84.5
Strongly Agree	11	15.5	15.5	100.0
Total	71	100.0	100.0	

Q4_ Customers do not trust the technology provided by the banks

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	7	9.9	9.9	9.9
Disagree	18	25.4	25.4	35.2
Neutral	18	25.4	25.4	60.6
Agree	23	32.4	32.4	93.0
Strongly Agree	5	7.0	7.0	100.0
Total	71	100.0	100.0	

Q5_ Lack of trust is considered as barriers for the adoption of Agency Banking in Ethiopia.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	1.4	1.4	1.4
Disagree	9	12.7	12.7	14.1
Neutral	15	21.1	21.1	35.2
Agree	33	46.5	46.5	81.7
Strongly Agree	13	18.3	18.3	100.0
Total	71	100.0	100.0	

Q6_ Using Agency Banking increases cost to do banking task

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	27	38.0	38.0	38.0
Valid Disagree	27	38.0	38.0	76.1
Valid Neutral	6	8.5	8.5	84.5
Valid Agree	8	11.3	11.3	95.8
Valid Strongly Agree	3	4.2	4.2	100.0
Total	71	100.0	100.0	

Q7_ Relatively using of Mobile to get banking service is expensive for customers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	29	40.8	40.8	40.8
Valid Disagree	26	36.6	36.6	77.5
Valid Neutral	3	4.2	4.2	81.7
Valid Agree	7	9.9	9.9	91.5
Valid Strongly Agree	6	8.5	8.5	100.0
Total	71	100.0	100.0	

Q8_ Customers of our bank were not familiar with the Agency Banking service provided using mobile phone

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	4	5.6	5.7	5.7
Valid Disagree	1	1.4	1.4	7.1
Valid Neutral	6	8.5	8.6	15.7
Valid Agree	33	46.5	47.1	62.9
Valid Strongly Agree	26	36.6	37.1	100.0
Missing Total	70	98.6	100.0	
Missing System	1	1.4		
Total	71	100.0		

Q9_ Lack of technical and managerial skills on the use technological innovation.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	3	4.2	4.2	4.2
Valid Disagree	10	14.1	14.1	18.3
Valid Neutral	8	11.3	11.3	29.6
Valid Agree	35	49.3	49.3	78.9
Valid Strongly Agree	15	21.1	21.1	100.0
Total	71	100.0	100.0	

Q10_ Lack of skills to implement Agency Banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	5	7.0	7.0	7.0
Valid Disagree	14	19.7	19.7	26.8
Valid Neutral	14	19.7	19.7	46.5
Valid Agree	33	46.5	46.5	93.0
Valid Strongly Agree	5	7.0	7.0	100.0
Total	71	100.0	100.0	

Q11_ Delivering Agency Banking by using internet is difficult due to low internet access in the Ethiopia

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	3	4.2	4.2	4.2
Neutral	5	7.0	7.0	11.3
Valid Agree	31	43.7	43.7	54.9
Strongly Agree	32	45.1	45.1	100.0
Total	71	100.0	100.0	

Q12_ Lack of sufficient government support will affect customers willingness to use technological innovation

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	3	4.2	4.2	4.2
Neutral	13	18.3	18.3	22.5
Valid Agree	27	38.0	38.0	60.6
Strongly Agree	28	39.4	39.4	100.0
Total	71	100.0	100.0	

Q13_ Lack of available ICT infrastructure

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	2.8	2.9	2.9
Neutral	6	8.5	8.7	11.6
Valid Agree	34	47.9	49.3	60.9
Strongly Agree	27	38.0	39.1	100.0
Total	69	97.2	100.0	
Missing System	2	2.8		
Total	71	100.0		

Q14_ Mobile banking services may not perform well because of network problems

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	5	7.0	7.0	7.0
Neutral	3	4.2	4.2	11.3
Valid Agree	43	60.6	60.6	71.8
Strongly Agree	20	28.2	28.2	100.0
Total	71	100.0	100.0	

Q15_ Lack of legal frameworks that enforce banking industries to adopt technological innovation

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	10	14.1	14.1	14.1
Neutral	11	15.5	15.5	29.6
Valid Agree	33	46.5	46.5	76.1
Strongly Agree	17	23.9	23.9	100.0
Total	71	100.0	100.0	

Q16_ Cross-country legal and regulatory differences will have impact on the adoption of new technological innovation in the banking sector like Agency Banking.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	9	12.7	12.9	12.9
	Neutral	15	21.1	21.4	34.3
	Agree	28	39.4	40.0	74.3
	Strongly Agree	18	25.4	25.7	100.0
	Total	70	98.6	100.0	
Missing	System	1	1.4		
Total		71	100.0		

Q17_ Lack of competition among local bank and foreign banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	5.6	5.6	5.6
	Disagree	10	14.1	14.1	19.7
	Neutral	8	11.3	11.3	31.0
	Agree	33	46.5	46.5	77.5
	Strongly Agree	16	22.5	22.5	100.0
	Total	71	100.0	100.0	

Q18_ Customers may not be willing to accept Agency Banking service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.4	1.4	1.4
	Disagree	9	12.7	13.0	14.5
	Neutral	13	18.3	18.8	33.3
	Agree	30	42.3	43.5	76.8
	Strongly Agree	16	22.5	23.2	100.0
	Total	69	97.2	100.0	
Missing	System	2	2.8		
Total		71	100.0		

Q19_ Agency Banking makes it easier to do banking activities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.4	1.4	1.4
	Agree	19	26.8	26.8	28.2
	Strongly Agree	51	71.8	71.8	100.0
	Total	71	100.0	100.0	

Q20_ In the case of Agency Banking, customers can simply use banking service by using cell phone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.4	1.4	1.4
	Agree	24	33.8	33.8	35.2
	Strongly Agree	46	64.8	64.8	100.0
	Total	71	100.0	100.0	

Q21_ From the bank perspective it is easy to use Agency Banking to accomplish banking tasks

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	2.8	2.8	2.8
Neutral	3	4.2	4.2	7.0
Valid Agree	32	45.1	45.1	52.1
Strongly Agree	34	47.9	47.9	100.0
Total	71	100.0	100.0	

Q22_ Using Agency Banking simplify the activity of workers to deliver service to customers.

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	2.8	2.8	2.8
Neutral	2	2.8	2.8	5.6
Valid Agree	37	52.1	52.1	57.7
Strongly Agree	30	42.3	42.3	100.0
Total	71	100.0	100.0	

Q23_ Our bank provide guidelines on the use of electronic banking facility

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	5	7.0	7.0	7.0
Neutral	8	11.3	11.3	18.3
Valid Agree	33	46.5	46.5	64.8
Strongly Agree	25	35.2	35.2	100.0
Total	71	100.0	100.0	

Q24_ The management of the bank provide training courses for its staff when introducing Agency Banking services.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	1.4	1.4	1.4
Disagree	2	2.8	2.8	4.2
Valid Neutral	8	11.3	11.3	15.5
Agree	32	45.1	45.1	60.6
Strongly Agree	28	39.4	39.4	100.0
Total	71	100.0	100.0	

Q25_ Agency Banking services helps to perform banking task in a simple way

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	1	1.4	1.4	1.4
Neutral	3	4.2	4.2	5.6
Valid Agree	35	49.3	49.3	54.9
Strongly Agree	32	45.1	45.1	100.0
Total	71	100.0	100.0	

Q26_ Agency Banking services enables users to complete banking activities more quickly and easily

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	3	4.2	4.2	4.2
Neutral	2	2.8	2.8	7.0
Valid Agree	30	42.3	42.3	49.3
Strongly Agree	36	50.7	50.7	100.0
Total	71	100.0	100.0	

Q27_ Agency Banking service is convenient in terms of time saving

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	1	1.4	1.4	1.4
Neutral	1	1.4	1.4	2.8
Agree	28	39.4	39.4	42.3
Strongly Agree	41	57.7	57.7	100.0
Total	71	100.0	100.0	

Q28_ Agency Banking service is convenient, in terms of 7 days and 24 hour services

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	2	2.8	2.8	2.8
Neutral	7	9.9	9.9	12.7
Agree	25	35.2	35.2	47.9
Strongly Agree	37	52.1	52.1	100.0
Total	71	100.0	100.0	

Q29_ Agency Banking service is more accessible to users than visiting a bank

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	2	2.8	2.8	2.8
Neutral	4	5.6	5.6	8.5
Agree	27	38.0	38.0	46.5
Strongly Agree	38	53.5	53.5	100.0
Total	71	100.0	100.0	

Q30_ The transactions in Agency Banking are at a lower price, or at no cost

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	5	7.0	7.0	7.0
Disagree	13	18.3	18.3	25.4
Neutral	4	5.6	5.6	31.0
Agree	30	42.3	42.3	73.2
Strongly Agree	19	26.8	26.8	100.0
Total	71	100.0	100.0	

Q31_ Agency Banking service improve customer service

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	1	1.4	1.4	1.4
Neutral	4	5.6	5.6	7.0
Agree	34	47.9	47.9	54.9
Strongly Agree	32	45.1	45.1	100.0
Total	71	100.0	100.0	

Q32_ Agency Banking service improve speed and efficiency

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	2	2.8	2.8	2.8
Neutral	2	2.8	2.8	5.6
Agree	34	47.9	47.9	53.5
Strongly Agree	33	46.5	46.5	100.0
Total	71	100.0	100.0	

Q33_ Agency Banking reduce number of customers coming to the banking hall

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	1	1.4	1.4	1.4
Neutral	2	2.8	2.8	4.2
Valid Agree	29	40.8	40.8	45.1
Strongly Agree	39	54.9	54.9	100.0
Total	71	100.0	100.0	

Q34_ Agency Banking service increase productivity of the bank

	Frequency	Percent	Valid Percent	Cumulative Percent
Neutral	1	1.4	1.4	1.4
Valid Agree	31	43.7	44.3	45.7
Strongly Agree	38	53.5	54.3	100.0
Total	70	98.6	100.0	
Missing System	1	1.4		
Total	71	100.0		

Q35_ Agency Banking increase reliability and accessibility

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	1	1.4	1.4	1.4
Neutral	9	12.7	12.7	14.1
Valid Agree	32	45.1	45.1	59.2
Strongly Agree	29	40.8	40.8	100.0
Total	71	100.0	100.0	

Q36_ Agency Banking service create better relationship among banks and clients

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	7	9.9	9.9	9.9
Neutral	4	5.6	5.6	15.5
Valid Agree	32	45.1	45.1	60.6
Strongly Agree	28	39.4	39.4	100.0
Total	71	100.0	100.0	

Q37_ Agency Banking service used as better information control tools

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	1.4	1.4	1.4
Disagree	5	7.0	7.0	8.5
Valid Neutral	18	25.4	25.4	33.8
Agree	28	39.4	39.4	73.2
Strongly Agree	19	26.8	26.8	100.0
Total	71	100.0	100.0	

Q38_ No time limit to access bank account and information

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	3	4.2	4.2	4.2
Neutral	9	12.7	12.7	16.9
Valid Agree	24	33.8	33.8	50.7
Strongly Agree	35	49.3	49.3	100.0
Total	71	100.0	100.0	