ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

THE CHALLENGE FACING IMPLEMENTATION OF HELLO CASH PROJECT IN CASE OF LION INTERNATION BANK S.C.

BY: BEMENET ASMARE

(SGS/0552/2011A)

JUNE 2020

ADDIS ABABA, ETHIOPIA

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A THESIS SUBMITTED TO ST. MARY‟S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ART PROJECT MANAGEMENT (APM) ADVISOR:

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DECLARATION

I, BemenetAsmare, declare that this work entitled **"The Challenge Facing The Implementation Of Hello Cash Project In Case Of Lion International Bank S.C."**Is the outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged.

I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the degree of Masters of Art in Project Management.

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Date September 05, 2020

Table Contents

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LIST OF ACRONYMS

ICT: Information and communication technology

NBE: National Bank of Ethiopia

LIB: Lion International Bank

MNO: The Mobile Network Operator

TOE: Technology-Organization-Environment framework

TAM: Technology Acceptance Model

List of Tables

List of Figure

ABSTRACT

The purpose of this study is to address the challenge facing Implementation of Hello Cash Project in Lion International Bank S.C. To address this objective a descriptive research design was employed and quantitative approaches were used. Both primary and secondary source of data were employed. Enclose ended questioner as a primary data and different document analysis were done as a source of secondary data. The sampling design that was employed for this study was purposive sampling. Data was gathered by distributing 90 questionnaires to the respondents. The data obtained through questionnaire has been analyzed quantitatively using descriptive statistics: frequency, mean, standard deviation and percentage through SPSS version 20.00 software. The study revealed that lack of adequate ICT infrastructure, poor quality of internet and mobile network, inconsistent power, network supply in rural areas of the country, lack of support & commitment of top level management, lack of availability of well trained manpower to build agent network, lack of skilled IT personnel, lack of technical and managerial skill of staffs, lack of confidence with the security aspect, customer's fear of risk of new technology innovation, and lack of availability of physical security, The study recommended banks to consider technology based competition, regulatory body to issue suitable legal frameworks to ease the adoption of mobile and agent banking system while the government should support banking sector by investing on ICT infrastructure development and financial education program.

Keywords: Challenge of hello cash, Hello cash, Implementation of hello cash and Mobile and agent banking.

CHAPTER ONE

1 INTRODUCTION

1.1 Background of the Study

The world banking and financial system is in the throes of a transformation caused by increasing globalization and deregulation. Technological innovations such as those available in ATMs, agent banking, Internet banking, and smartcard applications are taking place at an overwhelmingly fast pace in the global banking industry. Technological innovation is, currently, recognized as one of the key factors on the firms‟ competitive advantage as well as a critical element in improving the economic and financial results of firms. Indeed, increased economic and financial performance have been observed among firms capable of using innovation to improve their processes or differentiate their products and services in relation to their competitors (Kariuki, 2005).

The rapidly growing ICT is knocking the front-door of every organization in the world, where Ethiopian banks would never be exceptional. Technological innovations play a crucial role in banking industry by creating value for banks and customers, that it enables customers to perform banking transactions without visiting a brick and mortar banking system. On the other hand it has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space (Turban, 2008).

In the last decade, mobile phone technology has emerged as the most potential and well suit channel for financial inclusion. Use of mobile phone for inclusive finance is very popular in countries where most of the population is unbanked or under banked (Sumanjeet , 2010).

The agency banking model is one in which banks provide financial services through nonbank agents, such as grocery stores, retail outlets, post offices, pharmacies, or lottery outlets. Agency banking was introduced during the 2009 budget and was enshrined in the Finance bill of 2009. Agency banking takes customers out of the bank halls to kiosks and villages. Investors have pumped billions into new platforms that offer agency banking services. This model allows banks to expand services into areas where they do not have sufficient incentive or capacity to establish a formal branch, which is particularly true in rural and poor areas where as a result a high percentage of people are unbanked. Agency banking is quickly becoming recognized as a viable

strategy in many countries for extending formal financial services into poor and rural areas in that agency banking enables clients to store, send and receive electronic money through local agents, rather than travelling to the nearest bank branch (Agalla, 2014).

The Ethiopian government issued proclamation no. 40/1996 in 1996 that allowed the establishment of micro finance institutions. Since then financial services to the unbanked have become a major area of interest for policy actors. The government takes financial inclusion as a policy objective and has been trying to build inclusive financial systems not only to address the previously excluded ones but also to mainstream financial institutions to reach out to the unbanked (Elfagid, 2015).

The above credentials towards financial inclusion reveals the fact that the result achieved so far is quite low despite all the efforts made by the Government. However, recognizant of the actual reality and armed with the understanding that "The use of technology and innovative financial service delivery channels such as mobile devices and agents have significant contribution in deepening financial service accessibility to the wider section of the population at an affordable price" (NBE Directive, 2012), the National Bank of Ethiopia (NBE) issued a directive on "Regulation of Mobile and Agent Banking Services", Directive No. FIS/01/2012 which allows financial institutions to conduct the Mobile and Agent Banking Services (Elfagid, 2015).

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 in different countries. Mobile and Agent 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. Hence, the study will attempt to assess the major implementation challenges hello cash mobile and agent banking in Lion international bank.

1.2 Statement of the Problem

Mobile banking (hello cash in our case), is a subset of banking as it allows everyone easy access to their banking activities via mobile handsets (Khraim, 2011). According to Alifia, the E-banking service representative of the LIB, mobile banking system is implemented in the Lion International Bank in 2015, in cooperation with Cooperative Bank of Oromiya, Somali Micro Finance Institution and Wegagen Bank, by the common name of hello-cash or mobile and agent banking system.

According to LIB Alternative channel report on 2017 the major issue and deviation identified during the implementation of hello cash mobile and agent banking is that the impossibility to get all necessary services from EthioTelecom in terms of connectivity. Building agent network is also a challenge that alternative channel officer and branch manager face during implementation to make the agent effective in order to create a well-trained manpower; trusted by customers; strategically and conveniently located; and properly incentivized to follow procedures, keep sufficient float on hand, and serve customers. Since agents provide a range of services (e.g., account opening, deposits, withdrawals, bill payments, etc.) they are able to generate transaction volume and balance liquidity. An agent must maintain adequate cash and e-money float balances to meet customer cash-in/cash-out requests.

Availability and Quality of Infrastructure is one of the challenges which impact the Agent Banking business. Interruption in services of Telecommunications due to technical or nontechnical issue and non-availability of any parallel system or alternative may cause disruption in service availability. Similarly, congestion in network may become a bottle neck in providing Quality of Service to Agent Banking user. The inconsistent availability of power supply in the country particularly in the rural area is one of the challenges for the implementation and continuous availability of Mobile and Agent Banking service. Therefore, Utility disruptions or software or hardware failures can cause a lack of service availability and information loss. (Elfagid, 2015)

Managing the operational risk is one of the challenges that banks face as the time of implementation agent and mobile banking: such as volume forecasts, management information systems and Outsourcing. Accurate volume forecasts have proved difficult - One of the key challenges encountered by banks is how to predict and manage the volume of customers that they

will obtain. Many banks going on-line have significantly misjudged volumes. When a bank has inadequate systems to cope with demand it may suffer reputational and financial damage and even compromises in security if extra systems that are inadequately configured or tested are brought on-line to deal with the capacity problems. The second type of operations risk concerns management information systems. Again, this is not unique to E-banking. Banks may have difficulties in obtaining adequate management information to monitor their service, as it can be difficult to establish/configure new systems to ensure that sufficient, meaningful and clear information is generated. Such information is particularly important in a new field like E-banking. Finally, a significant number of banks offering E-banking services outsource related business functions, security, either for reasons of cost reduction or, as often the case in this field, because they do not have the relevant expertise in house (Tilahun, 2017).

Mobile and Agent banking carries sensitive legal risks for banks. Banks can potentially expand the geographical scope of their services faster through electronic banking than through traditional banks. In some cases, however, they might not be fully versed in a jurisdiction's local laws and regulations before they begin to offer services there, either with a license or without a license if one is not required (Sarita, 2012).Despite above profound realities stated, there are also various challenge such as dependency on a single network provider where there is no redundancy in case of network failures; tight government regulation like limited e-float, unavailability of super-agent concept to reach the last miles and strict due diligence policies by regulators; risks related to technology, fraud and theft; low financial literacy, inadequate awareness of available mobile money service and etc.

As can be seen from the literature and the practical years of working experience of the researcher in the subject area, the research expected to determine the challenge facing the implementation of hello cash agent and mobile banking in case of Lion international bank S.C. Moreover, to the best knowledge of the researcher, there is a lack of research made to investigate the implementation challenge of Mobile and Agent banking in Ethiopian banking industry. So to fill the gap this study was started by questioning; what are the challenges of implementing hello cash agent and mobile banking in Lion international bank S.C.

Therefore this study determines challenge facing the implementation of hello cash agent and mobile banking in the case of Lion international bank.

1.3 Research Questions

The study is going to be guided by the following key research questions;

- How operational structure can affects the implementation of hello cash mobile and agent banking?
- How does regulation of agency related laws affects the implementation hello cash mobile and agent banking?
- What are the effect of Technological factor on implementation of hello cash mobile and agent banking?
- How lack of training hinders the implementation of hello cash mobile and agent banking?

1.4 Research Objective

1.4.1 General objective

The main objective of the study was to establish the implementation challenge of hello cash mobile and agent banking project in Lion International bank S.C.

1.4.2 Specific Objectives

The specific objectives of the research are:

- To establish how technological risk affects the implementation of hello cash mobile and agent banking.
- To establish how operational structure affects the implementation of hello cash mobile and agent banking.
- To establish how regulation of agency related laws affect the implementation hello cash mobile and agent banking.
- To determine how lack of training hinders the implementation of hello cash mobile and agent banking.

1.5 Significance of the Study

This study is important to the stakeholders of Lion international bank S.C., other commercial bank and also to the government in that it will point out areas to be improved in an effort to provide banking services to the unbanked. The findings of this study will assisting stakeholders of Lion international bank S.C formulate or design appropriate mechanisms to identify and overcome challenges while implementing its hello cash mobile and agent banking strategy so as to achieve the set organizations goals and objectives.

The findings of the study also have practical importance through providing significant insight for decision makers at regulatory bodies and financial institution for passionate commitment towards accelerating the implementation of mobile and agent banking by way of overcoming the challenges forward.

This study can be used as an input for conducting further and extensive research on the area. And also the findings of the study can be used by policy makers as inputs for making possible policy adjustments.

1.6 Scope of the Study

The study is delimited to describe the implementation challenge of adopting mobile and agent banking in Lion international bank S.C. The study is conducted taking a sample population of 182 LIB staff (Addis Ababa city branch) and Alternative banking managers will be investigated. The target correspondents would be Head of Departments of Alternative banking and retail banking Vise-president. The study involves staffs from the selected city branch especially those who are direct participant of the hello cash mobile and agent banking.

1.7 Limitations of the Study

The major restraint of the study was lack of sufficient empirical evidences in Ethiopian context to the subject under study which enable to support the researchers finding and the time frame.

1.8 Organization of the Research Report

This paper comprised five chapters in which the first part illustrates the study backgrounds, statements of the problem, basic research questions, objectives, significance, scope and limitation of the study and the second chapter deals with review of related literature and the third chapter describes research design and methodology of the study and the analysis used, results and discussion would be discussed in the fourth chapter, finally the last chapter will be dealing with the research summary, conclusion and recommendations.

CHAPTER TWO
2 REVIEWOF RELATED LITERATURE

2.1 Theoretical Review

2.1.1 Concept of Mobile and Agent Banking

Mobile banking means performing banking activities which primarily consist 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).

Mobile Banking refers to provision of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank transactions, to administer accounts and to access customized information (Tiwari and Buse , 2007). In the broader sense mobile banking enables the execution of financial services in the course of which - within an electronic procedure - the customer uses mobile communication techniques in conjunction with mobile device (Pousttchi and Schurig, 2007).

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 NBE directives (NBE Directive, FIS/01/2012).

Agent banking is a retail or postal outlet contracted by a financial institution or a mobile network operator to process client's 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 (Chitli, 2013).

Agent banking is a kind of branchless banking which is significantly cheaper alternative to conventional branch-based banking that allows financial institutions and other commercial players to offer financial services outside traditional bank premises (Hassen, et al,2011).

Agent banking means the conduct of banking business on behalf of a financial institution through an agent using various service delivery channels (NBE directives Number FIS /01/2012).

2.1.2 Models of Mobile and Agent Banking

There are three widely practiced models to conduct the Mobile and Agent Banking business worldwide. These are: the Bank-Led Model, the Telco-Led (The Mobile Network Operator (MNO)-Led Model) and the Mixed Model.

Bank lead model is the one in which 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). The Regulation of Mobile and Agent Banking Services Directive No.FIS/01/2012 issued by National Bank of Ethiopia (NBE) clearly stated that Financial institutions shall ensure their agents fully comply with the requirements of "Prevention and Suppression of Money Laundering and the Financing of Terrorism Proclamation Number 657/2009" and "Customers Due Diligence of Banks Directives No. SBB/46/2010". The other Model is the Telco-Led Model which is implemented by most successful countries in Mobile and Agent Banking business. However, the issue of fund protection is one of the most challenging in the non-bank led model: Non-bank issuers are taking funds from the public. MNOs are not regulated or supervised prudentially and what if the m-banking provider goes bankrupt, to whom claim presented. Unlike the Bank-Led model, the loose established mechanisms to protect users" funds make the risk of the Telco-Led model higher than the Bank-Led Model (Laurent, 2011).

However, completely detaching the Telco-Led Model from implementation in fear of the risk will delay the pace of penetration/implementation of financial inclusion in one country. In this regard, the third Model, the Mixed Approach, may strike the balance between risk and penetration. Therefore, the pace of addressing to the remote area through bank led model may not be as fast as the way the Telco-Led approach. However, the Bank-Led Model approach is better in managing the business and controlling the risk that may occur following availing the service at large scale to avoid complication of managing the risk.

2.1.3 Drivers of Mobile and Agent Banking

Mobile and Agent Banking business increased income through commission; **bank agents** are usually awarded commissions whenever they perform transactions on behalf of the bank. Increased customer traffic brings additional benefits to the agent; the increased traffic brought about by customers performing banking activities also translates to more people getting to know your business hence more sales, the question comes at the initial stage there might not be sufficient number of customer who frequently visit the agent premises *(*Chiteli,2013*).*

Customers are also one of the drivers of Mobile and Agent Banking business. Most financial institution closes their doors early, but with agents, for as long as the business premise remains open, you can do your transactions, and this gives flexible hours. This has proven to be very convenient especially for people who are busy during the day. The other benefits to customer are financial institution agents have proven to be cost-effective especially to people who live in rural areas that are far away from banks (Veniard and Melinda*, 2010).*

Financial institutions have recorded an increase in their profits and Agent Banking is one of the main attributes to such huge profits. Banks are finding it cheaper to set up agents as opposed to opening a branch where they will incur extra costs of staffing, rent, electricity etc. With Agent Banking, the agent incurs almost all the costs. Agent banking has made it possible for bank products and services to penetrate areas that at first seemed impossible. With Agent Banking banks have reached even the smallest of villages. With regards to wide customer base Bank agents are paid commissions when they sign up new customers and this has led to an increase in the number of customers for banks. Banks are finding it effective to increase their customer numbers in this manner as opposed to using sales people (Lehman, 2010*).*

When financial institution do not have branches that are close to the customer, the customer is less likely to use and transact with their service. However, the emergence of new delivery models as a way to bank has played a key role to drastically change the economics of banking by the poor. By using retail points as agents, banking providers can offer banking services in a commercially viable way since they are able to reduce fixed costs and encourage entrepreneurs to use the service more often and in the process provide access to additional revenue sources *(*Chiteli, 2013*).*

The agent offers front-line customer service including physical space and operation of the POS device. The agent intermediates bank transactions through its balance sheet, transforming cash in

the-till into money-in-the-bank, and vice versa. This is actually not so different from the normal business of a store: transforming inventory into cash (or receivables) and back (i.e., store stocks goods, which ties up its working capital until the goods are sold). In the agent mechanism described, the store also ties up working capital, but in the form of cash-in the- till and balance-in-its-account rather than in the form of physical inventory. The agent needs to go to the bank from time to time to rebalance its cash in the till versus its money in the bank account (Lyman, 2006).

The agent absorbs/provides excess liquidity from/to the community of bank customers and deposits that into/withdraws from the bank on their behalf. In effect, the community delegates the bothersome business of going to the bank to the agent. This delegation introduces economic efficiencies. By netting the community's overall net cash position (offsetting withdrawals against deposits), the total amount of cash that needs to be transported to/from the bank is reduced. And by pooling the cash requirements of all customers, the required number of trips to the bank is reduced (Laurent, 2011).

The MNO(the Mobile Network Operator) or Network Service Provider will be beneficial from different angles such as enabling the Operator to provide financial services for all subscriber segments (in the case of MNO Model), serves as a means for the creation of new services around its core distribution system, enhances the subscriber retention and serves as a new revenue stream as more and more subscribers join the service provider in need of the specific Mobile and Agent Banking Services(Elfagid, 2015).

2.1.4 Implementation challenge of Mobile and Agent Banking

In this study the operational structure, Technological factors, regulation of agency related laws and lack of training are the major challenge while the implementation of mobile and agency banking.

2.1.4.1 Operational Structure

Strategy used by an organization is fundamentally influenced by the operational structure of the organization. It dictates how policies and objectives are established and how resources are allocated. When an organization changes its strategy, the existing organization structure may be ineffective. Though an effective structure, organization's members are able to develop synergies that promote effective strategy implementation. Successful strategy implementation involves empowering others to do all the things needed to put the strategy into place and execute it

proficiently (Thompson, Strickland and Gamble, 2007). Since the strategy implementation process imparts every part of the organization, every manager has to take an active role as a strategy implementer. The most important outcome that leaders, managers and planners should aim from successful strategy implementation is real value added through goal achievement and increased stakeholder satisfaction. Successful strategy implementation in organizations depends on various factors.

Strategy implementation is likely to be successful where there is fit between several organizational elements. These elements include organizational structure, culture, resource allocation, systems and leadership. The culture of an organization defines the social context in which an organization functions. It provides guidance to the organizational members in decision making, time management and energy investment, what kind of people to work for the organization and any other social activity done in the organization. The organizational culture affects the way managers behave including the decisions they make that affect the relationship between the organization, its strategy and the environment. Appropriate culture will facilitate successful strategy implementation (Pearce and Robinson, 2003).

Leadership ensures that organizational effort is united and directed towards achieving its goals and objectives. This makes leadership a very fundamental aspect in effective strategy implementation. Leadership provides the organization with vision, initiative, motivation and inspiration that affect the performance of the organization. Organizational systems play a fundamental role in the strategy implementation effort and process. Systems means all procedures, formal and informal, that make the organization carry out its function on a daily basis and these may include capital budgeting systems, training systems, cost accounting procedures and budgeting systems. Poor information sharing, unclear responsibility and accountability mechanisms can lead to failure of strategy implementation (Pearce and Robinson, 2003).

Challenges that occur during the strategy implementation process are an important area of research because even the best strategies would be ineffective if not implemented successfully. It is the management's responsibility to ensure that the strategy is well understood organization wide before the implementation process begins. Clear understanding of a strategy gives purpose to the activities of each employee and allows them to link whatever task is at hand to the overall organizational direction (Byars et al, 2001).

Lack of understanding of strategy is one of the obstacles to strategy implementation process. Another very fundamental challenge is the ability of most organizations to maintain continuity in senior management. Senior managers might leave too soon after the implementation process has been started. When this happens, staff's commitment and enthusiasm for strategy implementation is undermined and they start to distrust the new strategy and prefer old and familiar situation. Staff attitudes and perspectives go a long way towards subverting the firm's plan. Finding and bringing on board the right people to implement and manage change is a significant challenge to the strategy management process in many organizations today. Changes do not implement themselves. It is people that make them happen. Selecting people for key positions by putting a strong management team with the right personnel chemistry and mix of skills is one of the important steps towards successful strategy implementation (Thompson and Strickland, 1998).

An effective agent is well trained; trusted by customers; strategically and conveniently located; and properly incentivized to follow procedures, keep sufficient float on hand, and serve customers. Banks typically select established retail outlets, while mobile networks are more inclined to use smaller "mom and pop" shops or kiosks. Some providers choose to outsource agent recruiting and training. Either way, the size and growth of the network has to be carefully planned to ensure there are enough agents to serve the customers and that there are enough customers to keep the agents interested in providing the service (Davis, 1989).

When agents provide a range of services (e.g., account opening, deposits, withdrawals, bill payments, etc.) they are able to generate transaction volume and balance liquidity. An agent must maintain adequate cash and e-money float balances to meet customer cash-in/cash-out requests. If too much cash is taken in, the agent may run out of e-float and not be able to accept more deposits. If there are too many withdrawals, the agent will accumulate e-float but run out of cash. In either case, customers will get discouraged if the agent cannot provide the services they need when they need them. In addition, a secure mechanism needs to be in place to transport cash needs to and from an agent (Davis, 1989).

An agent is essentially an aggregator for the cash requirements of a community. It is a cash-storing and transfer business that absorbs the risk of cash handling. Providers have developed a variety of mechanisms to ensure agent liquidity and assist the agent in cash handling. The options

available depend to a great extent on the banking infrastructure in the markets where the agents operate and the willingness of the banks to take charge of secure cash transport (Mas, et al 2008).

Agents will not provide quality service to customers without ongoing, on-site supervision and in-store training to ensure the agents are liquid, consistently branded, and following the prescribed business processes. Providers need to decide how to divide the varied management functions and whether to keep those functions in house or outsource to an independent service provider. As the networks grow, it is increasingly difficult for the provider to cover the "last mile" of the distribution chain, so most use third parties for part or all of the channel management functions(Mas, et al 2008)..

2.1.4.2 Technological factors

Technology is the technical means people use to improve their surroundings. It is also knowledge of using tools and machines to do tasks efficiently. We use technology to control the world in which we live. Technology involves people using knowledge, tools, and systems to make their lives easier and better. Technology involves application of knowledge, tools and skills to solve problems and extend human capacity (Mberia, 2009).

Managing the structure, as one of the challenges by financial institutions towards the provision of Mobile and Agent Banking, refers to the approach that financial institutions establish relationship with their agents. The relationship can be direct, indirect or hybrid. A direct relationship with banking agents is one in which a financial institution uses its own staff to identify and evaluate potential agents and then contract and manage them. An indirect relationship involves contracting an external management company to manage the entire process. There is also a hybrid approach in which a financial institution assumes responsibility for parts of the process, for example, selection and contracting, while a management company is contracted to oversee the day-to-day management of the agent networks (Mas, et al 2008).

Availability and Quality of Infrastructure is one of the challenges which impact the Agent Banking business. Interruption in services of Telecommunications due to technical or nontechnical issue and non-availability of any parallel system or alternative may cause disruption in service availability. Similarly, congestion in network may become a bottle neck in providing Quality of Service to Agent Banking user. The inconsistent availability of power supply in the

country particularly in the rural area is one of the challenges for the implementation and continuous availability of Mobile and Agent Banking service. Therefore, Utility disruptions or software or hardware failures can cause a lack of service availability and information loss. Financial Institution without business continuity and disaster recovery planning may be on risk of non availability of services in case of catastrophic events, power breakdowns, fire etc and natural disasters like flooding, earthquake etc (Flaming et. al, 2011).

Technological challenge will be connected to mobile devices; software requires, inter-operability and protocols accepted and communications infrastructure (optimization and efficiency of bandwidth, communications interface, interference from other communications technologies). Most mobile phones have an embedded chip that can be used to store value or provide secure authorization and identification that does not rely on a card reader, PC and modem combination or a POS terminal. However, are consumers' ready to embrace this new method of payment? What technological barriers affect the operation of agency banking agents? And are the consumers willing to embrace the new technology in the market? (Mberia, 2009)

2.1.4.3 Lack of training

These are perceived risks due to lack of understanding the business benefits to the bank and the economy at large. These refers to social issues, such as acceptability of mobile device and cultural fit of wireless application, as primary consideration for the wireless market and perceived usefulness of a wireless application all affecting behavior intention Understanding credit, operational and compliance risks are the major worries hindering implementation of mobile and Agency banking by commercial banks (Mberia, 2009). Management of agency banking business requires man power and technological resources. Management of retail sized agents is a big challenge due to the risks mentioned above replicated in each agent.

2.1.4.4 Regulation challenge

Agents play a critical role in acquiring new customers, enabling them to transact, and keeping them satisfied. They verify the identity of customers, both when clients sign up and at subsequent transactions. The Policy makers and regulators have been facing problems to reconcile safe development of branchless banking and operation with increased levels of financial access (For broad branchless banking experiences). National Bank of Ethiopia is the promoters of Mobile and

Agent Banking. National Bank of Ethiopia issued the first Agency Banking prudential guide, National Bank of Ethiopian Directive, (2012). Regulation of Mobile and Agent Banking Services Directive No.FIS/01/2012needed to address the development of Mobile and Agency banking model, the legal and regulatory framework, the model of agency banking and the branching regulations in the guidelines.

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.

2.2 Empirical review

The researcher tried to review related researches works pertaining to the topic in order to demonstrate through understanding of the research topic. Based on the objectives and main findings of each research works under consideration, the review tries to make a link between the theoretical and empirical reviews in light of the underlying themes towards the provision of mobile and agent banking services; such as the various challenges posing to the business, the prospects towards the drivers of Mobile and Agent Banking services, the models employed by various countries and the success or failure factors behind such innovative banking services

towards financial inclusion in such a way that addressing the concept behind the statement of the problem.

2.2.1 Challenges of mobile and agent banking-International Aspect

Odhiambo" The Challenges Facing the Implementation of Agency Banking In Kenya a Case Study of Kcb Limited Mombasa County" The study sought to establish whether the risks associated with agency banking, Policies, procedures governing Agency banking, technological, operations and awareness as hindrances to the implementation of agency banking within Mombasa Business District a case study of Kenya Commercial Bank. The study finds out technical problems such as network failure and operation of the system had landed them in problems with agents, constant technology changes, extended times frames to address technological hitches and unreliability of existing telecommunication, low level of development of ICT infrastructure and the road network negatively inhibited them from carrying out their function are technological factors that significantly affects the implementation of agency banking thus banks ought come up with strategies that to address the above concerns. According to the findings of this study 70% of the respondents had not received any training from the bank on agency banking while 95% were willing to be trained on agency banking thus indicating that the bank personnel have embraced the concept of agency banking and that implementation of the same is hindered by a lack of knowhow which is as a result of total lack of training. The study further revealed that Collaboration with other banks on various aspects e.g. receiving agents" deposits on behalf of other banks and Managing credit risk, operational risk, liquidity risk and reputation risk greatly influences Implementation. And also majority of the banks personnel are not in tandem with any of the agency regulation policies by the CBK. Finally the researchers conclude reveal that the banking sector is eager to embrace agency banking as an alternative service delivery channel.

Lehman (2010) "Operational Management Challenges of Agent Banking System" has studied operational challenges of agent banking system in a global level focusing on the challenges on building agent network, managing of liquidity and managing of the channel. The study finds out that how building consistent customer experience is important towards bringing success in agent networking indicating the success of Safaricom-Kenya (M-PESA) and the failure of MTN Uganda that followed inconsistent customer experience. With respect to liquidity management the

study finds out how managing liquidity plays fundamental role in ensuring system viability. In this regard the experience of Vodacom- Tanzania was taken as a real experience which allows Agent Aggregators who perform the task of agent recruitment, managing their floats and transporting cash to the agent. The aggregator receives a flat fee for each new agent and a percentage of the agent commissions which provides an incentive to sign up high-quality agents who will actively transact. From the perspective of channel management, the study finds out that outsourcing or using third parties for agent channel management is recommended since with the expansion of agent network, it would be difficult for providers to manage the business and covers the "last mile" of the distribution chain.

Gichana (2013) in Kenya has made a study on "Challenges of Agent Banking Experiences in Kenya" with the objective of determining the extent to which insecurity affects agent banking, investigating the extent to which capital availability affects agent banking, establishing the effect of liquidity/float related problems and how perceived credibility affects the agency banking. The study has found out the uptake of agent banking in Kenya has not been well appreciated by the target beneficiaries who include among others the micro and small enterprises in the rural areas in Kenya who were expected to benefit from this technologically innovative service. The paper is based on a study conducted to reveal the challenges which are hindering the rural people of Kenya benefiting from agent banking. In as much as it has been witnessed that there is an increase in penetration of agent banking services clients have not fully made use of the available agents at their localities to cut down on transaction costs occasioned by travelling to traditional branches and also time wasted on queuing for services. The researcher also identified some of the factors hindering the well functioning of agent banking despite mounting financial literacy, lack of mobile network services and float, lack of capital, issues of insecurity and fear of robbery. The study tried also to indicate the CGAP(2010) report that states the usage of semi-formal financial services in Kenya including m-banking platforms such as M-PESA increased from8.1% in 2006 to 17.9% in 2009, while the proportion of the population with access to only informal financial services decreased from 35% to 26.8%. The share of the population excluded from any financial service decreased from 38.3% to 32.7%, these statistics suggest strong gains in financial inclusion coinciding with the introduction of M-PESA.

(Bansal, 2014) “Perspective of Technology in achieving Financial Inclusion in Rural India” The objective of the study was to find out the contribution of ICT towards financial inclusion in India and analyze different applications of ICT which banks are adopting. This would directly or indirectly reflect the effectiveness of the financial institutions efforts to bring-in underprivileged people to the main stream financial inclusion system, especially in rural areas and support government growth in inclusive growth. The paper tried to magnify the role of mobile technology towards bridging the gap between the banked and unbanked in India considering the 811 million people with mobile phones but only 17% of them have a bank account. The research found out that the main reason for slow inclusion is the absence of appropriate delivery model and products which satisfy the financial need of low income families. Financial inclusion in true sense would mean not only to make people aware but encourage them to buy the financial products and services. The institutions must foresee the challenges lying ahead and take necessary steps to support the policies of inclusive growth. ICT may act as a tool to overcome those challenges and provides us a platform to reach customer directly.

Anita et al. (2011) “Opportunities and Obstacles to Financial Inclusion” The objective of the survey is to provoke dialogue about what financial inclusion is and how to achieve it. It identifies the various pieces needed to complete the puzzle, in the confidence that those working toward financial inclusion can together take actions that will substantially reduce financial exclusion by the year 2020. The study proved that financial education and financial literacy plays unequivocal role towards financial inclusion. As Lindsay Gleason of ACCION writes, “Financial education is one of the best ways to empower the working poor to take control over their financial lives, which has a ripple effect to all areas of their lives”.

As the concept is new for Ethiopian banking industry, very few researchers attempted to assess its opportunities contributing to the bank industries and challenges 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 Financial Inclusion-National Experience

Most local Banks are under project stage to embark on Mobile and Agent Banking business following the issuance of the NBE Directive number FIS/01/2012 on Mobile and Agent Banking business in Ethiopia. So far only six Banks Commercial bank of Ethiopia, United Bank, Lion international Bank, Wegagen bank, Dashen bank and cooperative bank of Oromia have announced very recently that they have already launched Mobile and Agent Banking service. As the business is very immature to conduct further researches, the researcher was unable to get adequate local research works in the field except a thesis paper by Abdulkadir Wolela (2014) submitted to St.Mary‟sUniversity under the title "Prospects and Challenges on the Implementation of Mobile and Agent Banking in Ethiopia" and one research article posted on Birritu and written by Henok Arega (2015) under the title "Mobile Banking in Ethiopia: Challenges and Prospects" where the research article is limited to only the mobile banking aspect of the business, and Hayat Nesibu (2017) under the title Mobile Banking adoption in Ethiopia Case of Commercial Bank of Ethiopia.

Henok (2015) "Mobile Banking in Ethiopia: Challenges and Prospect" The researcher used exploratory research design since the development of m-banking in Ethiopia is a new phenomenon. The study found out major challenges such as regulatory challenge where financial institutions are facing challenges on timely approval of new product, the lack of interoperability in the banking system which is very important to support multiple payment mechanisms and the limit set to mobile money (e-wallet account) is too small for both commercial banks and MFIs; hence it should be left to financial institutions to determine in accordance with their risk appetite. Additionally, the research found out that poor network quality, low financial literacy level and lack of customization of mobile applications in local language were found to be challenges for the provision of Mobile banking service in Ethiopia. From the prospect aspect of the business, Henok found out that m-banking service in Ethiopia is endowed with huge potential as the sector remains untapped and the continual increase in per capital income of the nation can also be considered as another potential for banks to reap the full benefit derived from m-banking. Hayat (2017) "Mobile Banking adoption in Ethiopia: A Case of Commercial Bank of Ethiopia". The researcher used quantitative research design. The main objective of the study was to examine the determinants of mobile banking adoption in the Ethiopian banking industry with specific emphasis on

Commercial Bank of Ethiopia (CBE). The research results found that perceived usefulness, perceived ease of use, perceived self-efficacy, relative advantage and perceived risk.

2.3 Conceptual Framework

Researchers have been using different frameworks in the study of adopting new technological innovation. Among frameworks that have been developed in different studies, Technology-Organization-Environment framework (TOE) and Technology Acceptance Model (TAM) are the major ones. This study is also intending to use TOE and TAM to describe the implementation challenge of Mobile and Agent Banking.

2.3.1 Technology Acceptance Model (TAM)

The technology acceptance model is an information systems theory that models how users can accept and use a technology (Davis, 1989). It is modeled by Fred Davis in 1989 and it suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it. These factors are perceived usefulness and ease of use.

- **Perceived Usefulness** (PU) – PU was defined as "the degree to which a person believes that using a particular system would enhance his or her job performance". This means if the user believes as the system usage would increase his work /job performance he/she is willing to use it. The user's perception toward the usage of the system for the improvement of his task is the major factor. Perceived usefulness have the measurements of accomplishment of the work in a more quick, about the productivity rate, efficiency, etc. Because these issues are also the major factors for the adoption of new system in a current real world(Davis, 1989).

- **Perceived Ease of Use** (PEOU) –defined as "the degree to which a person believes that using a particular system would be free from effort". PEOU is the level of understanding of the user about the system that it could be employed on his/her task with less or minimal effort, unless it would be not usable anymore. PEOU has also some measurement of scales like flexibility to interact, making user skillful, clarity, etc (Davis, 1989).

The following diagram shows the technology acceptance models of perceived ease of use, perceived usefulness and technology acceptance (Davis et al, 1989).

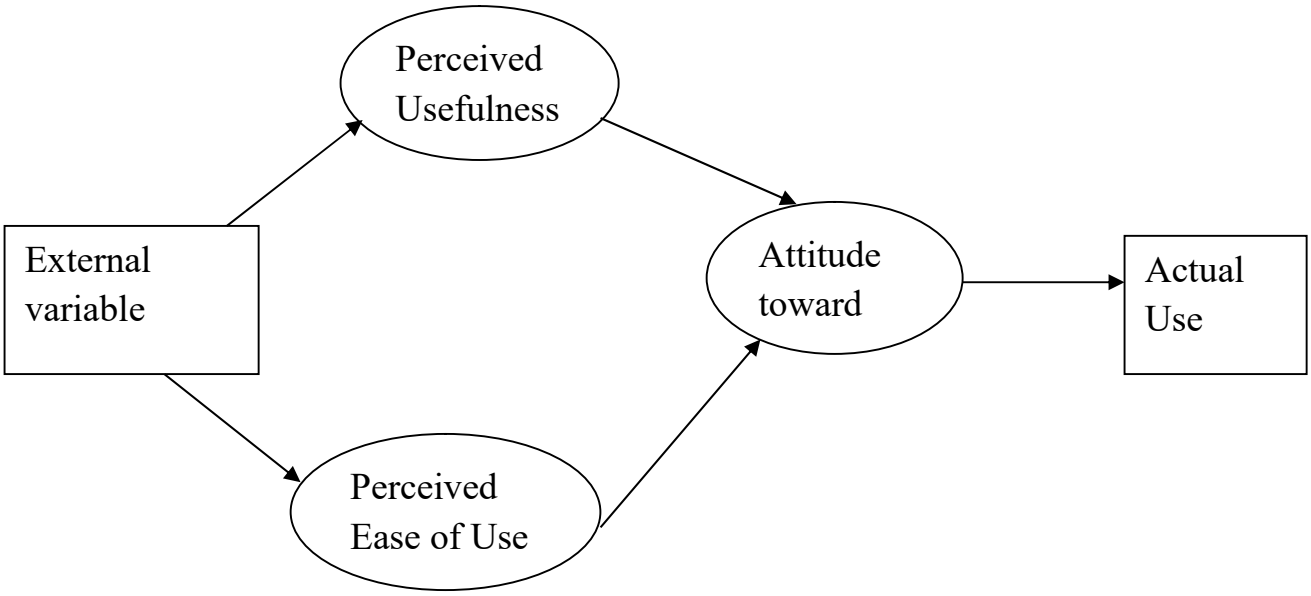


Figure: 2.1. Technology Acceptance Model (TAM) (Source: Davis, 1989

2.3.2 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. Technology adoption within an organization is influenced by factors pertaining to the technological, organizational and external environment context (Tornatzky and Fleischer, 1990).

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 Roger's diffusion of innovation 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 agent banking system(Rogers 2003).

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 but

only those factors that are considered relevant for agent banking adoption will be included in the following framework (Tornatzky and Fleischer, 1990).

2.3.2.1 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, firm size, top management support and financial and human resources in their preference to adopt technological innovation. 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 (Tornatzky and Fleischer, 1990). Accordingly, by consider the financial and human resources as the organizational factor in the framework:

- **Financial and Human Resources: -**Financial resources are important factors 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.

2.3.2.2 Environmental factors

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. 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 agent banking as indicated in various studies (Ayana, 2012).

- **National ICT Infrastructure: -** National ICT infrastructure is a major factor that supports the adoption of agent banking system as the case for other initiatives. Without an adequate development and quality of a national ICT infrastructure, agent banking adoption and use cannot do well (Ayana, 2012).
- **Competitive pressure: -** Competitive pressure can strongly influence any bank to develop and adopt agent banking initiatives and it may affect the bank's perception towards innovation. Intense competition stimulates the adoption of innovation (Ayana, 2012).
- **Government Support:-**Government can either directly or indirectly affect the adoption of agent banking in terms of creating a favorable environment and momentum for banking institutions and their customers so that the services can be diffused with the community (Ayana, 2012)

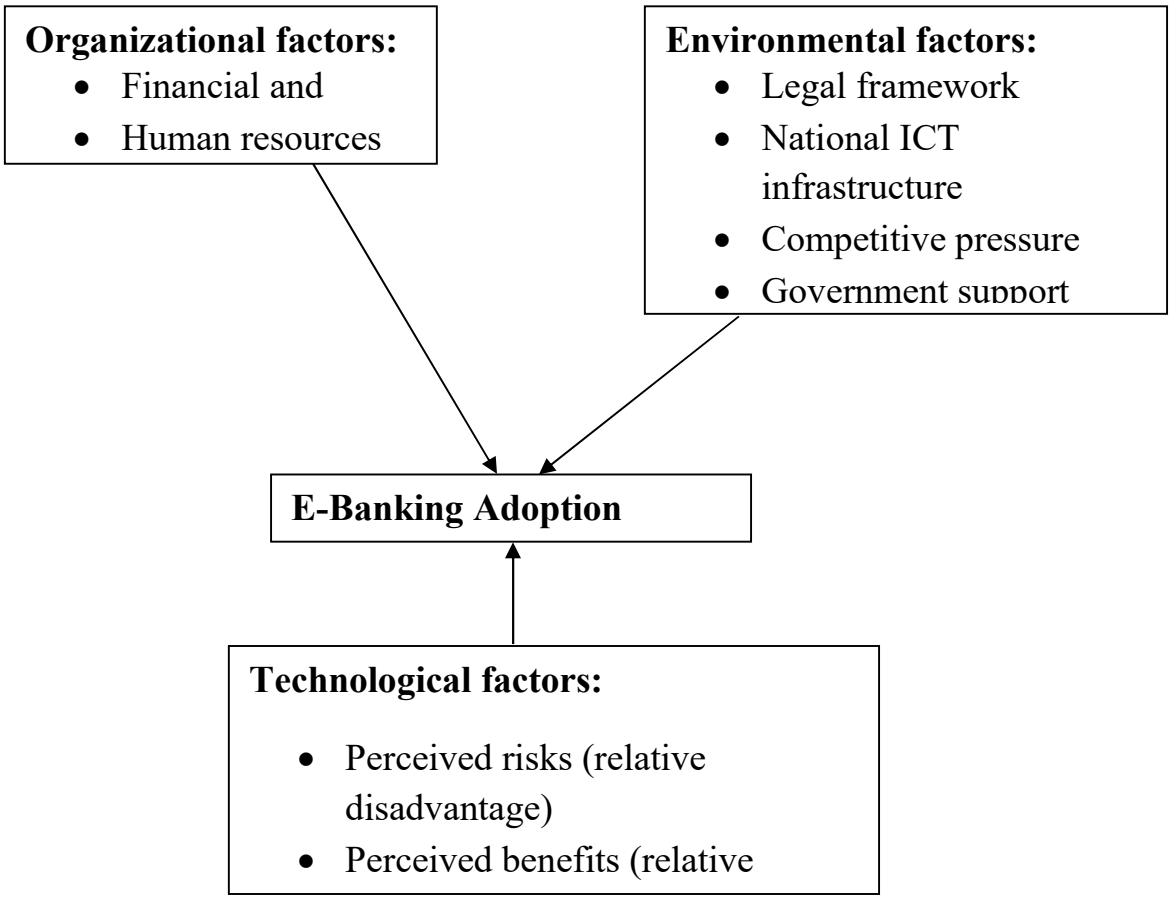
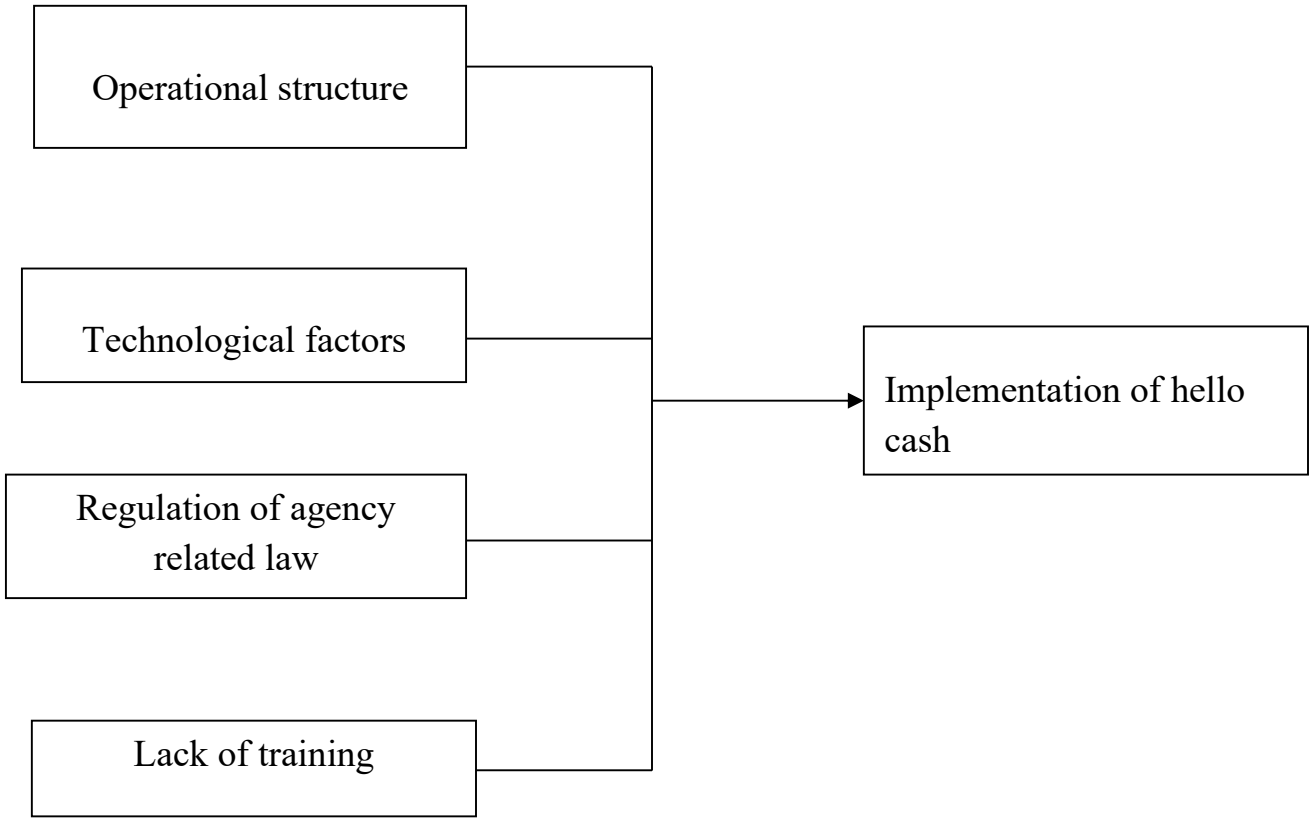


Figure 2.2Technology-Organization-Environment (TOE) framework, Source: Ayana (2012)

2.3.3 Conceptual framework for the study

According to Mugenda et al (2003), a conceptual framework helps the reader to quickly see the proposed relationships between the variables in the study and show the same graphically. Based on the above theoretical, empirical literatures and conceptual framework of other study, conceptual frame work was developed.



Source: Based on the literate

Figure 2.3 Conceptual Framework of the study

The independent variable encompasses factor that influence the implementation of hello cash mobile and agent banking. The independent variables are Operational structure; Technological factor, regulation of agency related law and lack of training. While the independent variable are variable that influence success of hello cash mobile and agent banking implementation that are

internal to the business as well as external or intervening variables such as the NBE directive, technological factor and other natural conditions of the country.

Managing credit risk, operational risk, liquidity risk and reputation risk, Lack of technical and managerial skills and Information sharing on the various channels of communication has impact on operation of mobile agent banking project implementation. Building, incentivizing, and managing network, and Availability and Quality of Infrastructure is a challenge which impact the Agent and mobile banking implementation. Managing the Risk has remained a challenge in association with technologically innovative products like Mobile and Agent Banking. Technological related risks are risks with regard to technology and could be characterized by unparalleled speed of transformation related to technological and customer service innovation, the nature of electronic network is open everywhere in the globe, the mobile banking application systems are integrated with the financial institutions legacy core application systems and with the hardware. And also the independent variables under investigation are likely to influence the agent performance as follows: training ,when the employee is well trained they are likely to satisfy their customer's needs who in turn gain confidence in the resulting in customer retention and growth in number of customers who are attached to the agent. Existence and maturity of legal frameworks and NBE guideline are also regulatory challenge that mobile and agent banking face during implementation.

Dependent variable is effectiveness of the performance of derived from the reaction of the character s of LIB hello cash implementation. Dependent variable is Implementation of hello cash mobile and agent banking project. The success of the project implementation by the bank was dependent on the above variable mentioned in the conceptual frameworks.

CHAPTER THREE

3 RESEARCHMETHODOLOGY

3.1 Introduction

The research methodology section of this study outlines how an investigation has taken place and a research method and design typically including how data has been collected, what instruments employed, how the instruments used and the intended means for analyzing data was conducted. In addition to these, sample selection, populations of the study and the procedures of data collections were presented.

3.2 Research Approach and Design

The decision of whether to carry out a quantitative or qualitative approach lies in the researcher's assumption (Kanaan, 2009). In this study mixed-method approach was employed to ensure effectiveness of the research process as the findings of the qualitative data enhance the findings of quantitative one and the vice versa.

According to Johnson et al (2007), mixed research method is a research practice and recognized as the third major research approach or research paradigm along with qualitative research and quantitative research methods. The research also tried to prove that there might not be a single criterion of demarcation for mixed research methods.

For this study, quantitative research and survey questionnaires were used for standardization purposes to allow for aggregation of the results. The investigation aimed to identify whether the variables were the challenge facing during the implementation of hello cash mobile and agent banking. The research established the effect of independent variables, which included operational structure, technological factor, regulation of related to law and lack of training on dependent variables, i.e. the implementation of hello cash mobile and agent banking.

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004). The study employed a descriptive research design. Descriptive research involves collections of quantitative information that can be tabulated along a continuum in numerical form; it involves gathering data

that describe events and then organizes, tabulates, depicts, and describes the data collection. Descriptive studies are aimed at finding out "what is," so observational and survey methods are frequently used to collect descriptive data (Borg & Gall, 1989). Mugenda and Mugenda (2008) also suggest that a descriptive study can be used to explain two or more variables at a given point in time. They define a survey as an attempt to collect data from the members of the population with respect to one or more variables. Descriptive studies report summary data such as measures of central tendency including the mean, median, and mode, deviance from the mean, variation, percentage, and correlation between variables Data Type and Source. (Earlbaum, 2001)

3.2.1 Data type

The study was using both primary data and secondary data in its construction. Primary data was used collected through questionnaire. This method of data collection was use to collect all the required information. To extract as much information as possible as that helps the researcher in addressing the objective of the study and secondary data also was used collected from reports of National Bank of Ethiopia and annual reports of the Lion international banks S.C.

3.2.2 Data source

The study was using both primary data and secondary data in its construction. Primary data was used collected through questionnaire. This method of data collection was use to collect all the required information. To extract as much information as possible as that helps the researcher in addressing the objective of the study and Secondary data was collected from different documents, records and reports of the industry, regulatory organ reports, from web site, books, annual reports and magazines, articles, journals annual reports of the Lion international banks S.C. and to supplement ideas and views obtained from the primary source.

The questionnaires were structured in close-ended questions by which the respondents were asked to indicate their level of agreement using a five Likert rating scale measurement where: Strongly Agree (SA) = 5; Agree (A) = 4; Neutral (N) =3, Disagree (D) = 2; and Strongly Disagree (SD) = 1

3.3 Target population and Sample

Population is defined as the total number of aggregate of all units possessing certain Characteristics from which a sample of study can be derived. The success of any research Depends on the extraction of the required information from the appropriate population. However,

a research involving a large number of the population under study is sometimes impossible as it requires more resources in terms of time, finances and tools to collect data. A sample therefore needs to be drawn from the entire population that has sufficient Characteristics representing the population to draw accurate inferences from it.

3.3.1 Target population

Among 259 branches of Lion international banks S.C. only Addis Ababa city branch are the target population of the study. The researcher considered 15 Addis Ababa city branches on which the bank give priority measure are go for this study as a population. The researcher believed that from the fact that those who have close involvement in the implementation of hello cash have better knowledge than others.

3.3.2 Sample size determination

A sample is a unit or portion of the target population with sufficient characteristics of the entire population. The key determinant of the sample size is the level of representation required; a high level of assurance can only be derived from a relatively large sample and vice-versa. The researcher used purposive non probability sampling technique in selecting the sample size. The reason that the researcher used purposive non probability sampling is that, a purposive non-probability sampling technique is most effective when one needs to study a certain cultural domain with knowledgeable experts within (Tongco, 2007). Initially, Purposive sampling was used to select bank branches based on their level of business activities. The reason behind such sampling design is to get higher number of response in a single place within short period of time, since the type of staff across all branch are assumed to be homogenous (no segmentation geographically or at branch level)

The researcher tried to reach 15 branches and alternative channel staff closely and currently working staff in the hello cash mobile and agent banking business. Questioner was distributed to all selected branches through head office of the bank in order to have their inputs in the study.

Using the sample size determination formula

(Yemane, 1973) $n = \frac{N}{1+N(e^2)}$

Where n- is sample size, N- no. of population and e- error tolerance. To find out ‘e’ we should know the confidence level, in this study 98% confidence level was taken so that the ‘e’ value was

(e = 1-confidence level) 0.05. The total population = 182, so the appropriate sample size was 15 branch. The questioner was distributed to these staff of the selected branch.

Table 3.1 sample size

Branch	Number of Employee
Yeka	18
Bole	15
Ragueal	15
Atlethaile	12
Gofa	14
Gotera	15
Saris	13
CMC	10
Gerji	11
Stadium	11
Sarbet	12
Imperial	10
Mexico	10
Lafto	8
Kazachise	8
Total	**182**

182/ $(1+182*0.05^2)$

=**125.09;** therefore 125 samples were selected.

3.3.3 Sampling selection procedure

The study was used a type of non-probability sampling called purposive sampling technique for primary data. The rationale behind for the selection of this sampling technique is its advantages on providing representative samples and avoiding conscious and unconscious biases.

3.4 Data Collection Methods and tools

The researcher used a questionnaire for data collection. This is a data collection instrument which will entail a face to face dialogue consisting written questions constructed to provide information from respondents based on objectives of the study. The questionnaires are distributed in hard and soft copy for all participants and make the questionnaire understandable for all participants. The use of questionnaire is to provide more reliable data that ensures confidentiality and to cover the entire population in the shortest of time.

3.5 Data Analysis and Presentation

Blumberg, Cooper and Schindler (2014) define data analysis as a process of gathering, modeling and transforming data with an aim of retrieving useful information, suggesting conclusions and supporting decision-making. Jackson (2009) notes that before data can be analyzed and presented it has to be organized. Organization involves putting the data into some systematic form.

The primary data is collected through questionnaires with 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 respondents and about the branch, while Section 2 covered factors influencing the implementation Challenges hello cash mobile and agent banking system.

The data collected through questionnaires was analyzed with descriptive statistics using statistical package for social scientists (SPSS). The collected close ended questions were inserted in to SPSS

version 20.00 software in order to make a descriptive analysis of the data, which enabled to present quantitatively using frequency and percentage

3.6 Validity and Reliability

The validity of the research was taken into consideration, as close-ended questionnaires were developed and checked by benchmarking the literature review in order to generate a valid and comparable response. The Linkert scale questionnaire items reliability is checked by the Cronbach-Alpha test using SPSS software, which scored in 0.753 as described below. Thus, the score supports the presence of good internal consistency among the items and promise the reliability and acceptability of the items for the study.

Table 3.2 Reliability Statistics of Cronbach-Alpha

Variable	Cronbach's Alpha	N of item
Operational structure	0.752	6
Regulation related law	0.743	3
Technological factor	0.721	6
Over all Reliability	0.753	15

Source SPSS

CHAPTER FOUR

4 RESULTS AND DISCUSSION

The previous chapters dealt with general introduction of the study, review of both related theoretical and empirical literatures to identify the knowledge gap and the research methodology used to meet its objectives. This chapter presents the empirical analysis of the data collected through semi-structured interview and close ended questionnaire which was analyzed through statistical package for social science (SPSS) version 2.0. Accordingly, the chapter has two sections in which the first section contains analysis of the data collected through questionnaire while the second section deals with presenting results of the interview conducted.

4.1 Response Rate

The sample sizes as discussed in chapter 3 a total of 125 questionnaires were prepared to potential respondents to fill the structured questions. Out of the 125 potential respondents, a total of 90 questioners were collected and the remaining 35 were not returned. In the end, a total of 90 respondents filled and returned the questionnaire. The overall respondent rate for the survey was approximately 72%.

4.2 Respondent profile

The researcher collected background data of the staff of selected branch. This was in order to establish the characteristics of the staff that providing those services. This was achieved by evaluating the respondents‟ gender, age and level of education

TABLE 4.1 Demographic Characteristics of the respondent

Variable	Categories	Frequency	Percent	Valid percentage
Gender	Male	50	55.6	55.6
	Female	40	44.4	44.4
	Total	90	100	100
Age	20-30 years	70	77.8	77.8
	31-40 years	20	22.2	22.2
	41-50 years	-	-	-
	51-60 years	-	-	-
	Total	90	100	100
Educational level	Diploma holder	-	-	-
	First degree	76	84.4	84.4
	Second degree and above	14	15.6	15.6
	Total	90	100	100

Source: Own Survey, 2020

Table above shows 50 (55.6%) of the respondents were male and 4. (44.4%) were female. This means the majority of the respondents are male. Similarly, it indicates the highest percentage age of respondents were adults, between the age group of 20 to 30 years 70 (77.8%), followed by age group between 31 to 40 years 20 (22.2%),while the third age group was between 41 to 50 years and fourth age group was 51-60 no respondent included in this age group. This indicates that most of the respondent are young controlling and run a large part of agent and mobile banking.

The other variable in the table was educational level and the majority of the respondents were first degree holders 76 (84.4%), the second is Masters / above 14(15.6%).This shows that majority of respondent were well educated to understand the information sought by the study.

4.3 Distribution of respondents' position and years of service at LIB

The respondents were asked to indicate their length of service in the bank. The results are as shown in Table 4.2 below

Table 4.2 Position of respondents and service year

Variable	Categories	Frequency	Percent	Valid percentage
Position in bank	Top management	6	6.7	6.7
	Middle management	24	26.7	26.7
	Lower management	60	66.7	66.7
	Total	90	100	100
How long have you work in LIB	Below 3 years	32	35.6	35.6
	3-5 years	30	33.3	33.3
	5-10 years	22	24.4	24.4
	Above 10 years	6	6.7	6.7
	Total	90	100	100
How long have you work in position current LIB	Below 3 years	70	77.8	77.8
	3-5 years	20	22.2	70
	5-10 years	-	-	-
	Above 10 years	-	-	-
	Total	90	100	100

Source: Own Survey, 2020

The above table depicts that 6 (6.7%) of the respondents were at top management position and 244 (26.7%) and 60 (66.7%) of them were at middle and lower management position, respectively. This portrays the fact that the knowledge on Mobile and Agent Banking has been better inculcated by lower and middle management level than top management level. These shows that operational activities are getting to cascade down from top management to lower management such that the necessary operational framework and infrastructure for Mobile and Agent Banking were established. Top Managements are engaged in policy making activities and the operational aspect of the business is usually managed by lower management level.32 (35.6%) of the respondent had served below 3 years, 30 (33.3%) of the employees had served between 3

and 5 years and the rest of two categories 22 (24.4%) and 6 (6.7%) served the between 5 and10 year and above 10 years respectively. This indicates the fact majorities of the respondent serves the bank below 3 year and have not enough experience in the banking sector. As can be seen from the table, 70 (77.8%) of the respondent works in current position below 3 years and 20 (22.2%) of works between 3 and 5 years. This shows that majority of the staff is works below 3 years and employees might be transferred either from their former positions in their bank or hired as new employees from outside of the bank.

4.4 Banks' Likelihood of Agency Banking Implementation and branch

The respondents were asked to state to what extent their respective banks consider adopting agency banking. The results are shown in Table 4.3 and 4.4 below

Table 4.3Branch's years of operation

Variable	Categories	Frequency	Percent	Valid percentage
How old is your branch	Below 3 years	12	13.3	13.3
	3-5 years	18	20	20
	5-10 years	28	31.1	31.1
	Above 10 years	32	35.6	35.6
	Total	90	100	100

Source: Own Survey, 2020

As shown in Table 4.3, 32 (35.6%) of the respondent branches have been in operation for above 10 years, and 28 (31%) for 5 up to 10 years, with only 18 (20%) having been set up for between 5 to 3 years and 12 (13.3%) are operated only for years below 3. This could imply a slow growth in the number of players possibly due to high barriers and cost of entry.

Table 4.4 Respondents perception of Banks' Likelihood to implement Agency banking

Variable	Categories	Frequency	Percent	Valid percentage
To what extent do you consider implementation of agent and mobile banking	Not applicable	4	4.4	4.4
	To limited extent	10	11.1	11.1
	To moderate extent	58	64.4	64.4
	To great extent	14	15.6	15.6
	To very great extent	4	4.4	4.4
	Total	90	100	100

Source: Own Survey, 2020

The study sought to establish the degree to which agency banking is applicable and from findings given in table 4.4 above 4(4.4%)of the respondents think that agency banking is "Not applicable".10 (11.1%) of the respondents is of the view that agency banking can be implemented to a limited.58 (64.4%) of the respondents are of the view that agency banking is applicable to moderate extent. 14 (15.6%) of the respondents believe that agency banking can be implemented "to a great extent". 4 (4.4%) of the respondents believe that agency banking can be implemented "to a very great extent" represent as shown in Table 4.6, 84.4% for moderate, great and very great likelihood of agency banking implementation respectively indicates a high inclination towards the implementation of agency banking by most respondent branches.

4.5 Operational structure

A total of 6 questions on operational challenges of Mobile and Agent Banking were asked to indicate the extent to which each respondent agrees to corresponding closed ended statements rated one up to five-point Likert type scales ranging from '1' "Strongly Disagree" to '5' "Strongly Agree". The summary of the results for all the variables under the research study and the result with respect to each statement is indicated below. Accordingly, the researcher tried to interpret the Mean and the Standard Deviation of the data points. The researcher tried to triangulate and complement the result obtained from the interview and open-ended questions with the results obtained from the Likert type statements pertaining to similar variables whenever appropriate.

Table 4.5Statistical Summary on operational structure

	N	Mean	Standard deviation
Agent and mobile banking are easy to understand and use	90	4.23	0.654
Collaboration with other banks on various aspects e.g. receiving agent deposits on behalf of other banks, has an impact on implementation of agent and mobile banking services	90	4.13	0.690
Managing credit risk, operational risk, liquidity risk and reputation risk greatly influence on agent and mobile banking Adoption.	90	3.83	0.738
Lack of technical and managerial skills in implementation and development of agent banking technology.	90	3.76	0.708
Resources allocation has an impact on implementation of agent and mobile banking services	90	4.16	0.820
Information sharing on the various channels of communication has an impact on implementation of agent and mobile banking services	90	4.21	0.662

Source: Own Survey, 2020

Table 4.5 shows the consolidated statistical results on the variables under challenge including the Mean, and Standard Deviation of the data points. The "N" column shows the number of respondents who provided answer for each corresponding variable. On the other hand, the mean tried to tell the average where the data points fall for each specific variable while the standard deviation column showed the variability of the data points for each variable under consideration

Table 4.6 Agent and mobile banking is easy to understand and use

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	8	8.9	8.9
	Agree	50	55.6	55.6
	Strongly agree	31	34.4	34.4
	Total	90	100	100

Source: Own Survey, 2020

Under the above Table 4.6 respondents asked Agent and mobile banking is easy to understand and use is considered, 55.6% of respondents agreed Agent and mobile banking is easy to

understand and use. Whereas, 8.9% of them were uncertain, 1.1% disagrees and 33.3 % strongly agree that Agent and mobile banking is easy to understand and use while a using Agent and mobile banking. In whole, from the result it can be seen that majority of the respondent agree that it is easy to understand and use hello cash mobile and agent banking and it does no required any special knowledge to use. Anyone who wants to use can register and use it.

Table 4.7 Collaboration with other banks on various aspects

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	13	14.4	14.4
	Agree	49	54.4	54.4
	Strongly agree	27	30	30
	Total	90	100	100

Source: Own Survey, 2020

Above table illustrate that54.4% of the respondents agree and 30% strongly agree,1.1% disagree and 14.4% uncertain that Collaboration with other banks on various aspects e.g. receiving agent deposits on behalf of other banks, has an impact on implementation of AB services of agent and mobile banking services. Most of respondent believe that collaboration with other bank on various aspect is important in order to be more secure.

Table 4.8 Managing credit risk, operational risk, liquidity risk and reputation risk

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	2	2.2	2.2
	Neutral	27	30	30
	Agree	45	50	50
	Strongly agree	16	17.8	17.8
	Total	90	100	100

Source: Own Survey, 2020

Table 4.8 summarizes the frequency distribution showing respondents level of agreement to the statement saying "Managing credit risk, operational risk, liquidity risk and reputation risk greatly influences Mobile and Agent Banking". Out of the total 90 respondents, all of them answered to the above statement and out of which 50% of the respondents were agreed, 17.8% was strongly agreed, 30% was neutral and 2.2% was Disagree. Referring to table 4.7 above, the standard deviation was calculated at 0.738 which is less than one and implied that the data points tended to be very close to the mean i.e. 3.83 and higher values such as strongly agreed and agreed were concentrated around the mean value denoting that there was strong consensus by the respondents that managing credit risk, operational risk, liquidity risk and reputation risk greatly influences Mobile and Agent Banking business in Ethiopia.

Table 4.9 Lack of technical and managerial skills

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	2	2.2	2.2
	Neutral	30	33.3	33.3
	Agree	46	51.1	51.1
	Strongly agree	12	13.3	13.3
	Total	90	100	100

Source: Own Survey, 2020

On the above table 4.9, majority i.e. 51.1% of respondents in agreed that Lack of technical and managerial skills has an impact on implementation of hello cash mobile and agent banking. 2.2%, 33.3% and 13.3% have response that disagree, neutral and strongly agree respectively. As per the feedback obtained from respondent, it was observed that Lack of technical and managerial skills in implementation and development of agent banking technology challenges implementation of Agent Banking service. As portrayed in table 4.7 above the standard deviation was 0.708 which had a value less than one and inferring that the data points tended to be very close to the mean i.e. 3.76 and there was general consensus by the respondents for such specific variable under consideration. Therefore, 64.4% of the respondents counted on Lack of technical and managerial skills as one driving factor for the success of Mobile and Agent Banking business.

Table 4.10 Resources allocation

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	5	5.6	5.6
	Neutral	9	10	10
	Agree	43	47.8	47.8
	Strongly agree	33	36.7	36.7
	Total	90	100	100

Source: Own Survey, 2020

Table 4.10 depicts Resources allocation has an impact on implementation of agent and mobile banking services, on which 47.8%, 36.7%, 10% and 5.6% of the respondents agree, strongly agree, uncertain and disagree respectively on it. As indicated in table 4.5, the standard deviation was 0.820 which was less than one and implied that the data points tended to be very close to the mean i.e. 4.16 and there was general consensus by the respondents for this specific variable under consideration. Therefore, the majority of the respondents asserted that Resources allocation has an impact on implementation of agent and mobile banking services.

Table 4.13 Information sharing on the various channels of communication

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	9	10	10
	Agree	50	55.6	55.6
	Strongly agree	30	33.3	33.3
	Total	90	100	100

Source: Own Survey, 2020

With respect to the statement saying "Information sharing on the various channels of communication has an impact on implementation of agent and mobile banking services", all respondents i.e. 90 of them expressed their level of agreement and out of which 55.6% of them agreed and 33.3% of them strongly agreed to the impact of such specific variable on Mobile and

Agent Banking. As portrayed in table 4.5 above the standard deviation was 0.662 which had a value less than one and inferring that the data points tended to be very close to the mean i.e.4.21 and there was general consensus by the respondents for such specific variable under consideration.

4.6 Regulation of agency related law

Table 4.12 summary of regulatory of agency related law

	N	Mean	Standard deviation
Existing regulatory guidelines on Mobile and Agency banking services positively supports the Mobile and Agent Banking business in LIB	90	4.10	0.704
Existing Model adopted by the National Bank of Ethiopia positively supports the fostering of financial inclusion of LIB.	90	3.83	0.797
Lack of legal frame works that enforce banking industries to adopt technological innovation.	90	3.82	0.712

Source: Own Survey, 2020

Table 4.12 provides the summarized result for the Mean and Standard Deviation related to regulatory challenge. The Data was sorted by the mean in descending order showing rank from 1 to 3. Accordingly, as a challenge the level of Existing regulatory guidelines, Existing Model adopted by the National Bank of Ethiopia and Lack of legal frame works could have impacted Mobile and Agent Banking business, ranked highest with a mean score of 4.10. Most of the respondents believed that the Existing Model adopted by the National Bank in the Country will have significant impact on the provision of the Mobile and Agent banking.

Table 4.13 Existing regulatory guidelines on Mobile and Agency banking services

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	15	16.7	16.7
	Agree	48	53.3	53.3

Source: own survey, 2020

Table 4.13 above portrayed the degree to which respondents agree to the statement saying "Existing regulatory guidelines on Mobile and Agency Banking services positively supports the

Mobile and Agent Banking". Out of the total of respondents 1.1%, 16.7%, 53.3% and 28.9% of them answered to the above statement disagree, neutral, agree and strongly agree respectively. As indicated in table 8, the standard deviation was 0.704 which was less than one and implied that the data points tended to be very close to the mean i.e. 4.10 and there was general consensus by the respondents for this specific variable under consideration. Therefore, the majority of the respondents asserted that existing regulatory guidelines on Mobile and Agent Banking services positively supports the Mobile and Agent Ban**ki**ng.

Table 4.14 Existing Model adopted by the National Bank of Ethiopia

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	1	1.1	1.1
	Disagree	1	1.1	1.1
	Neutral	28	31.1	31.1
	Agree	42	46.7	46.7
	Strongly agree	18	20	20
	Total	90	90	100

Source: own survey, 2020

Table 4.14 above shows the degree to which respondents agree to the statement saying "Existing Model adopted by the National Bank of Ethiopia positively supports the fostering of financial inclusion in Ethiopia". Out of the total of 90 respondents, 90 of them provided answer to the above statement and out of which 46.7% of the respondents were agreed while 20% of them were strongly agreed to the statement and 1.1%,1.1% and 33.3% of the respondent strongly disagree, disagree and uncertain respectively. Referring to table 4.15 above, the standard deviation was calculated at 0.797 which was less than one and implied that the data points tended to be very close to the mean i.e. 3.82 and meaning that there was general consensus by the respondents that the existing Model (The Bank Led Model) adopted by the National Bank of Ethiopia (NBE) supports the fostering of financial inclusion.

Table 4.15 Lack of legal frame works that enforce banking industries

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree		-	-
	Disagree	2	2.2	2.2
	Neutral	26	28.9	28.9
	Agree	48	53.3	53.3
	Strongly agree	14	15.6	15.6
	Total	90	100	100

Source SPSS

Table 4.15 above illustrates that 2.2% of the respondents disagree and 28.9% are uncertain, 15.6% strongly agree and 53.3% agree on the fact that Lack of legal frame works that enforce banking industries to adopt technological innovation. Implying that most regulations are being flouted or some disregarded entirely.

4.7 Technological factor

Table 4.16 Summary of technological factor

	N	Mean	Standard deviation
Technical problems such as network failure, operation of the system has landed me in trouble with Agents.	90	4.24	0.692
The level of development of ICT infrastructure and the road network significantly impacts AB adoption.	90	4.12	0.747
Lack of reliable customer support service.	90	3.84	0.763
Technological hitches are addressed within a reasonable time frame by the bank.	90	3.80	0.722
Absence of financial networks that links different banks.	90	4.19	0.777
High cost regarding with the implementation of agent banking. (Such as cost of ICT equipment and network, software and organizational structure)	90	4.23	0.671

Source: Own Survey, 2020

A total of 6 questions on "Prospects" of Mobile and Agent Banking 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. Accordingly, the researcher tried to interpret the Mean and the Standard Deviation of the data points. The researcher tried to triangulate and complement the result obtained from the closed-ended questions with the results obtained from the Likert type statements pertaining to similar variables. The researcher also tried to associate other literatures findings with respective variables under consideration when found appropriate.

Table 4.17 Technical problems

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	10	11.1	11.1
	Agree	45	50	50
	Strongly agree	34	37.8	37.8
	Total	90	100	100

Source: Own Survey, 2020

The summary of the results for all statements or variables under the research study and the result with respect to each statement is indicated above. Accordingly, 50% of the respondent agreed that technical problem is one of challenge that mobile and agent banking face at the time of implementation. Only 37.8% strongly agree, 1.1% disagrees and 11.1% uncertain those technical problems have an impact on implementation of mobile and agent banking. This indicated that network instability and low internet access which are vital part in the delivery of the service are marked as a challenge.

Table 4.18 the level of development of ICT infrastructure and the road network

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	14	15.6	15.6
	Agree	47	52.2	52.2
	Strongly agree	28	31.1	31.1
	Total	90	100	100

Source: Own Survey, 2020

Table 4.18 shows the frequency distribution showing respondents level of agreement to the statement saying "The level of development of ICT infrastructure and the road network significantly impacts Mobile and Agent Banking business". Out of the total of 90 respondents, all of them answered to the above statement and out of which 52.2% of the respondents were agreed, 31.1% was strongly agreed, 15.6% and 1.1% of the total population was neutral and disagree respectively. Referring to table 8above, the standard deviation was calculated at 0.747 which was less than one and implied that the data points tended to be very close to the mean i.e. 4.12 and higher values such as strongly agreed and agreed were concentrated around the mean value denoting that there was very strong consensus by the respondents that the level of development of ICT infrastructure and the road network significantly impacts Mobile and Agent Banking business.

Table 4.19 Lack of reliability customer support service.

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	2	2.2	2.2
	Neutral	28	31.1	31.1
	Agree	42	46.7	46.7
	Strongly agree	18	20	20
	Total	90	100	100

Source: Own Survey, 2020

Table 4.19 depicted the degree to which respondents agree to the statement saying "Lack of reliable customer support service**.**" 33.3% of the respondents were either neutral and disagreed while the remaining 66.7% of the respondents were agreed and strongly agreed to the statement. Referring to table 4.18 above, the standard deviation was calculated at 0.763 which is less than one. The data points tended to be very close to the mean i.e. 3.84 and meaning that more of smaller values were concentrated around the mean. Therefore, there was general consensus by the respondents that the Lack of reliable customer support service does not have an impact on the provision of Mobile and Agent Banking service.

Table 4.20 Technological hitches

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	2	2.2	1.1
	Neutral	28	31.1	31.1
	Agree	46	51.1	51.1
	Strongly agree	14	15.6	15.6
	Total	90	100	100

Source: Own Survey, 2020

As can be seen in the above table, the respondents indicated that 66.7% of the respondent agree and strongly agree about Technological hitches are addressed within a reasonable time frame by the bank. 33.3 % of respondent disagree and uncertain. Referring to table 4.18 above, the standard deviation was calculated at 0.722 which is less than one and implied that the data points tended to

be very close to the mean i.e. 3.80 and higher values such as strongly Agreed and agreed were concentrated around the mean value denoting that there was strong Consensus by the respondents that Technological hitches are addressed within a reasonable time frame greatly influences Mobile and Agent Banking.

Table 4.21 Absence of financial networks that links different banks.

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	4	4.4	4.4
	Neutral	8	8.9	8.9
	Agree	45	50	50
	Strongly agree	33	36.7	35.6
	Total	90	100	100

Source: Own Survey, 2020

According to this table, 86.7% of the respondent agree and strongly agree that absence of financial networks that links different banks affects the implementation challenge of agent and mobile banking. The rest14.3% of the respondents disagrees and neutral that Absence of financial networks that links different banks does have an impact on the implementation. In aggregate, most of respondent agreed and strongly agreed, which means that higher values were concentrated to the mean value i.e. 4.18. Referring to table 4.16 above, the standard deviation was calculated at 0.777 which is less than one and implied that the data points tended to be very close to the mean i.e. 4.19. Higher values such as strongly agreed and agreed were concentrated around the mean value denoting that there was strong consensus by the respondent's that absence of financial networks that links different banks influences the implementation of Mobile and Agent Banking.

Table 4.22 High cost regarding with the implementation of agent banking.

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	-	-	-
	Disagree	1	1.1	1.1
	Neutral	9	10	10
	Agree	48	53.3	53.3
	Strongly agree	32	35.6	35.6
	Total	90	100	100

Source: Own Survey, 2020

Table 4.22 above illustrates that 53.3% of the respondents agree and 35.6% are strongly agree, 1.1% disagree and 10% uncertain High cost regarding with the implementation of agent banking (Such as cost of ICT equipment and network, software and organizational structure). This implies that high technical costs in terms of ICT equipment and network, software and organizational structure are indicated as a challenge in the implementation of Agent Banking service.

4.8 Lack of training

The last objective of this study was to determine how lack of training affects implementation of agency banking and the respondents were asked if they had received any training from the bank and the findings are summarized below.

Table 4.23 if respondents have received any training from the bank

		Frequency	Percent	Valid Percent
Valid	Yes	64	71.1	71.1
	No	26	28.9	28.9
	Total	90	100	100

Source: Own Survey, 2020

According to the findings, 71.1% of the respondents indicated that they have received training from the bank on agency banking while 28.9% of the respondents indicated that they have not received any training from the bank. The findings indicated that most of the respondent participate the training held by the bank.

Table 4.24 if respondents would like to be trained on agency banking

		Frequency	Percent	Valid Percent
Valid	Yes	68	75.6	75.6
	No	22	24.4	24.4
	Total	90	100	100

Source: Own Survey, 2020

According to the findings, 75.6% of the respondents indicated that they would have liked to be trained on agency banking while 22% of the respondents indicated that they were not willing to be trained on agency banking. This shows that the respondents have a positive projection towards agency banking.

4.9 Major Findings of the study

Factors affecting Mobile and banking agent implementation identified in this study were analyzed after grouping in four i.e. operational challenge, technological challenge, regulatory challenge and lack of training.

4.9.1 Operational structure

From the study finding, the researcher noted that hello cash mobile and agent banking to be successful in its implementation, the allocation of resources and Information sharing on the various channels of communication is very vital, Respondents strongly agreed and these two factors had percentages of 36.7% and 33.3% respectively. The study further revealed that Collaboration with other banks on various aspects e.g. receiving agents‟ deposits on behalf of other banks and Managing credit risk, operational risk, liquidity risk and reputation risk and Lack of technical and managerial skills in implementation and development of agent banking technology greatly influences AB Implementation with 54.4%, 50% and 51.1% respectively of the respondents agreeing with that particular factor.

4.9.2 Regulation of agency related law

Majority of the respondents agree that existing regulatory guidelines on Mobile and Agency banking services positively supports Mobile and Agent Banking business in LIB, Existing Model adopted by the National Bank of Ethiopia positively supports the fostering of financial inclusion of LIB and Lack of legal frame works that enforce banking industries to adopt technological

innovation. All stated that at this implementation stage of the hello cash mobile and agent banking, the three existing regulatory challenge has strong impact in the Mobile and Agent banking business in LIB due to that the regulatory body need to amended in the areas of agent networking, agent due diligence and user daily transaction limit when the business starts to grow in the future.

4.9.3 Technological factor

The majority of the respondents indicated that technical problems such as network failure and operation of the system had landed them in problems with agents, constant technology changes, extended times frames to address technological hitches and unreliability of existing telecommunication, low level of development of ICT infrastructure and the road network negatively inhibited them from carrying out their functions thus based on these findings it was concluded that the implementation of agency banking was significantly affected by technological factors thus banks ought come up with strategies that to address the above concerns.

4.9.4 Lack of training

According to the findings of this study 71.1% of the respondents had received training from the bank on agency banking while 75.6% were willing to be trained on agency banking thus indicating that the bank personnel have the concept of agency banking and that implementation of the same is hindered by a lack of knowhow which is as a result of total lack of training.

CHAPTER FIVE

5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This thesis focuses on challenges of implementing hello cash mobile and agent banking in LIB. The purpose of the study was to investigate the challenges facing the implementation mobile and agent services in LIB branch. In order to meet the above research objective, the researcher had been collected primary (questioner and observation) and secondary written documents. Based on the response of employees and managers and data gained from documents the following conclusions were drowning.

The finding of the study shows that the banking sector is eager to embrace mobile and agent banking as an alternative service delivery channel. Mobile and Agent banking presents opportunity for rapid expansion at minimal cost by leveraging on the existing investment of the retail agents through information and communication technology. The study shows that the main challenges facing agency banking implementation among LIB branches in Addis Ababa branch are poor resource allocation, outdated and ineffective technological instruments and lack of training of staff on the relevant policy issues and factors that have a bearing on mobile and agent banking.

The study furthermore shows the challenges that Mobile and Agent Banking face at the time of implementations are the level of development of ICT infrastructure and the road network, the availability of appropriate Agent Banking channels, risk implication on managing credit risk, operational risk, liquidity risk and reputation risk; the influence of competing services offered by banks, lack of technical and managerial skills in implementation and development mobile and agent banking service, the regulatory framework and finally the existing Model adopted by the National Bank of Ethiopia.

5.2 Recommendations

- Banks should facilitate proper and continuous training courses for their employees to have adequate understanding of the Agent banking technology so as to achieve the desired objectives.

- Since Agent Banking service delivery is dependent on telecom technology, Ethio telecom who is a sole provider of telecom service in Ethiopia should enhance and accessible their overall services nationwide.
- The research recommended that bank should collaborate with financial network that links different banks to enhance their service delivery and share costs of ICT equipment and network, software and organizational structure which were indicated as a big challenge in the implementation of Agent Banking service.
- The study further recommends setting up redundant network infrastructures to improve network accessibility. This will enhance network reliability drastically reducing system down times and network unavailability thus improving service delivery.
- Finally, the researcher believes that the paper is not exhaustive that could provide all lists of topics researched. However, it will provide topic and it is open for further discussion and/or critics.

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Appendix:

Questionnaire Part A: General Information.

1. Gender

   Male ☐

   Female ☐

2. Age:

   20-30 ☐

   31-40 ☐

   41-50 ☐

   51-60 ☐

3. Educational level

   Diploma holder ☐

   First degree ☐

   Second degree and above ☐

4. How old is your branch?

   Below 3 years ☐

   3-5 years ☐

   5-10 years ☐

   Above 10 years ☐

4. What is your position in the bank?

   Top management ☐

   Middle management ☐

   Lower management ☐

5.How long have you worked in Lion international Bank S.C

   Below 3 years ☐

   3-5 years ☐

   5-10ears ☐

   Above 10 year ☐

6. How long have you worked in the current position?

Below 3 years ☐

3-5 years ☐

5-10 years ☐

Above 10 years ☐

7. To what extent do you consider implementation of agency and mobile banking?

Not applicable ☐

To limited extent ☐

To moderate extent ☐

To great extent ☐

To very great extent ☐

8. **Part B: Operational st**ructure please put a tick (√) mark to indicate the extent to which you agree with each of the following statements as regards the adoption of agent and mobile banking by your branch.

Key: 5=Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

	5	4	3	2	1
Agent and mobile banking are easy to understand and use					
Collaboration with other banks on various aspects e.g. receiving agent deposits on behalf of other banks, has an impact on implementation of agent and mobile banking services					
Managing credit risk, operational risk, liquidity risk and reputation risk greatly influence on agent and mobile banking Adoption.					
Lack of technical and managerial skills in implementation and development of agent banking technology.					
Resources allocation has an impact on implementation of agent and mobile banking services					
Information sharing on the various channels of communication has an impact on implementation of agent and mobile banking services					

Part C :-Regulation of agency related law Please put a tick (√) mark to indicate the extent to which you agree with each of the following statements as regards the adoption of agent and mobile banking by your branch.

Key: 5=Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

	5	4	3	2	1
Existing regulatory guidelines on Mobile and Agency banking services positively supports the Mobile and Agent Banking business in LIB					
Existing Model adopted by the National Bank of Ethiopia positively supports the fostering of financial inclusion in LIB.					
Lack of legal frame works that enforce banking industries to adopt technological innovation.					

Part D: -Technological factor please put a tick (√) mark to indicate the extent to which you agree with each of the following statements as regards the adoption of agent and mobile banking by your branch.

Key: 5=Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree

	5	4	3	2	1
Technical problems such as network failure, operation of the system has landed me in trouble with Agents.					
The level of development of ICT infrastructure and the road network significantly impacts AB adoption.					
Lack of reliable customer support service.					
Technological hitches are addressed within a reasonable time frame by the bank.					
Absence of financial networks that links different banks.					
High cost regarding with the implementation of agent banking. (Such as cost of ICT equipment and network, software and organizational structure)					

PART E: - Low level of training

9. Have you received any training from the bank related to agent and mobile banking service?

YES ☐

NO ☐

10. Would you like to be trained on agent and mobile banking?

YES ☐

NO ☐