

**EFFECTS OF AGENCY BANKING ON ACCESSIBILITY OF FINANCIAL
SERVICES IN NAKURU TOWN, NAKURU COUNTY, KENYA**

JANE CHEMOIYWO

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DECLARATION AND APPROVAL

Declaration

This research project is my original work and has not been presented for award of a degree in any other university/institution or for any other purpose.

Signature.....

Date.....

Jane Chemoiywo

Registration. GMB-NE-0216-01-14

Approval

This research project has been submitted for examination with our approval as the University supervisors.

Signature.....

Date.....

Dr.Symon K. Kiprop

Egerton University

Department of Economics

Signature.....

Date

Mrs. Stella. Korir

Kabarak University

School of Business

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DEDICATION

I dedicate this research project to my family members for their unyielding support in the course of my studies particularly my dear husband, David Chemoiywo and our loving children, Doreen and Dennis. May God bless you abundantly.

ABSTRACT

There has been unprecedented competition in the financial sector particularly amongst commercial banks. This trend has persuaded banks to be more innovative in order to remain relevant in the sector. One of the key innovations is the introduction of agency banking in the industry. Since the inception of the same in 2010, it has not been clear the extent to which agency banking has influenced financial services accessibility. The study examined the implication of agency banking on financial services accessibility in Nakuru town. The study adopted descriptive research design. The target population constituted 137 bank agents. A sample of 51 respondents was selected using simple random sampling method. A structured questionnaire was employed in data collection. The reliability and validity of the research instrument were assessed accordingly. The primary data collected were analyzed with the aid of the Statistical Package for Social Sciences (SPSS) version software and Statistical Analysis Software (SAS). Data analysis was in form of frequencies, percentages, means, standard deviations, Pearson's correlation, and regression.

Key Words: *Agency banking, channel innovation, commercial banks, economies of scale, financial services accessibility, Nakuru town*

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LIST OF ABBREVIATIONS

AFI:	Alliance for Financial Inclusion ASCAs:
AML:	AntiMoney Laundering
ROSCA:	Rotating Savings and Credit Association
ASCAs:	Accumulating Savings and Credit Associations
ATMs:	Automated Teller Machines
CBK:	Central Bank of Kenya
CFT:	Counter Terrorism Financing
CGAP:	Consultative Group to Assist the Poor
DBMs:	Deposit Money Banks
DFID:	Department for International Development
GDB:	Gross Domestic Product
KCB:	Kenya Commercial Bank
KYC:	Know Your Customer
MFI:	Microfinance Institutions
MNO:	Mobile Network Operators
NBCs:	Non Bank Correspondents
NPV:	Net Present Value
OPM:	Oxford Policy Management
SAS:	Statistical Analysis Software
SPSS:	Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In the recent past, the banking sector has witnessed profound changes as innovations and technology, competition and other forces that drive globalization create opportunities for growth and expansion. At the same time, the foregoing scenario has presented challenges to the bank managers to be sufficiently creative in order for their banks to remain relevant in the competitive environment (Goddard, Molyneux & Wilson, 2004). Performance is commonly linked to profitability. The level of profitability of a firm reflects its performance. Scott and Arias (2011) asserted that that it is quite possible to discern pertinent indicators of profitability for the banking industry, the hugely complex and nature of the environment in which they are competing notwithstanding. This was alluded to in a study of primary determinants of profitability of the top five banks in the United States of America.

According to the Alliance for Financial Inclusion (AFI, 2012), agency banking describes a banking model where banks provide services through non-bank agents, such as grocery stores, retail outlets, post offices, pharmacies, or lottery outlets. This model allows banks to expand services into areas where they do not have sufficient incentive or capacity to establish a formal branch. This is normally the case in rural and poor areas where 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 recent years, agent banking has been adopted and implemented with varying degrees of success by a number of developing countries, especially the Latin America.

Brazil is more often than not considered as the global pioneer of agency banking due to the fact that it was an early adopter of the model and over the years has developed a mature network of agent banks covering more than 99% of the country's municipalities. Other countries in Latin America that have followed suit include Peru (2005), Colombia (2006), Bolivia (2006), Ecuador (2008), Venezuela (2009), and Argentina (2009). Other

countries that have adopted and utilized the agency banking model are Pakistan, Kenya, South Africa, Philippines, Uganda and India. The regulation, design and implementation of agent banking vary across countries. The differences are evidenced in the variety of services offered by agents, the types of businesses acting as agents, the types of financial institutions that work through agents and the business structures employed to manage them (AFI, 2012).

Cohen, Hopkins and Lee (2008) analyzed the bridge between branchless banking (otherwise referred to as agency banking) and low-income clients. The study was necessitated by the fact that over 4 billion people in the world live below the poverty line (Prahalad, 2005). As such the study sought to understand how branchless banking benefits this cadre of people. It was noted that the banked people are more likely to take up branchless banking services than the unbanked. Persons in rural areas and low-income settlements whose literacy is limited are more often than not skeptical of branchless services. This is mainly due to their lack of understanding in using technology which is part and parcel of branchless banking services (Cohen et al., 2008). A report by Oxford Policy Management Ltd (OPM, 2011) evaluated agency banking models in different countries. The countries analyzed include Colombia, Brazil, Peru, India and Kenya. The study aimed to make pertinent recommendations to a similar model development in Nigeria. The studies focused on regulations and effect of agency banking on the aforementioned countries.

Agency banking was introduced in Kenya in 2010 according to OPM (2011). It is observed that the involvement of key stakeholders in implementation of agency banking cannot be understated (OPM, 2011). The stakeholders should be drawn from both the public and private sectors. The stakeholders should participate in rolling out of mobile financial services model. The OPM (2011) report further underscores the importance of prioritizing and coordinating the national financial inclusion agenda. It is asserted that Kenya engaged in discussion with the Alliance for Financial Inclusion (AFI) regarding support for strategic financial inclusions. Agency banking is a model that is aimed at enhancing financial inclusion by reaching out to millions of people in need of financial services.

The Central Bank of Kenya acknowledges the financial inclusions challenges which Kenya faces (CBK, 2014). The challenges include the cost of financial services and the distance to the bank branches in remote areas of the country (Beck, 2007). It is further noted that Kenya unlike other countries in Latin America, has vast experience with both bank-based and non-bank-based agency banking models. Regarding the bank-based model, in June, 2009, the National Assembly approved banking legislation to be amended in order to enable the use of bank agents. The regulations for agency banking were published by the Central Bank in May, 2010.

There are other key regulations that have enhanced agency banking in Kenya. They include 2008 regulation that allowed deposit taking institutions to use agents; and 2009 amendment to the Banking Act that allowed banks to appoint agents to take deposits and perform other operations. By 2011 there were 45,449 bank agents in Kenya which translated to about 1:889 agent to people served. Comparatively the number of agents per every 100,000 persons is notably higher in Kenya than in other countries such as India, Brazil and Colombia (OPM, 2011). According to the CBK (2011), total transactions through mobile payments amounted to Kshs 76 billion per month. The foregoing underscores the importance of agency banking in the country. The fact that it largely remains unclear regarding financial implication of agency banking in commercial banks in Kenya necessitated this study.

According to a report by CGAP (2010), policymakers around the world seek to encourage the provision of financial services to the unbanked and under-banked poor, they implement regulatory frameworks that enable the spread of low-cost branchless banking while at the same time protect consumers against fraud. This is a difficult balance to strike, particularly when it comes to regulating agents, which typically play a crucial role in receiving and dispensing cash on behalf of the financial service provider (CGAP, 2010). World Bank report (2010) indicates that branchless banking is only allowed to be undertaken by licensed deposit-taking financial institutions (bank and non-bank) or their agents. Furthermore, all customers of financial institutions (FIs) undertaking branchless banking activities must be 16 uniquely identified. In each case customer account relationship must reside with some FI and each transaction must hit the

actual customer account. All FIs and their agents must comply with the Anti-Money Laundering Act (2008) as well as the international standards set by the Financial Action Task Force (World Bank, 2010). According to World Bank (2010), it is a regulatory requirement that adequate customer due diligence, on the spirit of (KYC) be undertaken on all new accounts and on one-off cash transactions over designated thresholds. This requires identifying the customer and verifying the customer's identity: - Financial service providers to keep detailed transaction records for at least five years; Financial institutions to report suspicious transactions promptly to the AML/CFT authority (World Bank, 2010)

A study Conducted by Bold (2011) in Brazil found that some countries restrict the location of agents, though such restrictions are sometimes eased when regulators recognize that the regulations create obstacles to financial inclusion. For example, due to concerns that agents could threaten bank branches, Brazilian regulation originally allowed agents only in municipalities that did not have bank branches (Bold, 2011). Bold (2011) also found that Indian regulators initially required agents to be located within 15 kilometers of a "base branch" of the appointing bank in rural areas, and within 5 kilometers in urban areas. This policy, intended to ensure adequate bank supervision of its agents, limited the use of agents by banks with only a few branches (Bold, 2011). Experience has shown that overly restrictive location requirements can complicate the business case for viable agent-based banking and ultimately work against financial inclusion goals. In addition, the real-time nature of most 17 agent services has enabled remote supervision, thereby obviating one of the central arguments for location restrictions (Tarazi and Breloff, 2011). Tarazi and Breloff, (2011), revealed that regulations often impose some form of "fit and proper" requirements, mandating a form of agent due diligence that requires financial institutions to verify that would-be agents have good reputations, no criminal records, and no history of financial trouble or insolvency. While fit-and-proper criteria listed in regulation often are not problematic, providers and agents have occasionally argued that compliance with particular details can impose significant cost, particularly with respect to gathering documentation (Tarazi and Breloff, 2011). Central banks regulations on agency banking hamper the growth of agency banking, these regulations slows down the penetration of the agency banking

which negatively affect the performance of commercial banks. Central Bank has stringent regulations on agency banking which slow down the growth of agency banking in Kenya thus affecting the performance of commercial banks in Kenya.

1.2 Statement of the Problem

There are seven commercial banks in Kenya that have adopted agency banking. Agency banking was pioneered by the Equity Bank in year 2010 (CBK, 2014). There are several factors that have driven banks to adopt agency banking. This has been occasioned by the perceived increased profitability, increased customer base, attraction of the unbanked population and reduction of costs, upon adoption of agency banking (CBK, 2011). People living particularly in rural areas and slums have been facing challenges of accessing financial services. Many people in these areas prior to the inception of agency banking have been travelling for many kilometers in search of bank services. Indeed, inaccessibility of banking services has rendered many people unbanked (OPM, 2011).

In addition, however, there are scanty studies, if any that have attempted to address agency banking in tandem with financial services accessibility. Understanding the financial implication of agency banking would enable commercial banks to craft growth strategies relative to agency banking or as a way of enhancing financial services accessibility. Further understanding the financial implications of agency banking is likely to benefit millions of Kenyans who rely on agency banking and banking services at large. Therefore, the current study was necessary in establishing the role played by agency banking in accessibility of financial services in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

To examine the effects of agency banking on the accessibility financial services in Nakuru town

1.3.2 Specific Objectives

- i. To examine the effect of channel innovation on accessibility of financial services in Nakuru town

- ii. To analyze the effect of cost of agency banking on accessibility of financial services in Nakuru town
- iii. To determine how economies of scale resulting from agency banking influence accessibility of financial services in Nakuru town

1.4 Research Questions

- i. What is the effect of channel innovation on financial services accessibility in Nakuru town?
- ii. What is the effect of cost on financial services accessibility in Nakuru town?
- iii. How do economies of scale resulting from agency banking influence financial services accessibility in Nakuru town?

1.5 Justification of the Study

Since year 2010 there has been a rapid upsurge of bank agents across Kenya. Many commercial banks such as Equity Bank (pioneer of agency banking in the country), Kenya Commercial Bank, Postbank, Diamond Trust Bank, Cooperative Bank and Family Bank among others. Despite the fact that different names have been associated with the agency model, their functionalities remain similar. It is fundamental to understand the financial implication agency banking to commercial banks going forward. This is likely to enable commercial banks to lay down and implement appropriate financial management strategies in light of agency banking. The study will further add to the body of knowledge in the field of agency banking.

1.6 Scope of the Study

The study was conducted amongst bank agents in Nakuru town which is in Nakuru County. The aforementioned town has many bank agents as exemplified by the Equity Bank, Family Bank, Diamond Trust Bank, Cooperative Bank amongst others. This justified the suitability of the town for the study.

1.7 Limitations and Delimitation of the Study

The study faced quite a number of challenges where the major ones touched on respondents, research instruments and time. Some of the bank agents were not willing to

give the data sought. They had to be reassured that the information gathered was confidential and for academic purposes only. The research instrument restricted how the respondents commented to the suggested statements since it had close-ended questions. Regarding this, it was ensured that the instrument was structured in such a way that it captured data relative to the study objectives. The time available to conduct the study was also limited.

1.8. Operational Definition of Terms

Agency banking: It refers to the provision of financial services to bank customers through the engaged agents under a valid agency agreement. The owner of a business outlet (agent) conducts banking services on behalf of the concerned bank (OPM, 2011).

Agent float: This is the cash at hand and bank balances set aside by the agent for agent banking operations. According to CGAP. (2011). The top concerns among agents are low remuneration, liquidity management and network availability. The operation of the agency is such that a customer deposit at the agent means customer giving cash to the agent and is accounted by the bank by debiting the agent account at bank and crediting the customer's account at the bank. It is therefore not possible for an agent to receive a deposit unless the agent has sufficient credit in the bank. A customer withdrawal at the agent means the agent gives cash to the customer and the bank accounts by debiting the customer's bank account and crediting the agent's account at the bank. An agent then can only pay out a withdrawal if they have cash in their till at the shop. This means the agent has to have both cash in the bank and cash in till. This is a key challenge to banks as most agents are not able to balance the cash holding or have inadequate capital. For some reason banks have not been able to convince some businesses like large retail chains which could be ideal for agency banking. Some of the reasons given are the inability of the banks to provide reconciliation mechanism which has led to the chains losing cash. The situation of float is even worse for remote agents who have to travel to the banks to replenish their deposits when balances run low.

Erratic nature of finance services daily cash limits are also to be considered as part of antimoney laundering initiative by CBK, agents cannot transact above certain limit. Hitting this limit means the agent can only close for the day unless they have applied for

higher limits. In Brazil many agents complain about downtime –POS —frozen by bank once cash limit reached, pending deposit of cash at branch, but often with a lag until POS is unfrozen (CGAP,2010)

Banking agents are retail vendors, lottery outlets, and post offices—trusted local establishments that can double as a kind of bank branch for their customers, processing everything from bill and pension payments to deposits, withdrawals, and money transfers. Increasing access to finance has been bridged with the use of innovation such as agent banking, which allows commercial banks and DTMs to engage the services of third party outlets to deliver specified financial services on their behalf. Following the roll out of the agent banking model in May 2010, commercial banks have been able to contract varied retail entities. These entities, such as security companies, courier services, pharmacies, supermarkets and post offices act as third party agents to provide cash-in-cash-out transactions and other services in compliance with the laid down guidelines (Ivatury et al., 2008).

As at December 2011, there were 8 commercial banks that had contracted 9,748 active agents facilitating over 8million transactions valued at Ksh.43.6 billion. This represented 3% of the total deposit base in the banking industry, (Flaming et al. 2011). As one of the policies initiated by CBK to promote financial inclusion, agency banking has been initiated to fill the gap in the financial sector by championing financial inclusion. Financial inclusion comprises the provision of financial services to the financially excluded segments of society as well as increasing the usage of diverse financial services to the entire Kenyan populace. It embraces sector-wide developments towards creating access to affordable financial services. Financial inclusion may not be fully realized without financial education and consumer protection, which are at the heart of the global financial inclusion and financial sector development agendas (CBK, 2011a). Research Centre (2010) note that, when an agent can both open accounts and facilitate transactions, it not only offers greater incentive for the agent to provide the service to customers, but it encourages customers to use the service as well. An agent must maintain adequate cash and emoney 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 hard cash. In either case, customers will get discouraged if the agent cannot provide the services they need when they need them

Financial services have been inaccessible to the rural population, mainly because of distance and awareness. The emergence of agency banking has brought in financial awareness to the unbanked like information on the importance of having a bank account to make deposits, saving excess cash for future use, and also getting to know of the existence of the various financial services providers who offer unique products to meet various needs of their clientele. In this case the rural customers are able to select that which suits their needs from an informed decision. For instance, bank customers are able to distinguish the account that is cheap to operate given the various bank accounts offered by different commercial banks like Equity, Kenya Commercial bank, Cooperative bank and many others.

Channel innovation: This is an innovative concept or technology that commercial banks came up with in order to enhance their customer reach. Channel innovation as exemplified by agency banking enables accessibility of banking services by bank customers at a reduced cost especially on the part of commercial banks (Scott & Arias, 2011). By bringing the channel closer to the client, agent transaction platforms may also benefit from additional revenue associated with transactions acquired by the agent, such as person-to-person transactions and bill payments. Although customers can conduct these transactions in a branch, proximity may increase their willingness to pay for these services and increase the number of transactions conducted through the channel (Clara, 2010). The nearness to the service provider which are the agents will serve as a motivational tool for customers not near the banks to do their payments through the agents like payment of electricity bills, school fees and many other transactions.

Cost effectiveness: This is provision of banking services at reduced cost. Commercial banks' offering of banking services to their customers through their agents is argued to be a cost effective model (Ivatury & Mas, 2008). Costs Associated with Agency Banking One of the primary impediments to providing financial services to the poor through branches and other bank-based delivery channels is the high costs inherent in these

traditional banking methods. The amount of money expended by financial service providers to serve a poor customer with a small balance and conducting small transactions is simply too great to make such accounts viable. In addition, when financial service providers do not have branches that are close to the customer, the customer is less likely to use and transact with their service (Juanita, 2009). However, the emergence of new delivery models is a way to a drastically changing the economics of banking the poor. By using agent banking, financial institutions can offer saving services in a commercially viable way by reducing fixed costs and encouraging customers to use the service more often, thereby providing access to additional revenue sources (Clara, 2010). In this case agency reduces the cost of doing transactions both to the commercial banks and the customers being served and thus they both enjoy efficiency in fulfilling their financial objectives. Agent banking minimizes fixed costs by leveraging existing retail outlets and reducing the need for financial service providers to invest in their own infrastructure. Secondly, the bank incurs cost only if transactions are realized. Agents receive a commission only if transactions are realized. Therefore the fixed costs accrued by underutilized branches are avoided. Next, agent banking works best for low-balance, high transaction accounts. As a result of lower transaction costs and a transaction-driven revenue model, agent banking systems are most cost effective for transactional accounts with low balances and frequent transactions.

Finally, agent transaction platforms benefit from additional transactional revenue sources. By bringing the channel closer to the client, agent transaction platforms may also benefit from additional revenue associated with transactions acquired by the agent, such as person-to-person transactions and bill payments. Although customers can conduct these transactions in a branch, proximity may increase their willingness to pay for these services and increase the number of transactions conducted through the channel (Clara, 2010)

Economies of scale: These are cost advantages enjoyed by firms due to their large size, output or scale of operation. The foregoing is possible due to the lowered cost per unit in tandem with the increasing scale. Commercial banks with many bank agents enjoy

economies of scale due to the increased number of transactions made by the agents on their behalf (Lozano & Mandrile, 2010).

Financial deepening: It refers to increased provision of financial services by commercial banks with a wider choice of services geared to all income-levels of the society. In respect of agency banking, financial deepening is line with enhancing financial inclusion to people who cannot otherwise access banking services mainly due to physical distance to bank branches (Ivatury & Mas, 2008).

Financial accessibility:

Access to finance is the ability of individuals or enterprises to obtain financial services, including credit, deposit, payment, insurance, and other risk management services. Those who involuntarily have no or only limited access to financial services are referred to as the *unbanked* or *underbanked*, respectively.

Accumulated evidence has shown that financial access promotes growth for enterprises through the provision of credit to both new and existing businesses. It benefits the economy in general by accelerating economic growth, intensifying competition, as well as boosting demand for labor. The incomes of those in the lower end of the income ladder will typically rise hence reducing income inequality and poverty.

The lack of financial access limits the range of services and credits for household and enterprises. Poor individuals and small enterprises need to rely on their personal wealth or internal resources to invest in their education and businesses, which limits their full potential and leading to the cycle of persistent inequality and diminished growth.

Financial services have been inaccessible to the rural population, mainly because of distance and awareness. The emergence of agency banking has brought in financial awareness to the unbanked like information on the importance of having a bank account to make deposits, saving excess cash for future use, and also getting to know of the existence of the various financial services providers who offer unique products to meet various needs of their clientele. In this case the rural customers are able to select that which suits their needs from an informed decision. For instance, bank customers are able

to distinguish the account that is cheap to operate given the various bank accounts offered by different commercial banks like Equity, Kenya Commercial bank, Cooperative bank and many others.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the concepts, theories and empirical studies touching on agency banking and performance especially amongst commercial banks. It also outlines the interaction of study variables in a conceptual framework. It further highlights the research gaps which are addressed in latter chapters.

2.2 Theoretical Review

This section delves into theories that touch on agency banking and financial accessibility. The reviewed theories are then discussed in context of this study. The agency theory Diffusion of innovations theory Nonbank-led Theory, Bank-focused Theory, Modern Economics Theory and the theory of corporate financial management are reviewed.

2.2.1 The Agency Theory

The agency theory was advanced by Jensen and Meckling (1976). It examines the conflict between shareholders and managers; the latter are agents of shareholders. This theory outlines the relationship between the principal and the agent whereby the latter is entrusted to run the interests of the former mostly at a predetermined monetary consideration or otherwise. It is asserted that since managers are compensated on the basis of accounting profits, it increases the incentives to manipulate information and/or favour projects with NPV if they provide immediate profits (Dogan & Smyth, 2002). The foregoing is argued to have negative consequences of potential loss in firm's value (Jensen & Meckling, 2001).

Standard agency theory has it that, *ceteris paribus*, the choice of a privately optimal ownership structure involves a trade-off between risk and incentive efficiency. The theory further states that larger owners are more likely to have a stronger incentive to monitor managers and also more power to enforce their interests which is bound to enhance the tendency of managers to maximize shareholder value. Contextualizing the same to agency banking, large commercial banks such as the Equity Bank and KCB are better placed to realize greater benefits from the agency banking model than smaller banks (Shleifer & Vishny, 1997).

Agency theory further presumes that managerial discretion is negatively associated to firm performance if and when managers employ their discretion to pursue their own selfish interests (Chang & Wong, 2003). The authors, moreover, argue that strategic management of managerial discretion depends largely on a comparison of the objectives of controlling shareholders and those of managers. The bank agents essentially are, as their title suggests, the agents in the principal-agent relationship and are tasked with advancing the interests of commercial banks (principals) at a commission. In agency banking, the principals have a greater say and huge control over the agents in that all the agents' operations are absolutely determined by the management of commercial banks.

Stephen Ross and Barry Mitnick (1972) came up with agency theory, where they said that the principal delegates or hire an agent to perform work. The theory attempts to deal with two specific problems; first that the goals of the principal and an agent are not in conflict (agency problem) and second that the principal and agent reconcile different tolerances for risk. (Bruce et al 2005) say that the challenge in agency theory is to get agents to either set aside their self-interest, or work in a way in which they may maximize their personal wealth while still maximizing the wealth of the principal. This is true as some agents were even closing early than the physical banks according to this study.

2.2.2. Diffusion of innovations theory

The original diffusion research was done as early as 1903 by the French sociologist Gabriel Tarde who plotted the original S-shaped diffusion curve. Tarde 1903 S-shaped curve is of current importance because, Most innovations have an S-shaped rate of adoption (Rogers, 1995). Diffusion research centers on the conditions which increase or decrease the likelihood that a new idea, product, or practice will be adopted by members of a given culture. Diffusion of innovation theory predicts that media as well as interpersonal contacts provide information and influence opinion and judgments. Very little innovators adopt innovation in the beginning. Later Diffusion of innovation theory was developed by E.M. Rogers in (1962) and it originated in communication to explain how overtime an idea or product gains momentum and spreads through a specific population or social system. Researchers have found out that people who adopt an innovation early have different characteristics than people who adopt an innovation

later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation.

There are five established categories of adopters, and majority of the general population tends to fall in the middle categories. The five categories include:- **Innovators**- These are people who want to be the first to try the innovation. They are venturesome and interested in new ideas. These people are risk takers. **Early adopters**- These are people who represent opinion leaders. They enjoy leadership roles, and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. They do not need to be convinced so as to change. **Early majority**- They are rarely leaders, but do adopt new ideas before an average person. They just need to see evidence that innovation works before they adopt it. **Late majority**- These people are skeptical of change and will only adopt innovation after it has been tried by the majority. They need to be told how many other people have tried the innovation and have adopted it successfully. **Laggards**- These are people bound by tradition and very conservative. They are very skeptical of change and are the hardest group to bring on board

2.2.3 Nonbank-led Theory

In this theory customers do not deal with a bank, nor do they maintain a bank account. Instead, customers deal with a nonbank firm either a mobile network operator or prepaid card issuer and retail agents serve as the point of customer contact. Customers exchange their cash for e-money stored in a virtual e-money account on the non-bank's server, which is not linked to a bank account in the individual's name (Kumar, et al. 2006). This model is riskier as the regulatory environment in which these nonbanks operate might not give much importance to issues related to customer identification, which may lead to significant AntiMoney Laundering and Counter-Terrorism Financing (AML/CFT) risks. Bringing in a culture of Know Your Customer (KYC) to this segment is a major challenge.. Regulators also lack experience in the realm. For these reasons, allowing nonbank-led model to operate is an unnecessarily big leap and an unjustifiably risky proposition. However, this model becomes viable after regulators have gained sufficient experience in mitigating agent related risks using bank led model and need to think about mitigating only e-money related risks (Kapoor, 2010).

According to Hogan, B. (1991) to mitigate the e-money risks (which are peculiar to Nonbank-led model), necessary changes in the existing regulations are required. It starts by bringing non-banks under financial regulatory net by giving these entities special status of some sort of quasi-bank/remittance agent etc. Grant of this status depends upon meeting prespecified standards of transparency, financial strength and liquidity. There should be clear, well-defined limits on nature, type and volume of transactions that such entities can undertake. To avoid insolvency, these entities may be required to deposit their net e-banking surplus funds with scheduled banks meeting certain minimum rating criteria (State Bank of Pakistan, 2011). The Nonbank-led Theory is found relevant to the study as it explain how agent deals with customers on behalf of the bank.

2.2.4 Bank-focused Theory

The bank-focused theory emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. Examples range from use of automatic teller machines (ATMs) to internet banking or mobile phone banking to provide certain limited banking services to banks' customers. This model is additive in nature and may be seen as a modest extension of conventional branch-based banking. Customers' primary concerns are to do with the quality of experience, security of identity and transactions, reliability and accessibility of service and extent of personalization allowed. Banks address these issues by providing a branchless banking service with an easy to use interface, made secure with the help of multi-factor authentication and other technology, capable of running uninterrupted 365 days a year (Kapoor, 2010).

The bank-focused theory emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. With the use of agent family bank achieves economies of scale by serving many customers at low cost, this is therefore related to the study as Family bank utilizes Pesa pap agents for low cost delivery of its financial services.

2.2.5. Modern Economics Theory

Modern economics has gone far in discovering the various pathways through which millions of expectations of, and decisions by, individuals can give rise to emergent features of

communities and societies like rate of inflation, productivity gains, and level of national income, prices, and stocks of various types of capital, cultural values, and social norms. Two factors make economic theory particularly difficult (Sohail and Shanmugham, 2003). First, individual decisions at any moment are themselves influenced by these emergent features, by past decisions learning, practice, and habit, and by future expectations. Second, the emergent features that can be well handled by existing economic theory and policy concern only fast-moving variables. The more slowly emergent properties that affect attitudes, culture, and institutional arrangements are recognized, but are poorly incorporated.

According to Tiwari, Buse and Herstatt (2006), economists know that success in achieving financial return from fast dynamics leads to slowly emergent, nearly hidden, changes in deeper and slower structures, changes that can ultimately trigger sudden crisis and surprise. But the complexities that arise are such that most modern economists are frustrated in their attempts to understand the interactions between fast- and slow-moving emergent features.

2.2.6. Theory of Corporate Financial Management

The Theory of corporate financial management, whose proponents are McInnes and Carleton (1982), is a summary of broad flow of financial literature which provides a powerful logic for designing information and decision-making structures in order to support corporate planning. The study will also borrow concepts from 'Structuration Theory' as applied in sociology to understand organizational perspective in relative to agency banking (Indeje & Zheng, 2010). McInnes and Carleton (1982) assert that a theory of corporate financial management is summarized from the broad flow of finance literature. Within this, contributions to a normative theory, amenable to corporate financial modeling are reviewed in some detail. The central propositions of a normative theory are isolated to provide a basis of comparison for the practice of financial modeling as observed through field research study.

The scholars noted that compared to previous experience, computer-based financial modeling systems are today gaining much greater acceptance in business organizations and government institutions. Against this backdrop, a wide gap seems to exist between the information and logic structures programmed into financial models, and the precepts and algorithms derived from a normative theory of corporate financial management.

McInnes and Carleton (1982), further argue that there are three major implementation difficulties creating the gap between theory and practice. First, they observe that there is a constraint in constructing the relevant information in a form which would be meaningful in a normative framework. Within the broad set of managerial activities of an organization, there are several relevant logic structures, including: a financial accounting structure; an economic structure dealing with cash flow, economic value, and marginal rates of return to investment; operating information structures dealing with the conduct of an organization's work; and strategic information structures dealing with an assessment of the external and internal human needs which provide a rationale for an organization's present and future existence.

The systematic provision of information in each logical mode, and the translation between modes, poses a considerable intellectual and practical challenge. Then there is the problem of dealing satisfactorily with strategic uncertainty, and the way that uncertainty is distributed within the managerial organization. More so, multiple and conflicting goal dimensions pose considerable problems in terms of an explicit modeling of a corporate objective function. In respect of agency banking, commercial banks have or ought to have a financial accounting structure and also an economic structure which can aid in assessing the financial implications of embracing agency banking as compared to traditional bank branches. .

In conclusion these theories bring the meaning closer to the population worldwide and especially to the Kenyan population. Relating the diffusion theory to agency banking, the agency banking is clearly an innovation that requires time to reach critical mass. With regard to communication channels, banks have done well to popularize the agency banking with service names that resonate well the target population. Such names include; Equity ndio hii, Kcb mtaani, co-op kwa Jirani ,Family papo hapo DTB Mlangoni, Post Bank Mashinani and so on. Such names intended to create a sense of ownership and create confidence among the banks customers for a service that has been devolved to their neighborhood or brought closer to their doorsteps. Agency theory relates well with agency banking as most of banks have sought the services of third parties in offering the banking services to their customers. These bank Agents are paid some commission by the banks which they work for. The nearest branch of the bank provides necessary logistic support to their respective Agents.

2.3 Empirical Review

Empirical studies hitherto conducted from global, regional and local perspectives are reviewed in this section. Essentially, the study looks into studies bordering on various aspects of agency banking (channel innovation, cost, and economies of scale) alongside accessibility of financial services. The review narrows down to financial institutions particularly commercial banks.

2.3.1 Channel Innovation

A study conducted in the United States on technological progress and the geographical expansion of the banking industry indicated that the banking sector is likely to experience probable diseconomies to geographic expansion in the form of agency costs occasioned by monitoring junior managers based in far-flung locations (Berger & Deyoung, 2006). The authors further opined that innovations in information processing and telecommunications could minimize the agency costs by improving the capacity of senior bank managers at the head offices to monitor and communicate with employees at distant branches. It is further posited that technologies such as automated teller machines (ATMs) and transactional internet websites allow commercial banks to interact more efficiently with their customers geographic proximity notwithstanding. Recent innovations in financial technologies present the capacity to offer the foregoing services using long-distance interfaces with customers (Scott & Arias, 2011).

Li, Pan and Tse (1999) in their study observed that large banks are more likely to embrace channel innovation due to the robustness of their capital resources. The authors asserted that large firms have more resources to invest in innovations, pursue more aggressive expansion strategies and also perform better. A study conducted in Colombia on branchless banking revealed that a group of major commercial banks have employed branchless banking channels to deliver services and reach prospective customers through retail outlets (Lozano & Mandrile, 2010). It was noted that the users of these innovative services have predominantly been the financially endowed persons. In other words, the services are not targeted to the poorest market segments. It is further noted that adoption of agency banking has been quite faster in Brazil than in Colombia probably due to failure by the commercial banks in the latter country to spearhead this innovation. Indeed,

Brazil has the largest agency banking network in the world and as a result, it has influenced other Latin American countries.

Studies indicate that there are some good opportunities for agency banking in Nigeria. In the same light, it is noted that some deposit money banks (DBMs) have already started experimenting with innovations in agency banking. Furthermore, some banks in the said country have been pursuing aggressive expansion strategies. However, it is noted that according to the findings of empirical studies conducted in other countries, there is no single, perfect, regulatory model for agency banking in Nigeria; though specific aspects of the regulations in each country could be adopted (Oxford Policy Management, 2011). It is noted that the Central Bank of Kenya appreciates the financial inclusion challenges which Kenya faces. These challenges border on the cost of financial services and the distance to bank branches especially in remote areas. One of the CBK's approaches to address these challenges is to promote innovation through mobile financial services and also to look into the delivery channel costs through enhanced use of agency banking (CBK, 2010).

2.3.2 Cost

An empirical study by Oxford Policy Management (2011) noted that, one of the major constraints in financial inclusion is cost. The costs revolve around commercial banks involved in servicing low-value accounts and extending physical infrastructure to remote rural areas, and the costs incurred by bank customers in remote areas to reach bank branches. The study further noted that agency banking plays a fundamental role in cutting the aforementioned costs to the advantage of both commercial banks and their customers. Another study conducted in Colombia indicates that branchless banking has enhanced financial accessibility to the lowered transactional costs (Ivatury & Mas, 2008). The authors note that this form of banking has the capacity to provide formal banking services at lower costs than the traditional brick and mortar banking to not only the consumers but also the financial institutions offering the services. The cost effectiveness is, in other words, occasioned by lack of necessity by commercial banks to put up physical structures and human capital to run the bank operations as is the case with bank headquarters and branches.

In Brazil, agency banking has been observed to contribute towards cost-cutting and thus facilitating growth for banks. In Peru, agency banking is asserted to be the cheapest means of accessing financial services (Oxford Policy Management, 2011). In a study on branchless banking in Colombia, Lozano and Mamdrille (2010) posited that early experiences have indicated that bank agents can significantly reduce set-up and delivery costs. Essentially, agents can cost-effectively offer cash in/cash out operations only or a spectrum, of financial services to bank customers who more often than not feel more comfortable banking at their local retail outlets that at traditional bank branches. The authors hypothesized that there is a way of accessing low-income population with financial products through a “win-win branchless banking solution” for both the banks and their agents which ultimately result in saving of costs and reduced prices for customers.

Oxford Policy Management’s (2011) study reported that agents in Nigeria could effectively be utilized to make payments to beneficiaries of conditional cash transfer programmes and to provide other financial services such as sale of insurance products, dispensing food vouchers amongst others. The foregoing have been observed to enhance the efficiency of agricultural value chain finance by reducing transaction costs and as such enables buyers, sellers and financiers to undertake more efficient clearing and settlement.

Beck (2007) conducted a study on barriers to banking in Kenya where the author argued that banking is relatively expensive in Kenya. The study further indicated that the minimum balances required by Kenyan commercial banks are significantly high as they equal to 44% of the Gross Domestic Product (GDP) per capita compared to a global average of 8%. It is further lamented that annual fees in the country are also high at 2% of GDP per capita compared to a global average of 0.38% (Beck, 2007). It is, therefore, obvious that the cost of financial services is equally high. Agency banking has come to mitigate the foregoing challenges by addressing the delivery channel costs (CBK, 2010). CBK further emphasizes that the costs of financial services should clearly be described and communicated to the bank customers.

According to Arora and Ferrand, (2007), access to Finance is critical for sustainable economic growth and social development. Financial inclusion empowers low income people and marginalized sectors of society to actively participate in the economy, which leads to increasing employment and decreasing poverty levels (Arora and Ferrand, 2007). Apart from increasing access to those excluded from financial services and reducing reliance on informal financial sources such as Accumulating Savings and Credit Associations (ASCAs), Rotating Savings and Credit Associations (ROSCAs) and shylocks, agent banking has reduced the need for more staff and branches to reach customers (Arora and Ferrand, 2007).

Bean, (2009), states that agent banking has reduced cost and enhanced efficiency in the financial sector with a possibility and availing financial services at much lower cost to consumers (Bean, 2009). It has also increased the ease of banks' expansion hence outreach to far flung market pockets of bankable populations (Bold, 2011). Agent banking means commercial outlets like shops and supermarkets acting in some capacity on behalf of formal banks (Hogan, 1991).

A study was conducted by Ngigi (2012), on the effect of financial innovation on financial performance of Kenyan commercial banks, provides relevant information to this study. The study concentrated on the introduction and adoption of more efficient and real time systems of finance by the commercial banks. Financial innovation involves a host of new services and new products, new production methods and new forms of organization including internet exclusive banks and agency banking. With regard to new products, the study highlighted the exchange-traded index funds and adjustable rate mortgages. New services included mobile banking, internet banking and online securities trading. New production methods included credit scoring. Clearly, financial innovation is more than one way embedded in the enhancement of financial performance of financial institutions, and not just banks. Most of the strategies involved in financial performance focus on improving accessibility, convenience and reducing cost of operation as much as possible. These facts make this study by Ngigi (2012), very essential and relevant.

A study done by Ndiema (2008) sought to establish the effect of agency banking on the financial performance of Kenyan commercial banks. Ndiema (2008), postulates that the twenty first century has been riddled with by rapid growth and application of technology that involves innovative ways of doing business, in a way that enhances effectiveness and efficiency with improved productivity/ profitability and reduced cost. The banking sector in Kenya has come across developmental innovations that includes; ATM, women oriented banking, mobile banking, internet banking, credit card youth oriented accounts, 18 children accounts, sharia compliant banks in recent past agency banking since may 2010.

This study sought to find out how agency banking has improved the financial commercial banks performances especially in Kenya. The researcher was driven by objectives namely; to establish the extent of implementation of agency banking and financial performance and to determine the challenges facing commercial banks at implementation of agency banking. The researcher appraised relevant literature and conducted a descriptive research design survey study to establish the effect of agency banking top financial performance of commercial banks. The results of the study indicate that largely, agency banking had been implemented by commercial banks performing agency banking. That agency banking has enhanced the financial performance of commercial banks in Kenya with regard to profitability, establishing branches and reduced employment cost. Chi-square test was used to carry out a cross-tabulation to find out the relationship between bank operation cost and bank financial performance because of implementation of agency banking. Agency Banking has also its share of challenges that was in general agreed that there was room for improvement and with time overcome the challenges.

Mwangi, (2013) evaluated the role agency banking plays in Kenyan commercial banks performance. Keen to take advantage of the accessibility and cost-saving brought about by the model of agency banking, Kenyan financial institutions have embarked on an aggressive entry into this segment over the last one year. However, it is yet to be documented how this model has contributed to the performance of these banks in Kenya. This study's objective was to evaluate the role played by agency banking in the good or bad performances of commercial banks in Kenya The study depicted that some of the

regulations effects on the performance of commercial banks attributable to agency banking were executive management and board of directors, quality control and accountability. The study concluded that infrastructure security and cost influence the performance of commercial banks attributable to agency banking to a very great extent. Therefore, the study recommends that Agency banking should be accorded more attention on measures of security including risk-based approach and that the banks should seek better ways of screening their agents to make sure that large cash transactions handling is carried out effectively on their behalf. It is also recommended that banks explore other services, other than only money transfer to enhance their performance through agency banking such as: operating systems secure enough and capable of conducting real time transactions, generating an audit trail, and protecting data integrity and confidentiality

Therefore it satisfies the second specific objective on to analyze the effect of cost on financial accessibility services. We found out that agent banking systems are cheaper to operate than branches for two reasons. First, agent banking minimizes fixed costs by leveraging existing retail outlets and reducing the need for financial service providers to invest in their own infrastructure. Although agent banking incurs higher variable costs from commissions to agents and communications, fixed costs per transaction for branches are significantly higher

In an underutilized branch, fixed costs are distributed over a smaller number of transactions, resulting in significantly higher costs per transaction. Agent banking systems, on the other hand, receive a commission only if transactions are realized.

Agency banking represents a significant opportunity to reduce transaction costs such as travel for clients by bringing financial services to hard-to-reach and geographically dispersed areas. This is especially true in Africa where some areas are sparsely populated leaving long distances between the customer and the bank. Moreover, in these areas overall literacy levels are fairly low. Also, banks and other financial institutions often do not have sufficient incentive or capacity to establish formal branches in these areas. Obviously, the set-up of agent banks is less costly and more flexible than for traditional bank branches since it reduces the need to invest in staff and physical infrastructure.

These views are supported by Kithaka (2001) and Kasekende (2008) among other researchers. In countries where agency models have been successfully implemented, regulators and supervisors have tried to address the potential risks of using a large number of agents to deliver financial services by adopting risk-based approaches to supervision where agents are supervised indirectly and banks must assume full responsibility for their agents. This has been done with varying success rates. Kasekende (2008) argues that regulation enabling agent banking allows for sufficient business incentives for both agents and financial institutions to increase outreach by delivering financial services through a network of agents. Many of these initiatives not only enhance the value of the model but they reduce the overall cost of banking for the low-end bank client.

2.3.3 Economies of Scale

Li *et al.* (1999) conducted a study on commercial banks. They noted that large banks just like large firms do enjoy economies of scale. They further stated that big organizations benefit from economies of scale and scope. In other words, there is a tendency of better performance amongst large firms, *ceteris paribus*. A study on branchless banking in Colombia (Lozano & Mandrile, 2010) indicated that one way of bank agents to break even and eventually be profitable is through increment of transactions volume. Increasing the number of daily transactions per agent on economies of density (reaching as many customers as possible) and economies of scope (offering as many services as possible) is the most promising strategy. In Colombia, microfinance institutions (MFIs) act as bank agents and in order for agency banking to be profitable to them (given that they are entitled to commissions from commercial banks), they ought to enhance the attributes of economies of scale (Mas, 2009).

Another study noted that in Brazil, Caixa Economica Federal which is a commercial bank enhanced its economies of scale by partnering with more than 9,000 lottery outlets that offer agency banking. The firm had a total of 64,000 agents by the end of 2000 which implies that by then it enjoyed huge economies of scale (Oxford Policy Management, 2011). A report by Central Bank of Kenya indicated that, in Kenya, there are strict parameters on the size or frequency of transactions by a bank agent and a maximum daily

balance that may be held by an agent (CBK, 2010). The bank agents are entitled to a commission on every transaction they carry out. Interpretatively, the more transactions they make, the higher their gains and the reverse is true. From the banks' perspective, they are bound to benefit from the transactions made by their agents. Therefore, according to the report, the more the number of bank agents the greater the likelihood of the bank making more transactions through its agents and ultimately its performance will be enhanced.

Another study which was noted in Brazil, Caixa Economica Federal which is a commercial bank enhanced its economies of scale by partnering with more than 9,000 lottery outlets that offer agency banking. The firm had a total of 64,000 agents by the end of 2000 which implies that by then it enjoyed huge economies of scale (Oxford Policy Management, 2011). A report by Central Bank of Kenya indicated that, in Kenya, there are strict parameters on the size or frequency of transactions by a bank agent and a maximum daily balance that may be held by an agent (CBK, 2010). Therefore there is a good expansion of agency banking in Nakuru Town.

When financial agent banks 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. According to Podpiera (2008) agency banking does improve the economics for these institutions compared with branches, especially for high-transaction, low-balance accounts that are common among poor user

2.3.4 Accessibility of Financial Services

According to a study by Cohen, Hopkins and Lee (2008), many low income households continue to lack access to formal or semi-formal financial services. This results from the assertion that such households either live in areas such as rural areas where low population densities make delivery with existing provider business models too costly, or

the transaction costs make the products too expensive for the poorer segments of the population who are consequently excluded or choose to self-exclude. In addition, Ivatury, G, and Mas, I. study (2008) indicated that agency banking which is a form of branchless banking has received a lot of enthusiasm due to its potential to deliver financial services to many people at the bottom of the pyramid.

Arora and Ferrand, (2007), reveal that technology adoption especially, in banking systems has shown a great momentum and spread at an unbelievable pace across the world. Considering the importance of banking systems high presence and affordability, there is great potential of using this in agent banking for provision of banking services to unbanked community (Arora and Ferrand, 2007). However, technology systems have associated data and network security risks which make them susceptible for conducting financial transactions. Technology risks regarding information and data security based on applicable models of agent banking have been reported thus creating uncertainty to the clients (Owens, 2006).

Owens, (2006), states that financial institutions are required to plan and act for long term development and prosperity of their agents for them to reach the targeted customers at a set population. This requires close coordination/collaboration with agents; providing them opportunities to learn more, to become more efficient and; a fair pricing mechanism for the services provided by the agents (Arora and Ferrand, 2007). As the technology changes rapidly, banks have been greatly affected in its operation, whereby application of the technology ensures quick and effective services to the clients. However, banking agents do not change their system as frequent often leading to system failure and the consequent delays in transaction execution (Lyman, et al, (2008). This leads to customer inconvenience and trust over the security/safety of transaction lodged with agent banks. Moreover, these constant systems failure makes transactions with banking agents vulnerable to fraud.

It is asserted that in spite of the unprecedented international attention and enthusiasm from any development organization and business enterprises, branchless banking fails to provide a fit-for-all solution of financial inclusion (Ivatury & Pickens, 2006). In

Colombia, Lozano and Mandrile (2010) conducted the first research attempt on the relationship between branchless banking and financial inclusion. The authors looked into the current development of branchless banking in Colombia within the context of the government's strategy to promote access to financial services through non-bank correspondents (NBCs). The study noted that, as one way of enhancing financial deepening, the Colombian government decided to develop branchless banking model based on non-financial institutions providing financial services on their own behalf due to lack of regulation and supervision of such entities. This led to agency banking model. Yet, against this backdrop the study revealed that Colombia's banking sector has failed to embrace branchless banking solutions. This has in turn negated financial deepening given that the banking sector has not been keen in enhancing financial accessibility to low-income populace.

Central banks play a key regulatory role in any financial market. They have been at the center of the growth of Agency banking in developing countries. In Kenya, the Central Bank of Kenya has played a pivotal role in enhancing penetration of the agency banking model. In 2009 for instance, the CBK commenced measures to open up banking channels to non-bank agents. An amendment to the Banking Act allowed banks to start using agents to deliver financial services. It was then argued that using small shops, petrol stations, pharmacies and other retail outlets as agents could have a dramatic impact on improving access to financial services, especially in rural areas. This resulted into mushrooming of many agency banks in the country (Baron 2002). This decision has been widely praised as having resulted in the deepening of the financial sector and raising overall levels of financial literacy in the country.

According to Berger (1998), agent banks offer similar services as a real bank. This ranges from cash deposits and withdrawals, disbursement and repayment of loans, payment of salaries, pension, transfer of funds, and issuance of mini-bank statements, among others. Berger further argues that, the agent also facilitates new account opening, credit and debit card application, cheque book request, hence eliminating the need for the commercial bank to have branches all over. This is being replicated across the country, especially in rural areas. The Kenyan situation remains an important case study in this regard. In

Kenya, the Central Bank has already licensed four banks to carry out agent banking business and approved 8,809 agents. Many others are expected to be licensed in due course. This is expected to deeply boost penetration of low cost banking services in the country.

Perhaps the greatest benefit of agency banking in Kenya has been taking banking services to areas that hitherto would have remained unbanked for a long time. These are areas that most banks always shunned because of economic factors. Taking the bank to the community has not only widened and deepened the financial market but it has also enhanced customer loyalty to respective banks. This has continued to create committed entrepreneur-clients. According to Christopher (2002) the process of loyalty building can be seen in the form of a ladder in which the customer has to be converted into a client then into a supporter, an advocate and ultimately to a partner. Finding loyal entrepreneurs requires targeting those segments to which the bank can deliver superior value. The economic benefits of customer loyalty often explain why one bank is more profitable than its competitors. Therefore, building a highly loyal customer base cannot be done as an add-on; it must be integral to a bank's basic business strategy. The agency banking model has played this role in a great way.

According to Cohen (2002) the ongoing global expansion of a high-tech telecommunications infrastructure, coupled with the increased availability of advanced information technology services, is having an impact on almost every emerging industry. Emerging industries are newly formed or reformed industries that have been created by technological innovations, shifts in relative cost relationships, emergence of new consumer needs or other economic and sociological changes that evaluate a new product or service to the level of a potentially viable business opportunity. The agency banking model is expected to continue playing a catalytic role in expanding the reach of banks within a rapidly changing technological environment.

In Kenya, a study by CGAP (2010) showed that, mobile network operators (MNOs) have indeed played a crucial role in driving the financial market forward. Yet, the study observed that there exist no partnerships between commercial banks and MNOs which object to provide services to the unbanked at large scale. An OPM's (2010) study

recommended that the role of donors and the World Bank in facilitating the development of agency banking in Kenya ought not to be underestimated. The study noted that Association of Financial Inclusion's (AFI) support to the Central Bank of Kenya (CBK) in drafting the agency banking guidelines implied that the regulations borrowed the extensive experience of agency banking from both Brazil and Colombia. OPM further established that the multi-donor Financial Sector Deepening Kenya Trust provided substantial support to Equity Bank both directly and also through their support to MicroSave. Indeed, M-PESA, a Safaricom Limited's mobile money transfer flagship, was supported by a £1 million grant from DFID's Financial Deepening Challenge (OPM, 2010).

A study done by Njagi (2014) sought to establish how agency banking contributed to the financial performance of Kenyan banks. He holds that more than 6.5 million adult rural Kenyans are either unbanked or under-banked. This can be attributed to the lowly paying business transactions done in rural Kenya and the high cost needed to sustain bank branches in rural Kenya which makes the establishment of new commercial banks in rural Kenya a non-profitable venture. Due to this, technology has provided opportunities for service providers in the banking sector to enable customers enjoy greater banking flexibility. Agency banking has a number of technologies that enable banking service providers to keep track of the transactions made by retail banking outlets. This study was guided by directions of previous researches carried out abroad in an effort to establish the influences of agency banking on commercial banks' financial performances in Kenya. The study also established that low transaction costs that were obtained due to the use of agency banking had a positive effect on the financial performance of Kenyan commercial banks. The study further found out that customers could easily access financial services due to the use of agency banking. This led to a positive impact on the financial performance of the Kenyan commercial banks.

2.4 Conceptual Framework

A conceptual framework is a diagrammatic representation of the interaction of study variables as outlined in Figure 2.1. As the Figure indicates, there are three sets of study variables, that is, independent, dependent and intervening variables. There are three

independent variables which include channel innovation, cost, and economies of scale. On the other hand, the study was guided by financial services accessibility as the dependent variable. The framework hypothesizes the existence of relationships between each of the aforesaid independent variables and the dependent variable. In other words, it is presumed that channel innovation, cost, and economies of scale separately influence financial services accessibility in Nakuru town. In addition, it is stated that the CBK's regulations, competition in the financial sector, and the size of commercial banks determine how agency banking impacts on financial services accessibility in Nakuru town.

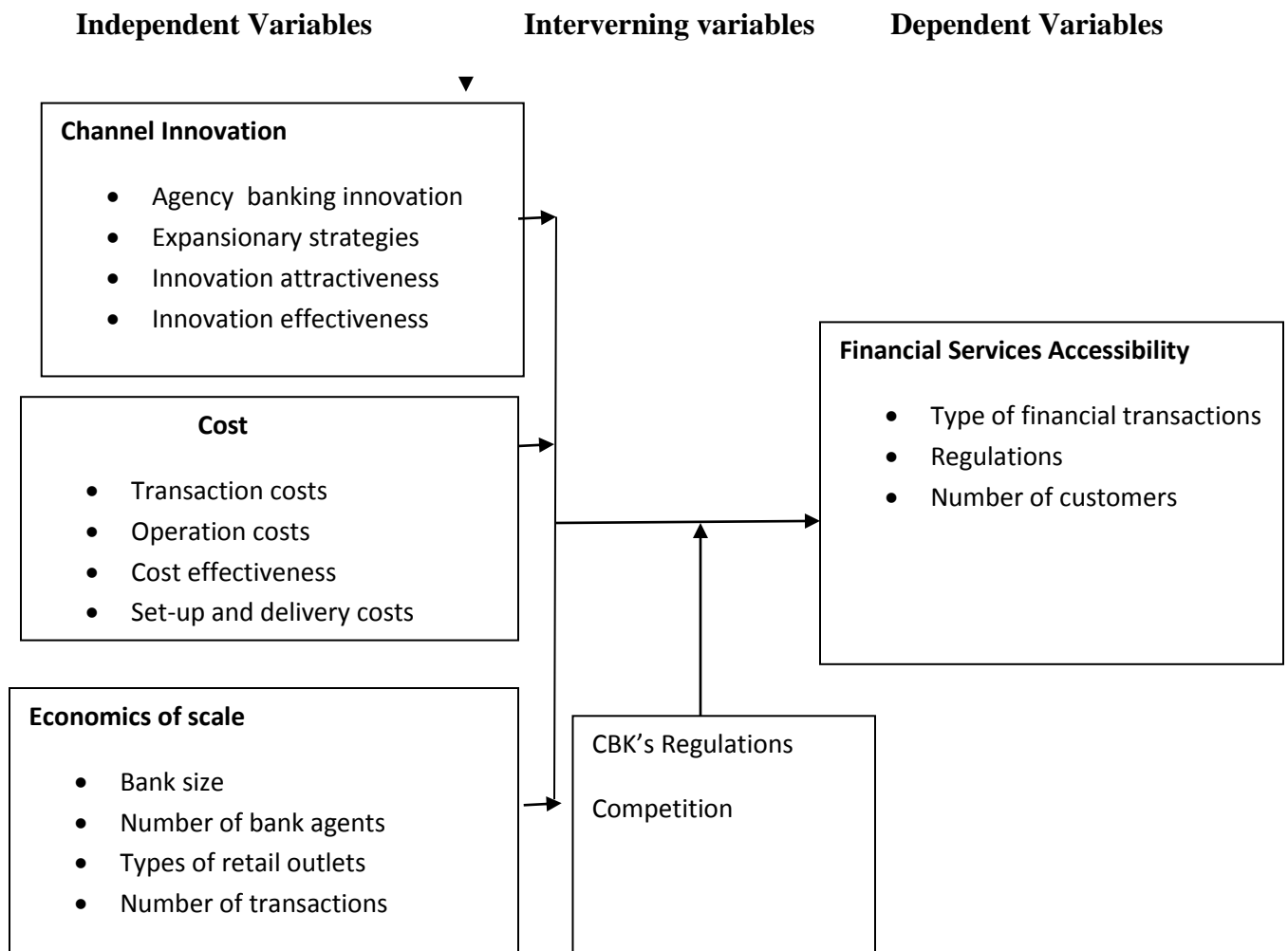


Figure 2.1: Conceptual Framework.

Source: Researcher (2015)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the research design adopted. It also highlights the target population and the sample used in the study. In addition, it outlines the various steps followed to model the research instrument, collect data and analyze the same with the view of arriving at findings pertinent to the study objectives.

3.2 Research Design

This study adopted descriptive research design. This was due to the fact that the study sought to have an accurate description of the study variables and also study the relationship between the aforesaid variables.

3.3 Target Population

The target population for this study constituted the 137 bank agents in Nakuru town. The bank agents were homogenous in that they offered similar services to bank customers.

3.4 Sample Size and Sampling Technique

The target population of 137 bank agents necessitated sampling. The sample size was calculated by use of Nassiuma's (2000) formula as shown.

$$n = \frac{NC^2}{C^2 + (N-1)e^2} \quad \text{Where}$$

n = Sample size

N = population size

C = Coefficient of variation

e = Error rate

Nassiuma, (2000) asserts that in most surveys, a coefficient of variation is in the range of $21\% \leq C \leq 30\%$ and standard error is in the range of $2\% \leq e \leq 5\%$ is usually acceptable. The higher the value of coefficient of variation and standard error to be selected the lower the variability in the sample and also minimizes the error.

C was taken as 23%

e was taken as 0.022%

Substituting these values in the equation, estimated sample size (n) was:

$$n = \frac{137(0.23)^2}{0.23^2 + (137 - 1)0.022^2}$$

$$n = 58.05$$

$$n = 51 \text{ respondents}$$

The 51 sampled bank agents were drawn from the target population using simple random sampling method. This method was chosen due to the homogeneity of the bank agents in Nakuru town. The method reduced the sampling bias and as part of probability sampling, it ensured that every member of the target population had an equal chance of participating in the study.

Table 3.1: Distribution of Bank Agents

S/No.	Bank	Targeted Agents	Sample Size
1	Equity Bank	65	24
2	Family Bank	17	6
3	Cooperative Bank	15	6
4	Kenya Commercial Bank	25	9
5	Diamond Trust	5	2
6	Post Bank	5	2
7	National Bank	5	2
Total		137	51

Source: Field Data (2015)

3.5 Research Instrument

A research instrument is a tool that is used to collect data from the respondents. There are various types of research instruments; however, in the context of this study, a structured questionnaire was employed in data collection. As Mugenda and Mugenda (2009) posit, questionnaires are suitable tools for collecting data from respondents who are geographically dispersed. This was the case in this study since bank agents were widely spread out across the entire Nakuru town.

3.6 Pilot Testing

Before the research instrument was used to collect data for the main study, it was pilot tested with the aim of ensuring that it was adequate and consistent when employed in data collection. A small number of bank agents were randomly picked from those operating in Nakuru town. Notably, the participants in the pilot test were included in the final study. The adequacy and consistency of the research instrument were achieved through determination of both reliability and validity of the research tools.

3.6.1 Reliability Test of the Research Instrument

Reliability is described as the ability of a data collection tool to return consistent results. A reliable instrument when administered on different populations with similar characteristics should enable collection of consistent data. Kimberlin and Winterstein (2008) argue that the Cronbach alpha is the most widely and recommended method of testing reliability of a research instrument. The alpha values range from 0 to 1 whereby the higher the alpha values the greater the reliability of the instrument and the reverse is true. All the study variables returned alpha values greater than 0.7 which implied that the research instrument was reliable.

3.6.2 Validity Test of the Research Instrument

Validity is the extent to which the interpretations of the results of a test are warranted, and also depends on the particular use the test is intended to serve (Kimberlin & Winterstein, 2008). This study sought to determine content validity of the data collection tool which was achieved through consultation with the assigned University supervisors since the said validity could not statistically be determined.

3.7 Data Collection Procedure

The requisite permits and consents to collect primary data were sought specifically from the Kabarak University and the management of the commercial banks that have bank agents in Nakuru town. The structured questionnaire was administered on the sampled respondents through trained research assistants. The filled questionnaires were collected after about five working days from the date of their issuance.

3.8 Data Processing and Analysis

The collected questionnaires were thoroughly perused to ensure that only the adequately and appropriately filled ones were considered for the study. The primary data were edited and coded before analysis. The coding and analysis were executed with the aid of the Statistical Package for Social Sciences (SPSS) version 21 software and Statistical Analysis Software (SAS). Analysis was both descriptive and inferential. Descriptive analysis constituted frequencies, percentages, means and standard deviations. On the other hand, the study incorporated Linker scale to conduct the analysis whose object was to determine the relationship between each of the independent variables and the dependent variable. The study findings were presented in form of statistical tables. The following regression function was also used to guide analysis of the collected data.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = Financial services accessibility

β_0 = constant (Intercept term)

X_1 = Channel innovation

X_2 = Cost

X_3 = Economies of scale

ε = Error term which is assumed to be normally distributed

$\beta_1, \beta_2, \beta_3$ = Régression coefficients

CHAPTER FOUR

RESULTS INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings that were obtained from both descriptive and inferential analyses of the data collected. The first section outlines the response rate and the background information of the respondents. This is followed by descriptive and inferential findings in that order. Notably, all findings are accompanied by relevant discussions.

4.2 Response Rate

The researcher issued a total of 51 questionnaires to the sampled bank agents in Nakuru town. 40 questionnaires were filled and collected from the respondents. This represented 78.43% response rate.

4.3 Background Information of Respondents

The study put into perspective a number of aspects pertaining the bank agents. These included their gender, education level, and how long they had worked as bank agents.

4.3.1 Gender of Respondents

As shown in Table 4.1, most (85%) of bank agents were females as opposed only 15% of male bank agents. This result was interpreted to mean that compared to males, females were more inclined to take up jobs as bank agents. This was likely due to the relatively low pay given to bank agents. Ideally, males have more financial responsibilities than females and are as such more likely to decline taking up jobs with returns short of their financial obligations.

There was a great and significant association between the two genders as indicated by the statistical results of the chi-square ($\chi^2 = 19.6$; $\text{Pr} > \chi^2 = 0.0001$).

Table 4.1: Distribution of Bank Agents by Gender

	Percent	χ^2	Pr> χ^2
Male	15	19.6	<0.0001
Female	85		
Total	100.0		

Source: Field Data (2015)

4.3.2 Education Level of Respondents

The study also examined the highest level of education of bank agents in Nakuru town where the results are as shown in Table 4.2.

Table 4.2: Distribution of Bank Agents by Highest Level of Education

	Percent	χ^2	Pr> χ^2
KCSE	5	13.6	0.0035
Certificate	30		
Diploma	45		
Bachelors Degree	20		
Total	100.0		

Source: Field Data (2015)

From the analysis, it is quite clear that majority of bank agents at 45% had Diplomas as their highest academic qualifications while only 5% had the Kenya Certificate of Secondary Education (KCSE) certification. Given that 20% held Bachelor degrees, then it was arguable that agency banking in Nakuru town attracted entrepreneurs with fair level of education. This was clear because 30% of the respondents had a certificate course and therefore it is very clear that agency banking cannot be operated by those who do not have the proper skills. The importance of education in agent banking is indicated by the result that the chi-square statistics were significant (Pr< 0.05).

4.3.3 Operation Duration of Respondents

The study further evaluated the period of time which the respondents had worked as bank agents. Table 4.3 shows the relevant findings.

Table 4.3: Distribution of Bank Agents by Operation Duration

	Percent	χ^2	Pr> χ^2
less than 1 year	32.5	11.6	0.0089
1 - 3 years	42.5		
4 - 5 years	17.5		
more than 5 years	7.5		
Total	100.0		

Source: Field Data (2015)

The findings indicated that 42.5% of respondents had worked as bank agents for a period of between 1 and 3 years. On the other hand, only 7.5 per cent had worked as bank agents for more than five years. However 32.5% had worked as bank agents for a period of less than one year. This may imply that majority of the respondents have just established themselves and trying to be entrepreneurs on their own capacity. It is also clear that 17.5% have operated agency banking for a quite longer period of time and now they are facing high competition from other competitors from commercial banks which had not opened agency banking in that particular area or region. The findings implied that agency banking had not penetrated the financial sector more than three years ago in as much as it has in the recent past. Given that ($\chi^2 = 11.6$; $\text{Pr}> \chi^2 = 0.01$), then the duration of operation of bank agents was also statistically significant.

4.4 Descriptive Findings and Discussions

In this section, the findings of the descriptive analysis and accompanying interpretations are presented. The findings and discussions are in tandem with study findings. The results are presented in a five-point scale ranging from ‘strongly agree’ to ‘strongly disagree’. The chi-square statistics are also captured in the results.

4.4.1 Descriptive Findings for Channel Innovation

The study examined the position taken by bank agents regarding the aspect of channel innovation relative to agency banking. Table 4.4 outlines the relevant descriptive findings.

Table 4.4: Descriptive Statistics for Channel Innovation

	SA	A	I	D	SD	χ^2	Pr>
	%	%	%	%	%		χ^2
i. Bank size is associated with key innovations due to their vast capital resources.	32.5	57.5	2.5	2.5	5.0	48	<0.001
ii. Agency banking is one of key innovations in the recent times	50.0	35.0	-	15.0	-	7.4	0.024
iii. Agency banking is one of expansionary strategies of commercial banks	55.0	22.5	17.5	5.0	-	21.8	<0.001
iv. The channel innovation enables accessibility to remote areas.	55.0	45.0	-	-	-	0.4	0.53
v. The innovation has attracted many bank customers.	52.5	47.5	-	-	-	0.1	0.7518
vi. The innovation has minimized the physical distance covered by customers to access bank services.	57.5	20.0	15.0	5.0	2.5	39.3	0.0001
vii. Bank customers prefer bank agents to traditional banking services.	15.0	42.5	20.0	20.0	2.5	16.75	0.0022
viii. The agency banking innovation has reduced the queuing time associated with bank branches.	50.0	42.5	7.5	-	-	12.35	0.0021

Source: Field Data (2015)

The results indicated in Table 4.4 show that most of the respondents (55%) strongly agreed that agency banking is one of expansionary strategies of commercial banks and that innovation has minimized the physical distance covered by customers to access bank services (57.5%). These reveal that channel innovation encourages investment and customers by the use of technology hence channel innovation improves financial

accessibility. The findings concurred with the findings of a study conducted in the United States where it was opined that innovations in information processing and telecommunications could minimize the agency costs by improving the capacity of senior bank managers at the head offices to monitor and communicate with employees at distant branches (Berger & Deyoung, 2006). The results were statistically significant at 0.01 level of significance. The respondents agreed that the bank size is associated with the innovation since they have large capital base and therefore they are likely to have more bank agents. This was in agreement with Li *et al.*'s (1999) study that observed that large banks are more likely to embrace channel innovation due to the robustness of their capital resources. The authors had asserted that large firms have more resources to invest in innovations, pursue more aggressive expansion strategies and also perform better. This implies that customers easily access financial services without going to the main banks.

In particularly the results revealed that 57.5% agreed that Bank size is associated with key innovations. Therefore, the chi-square test showed that there was a strong relationship between channel innovation and financial accessibility. This relationship is statistically significant at 1% and this implies that there is improvement in financial accessibility. In addition the respondents also agree that innovation has attracted bank customers and that customers prefer bank agents than traditional banking services since it reduces queuing time associated with banks. Specifically the result show that 47.5% agree that innovation has attracted many customers while those who agree that bank customers prefer bank agents to traditional banking services and those who also agree that agency banking has reduced queuing time were 42.5% respectively. These results were statistically significant at 1% implying that channel innovation improves financial accessibility. It is further noted that adoption of agency banking has been quite faster in Brazil than in Colombia probably due to failure by the commercial banks in the latter country to spearhead this innovation. Indeed, Brazil has the largest agency banking network in the world and as a result, it has influenced other Latin American countries.

Studies indicate that there are some good opportunities for agency banking in Nigeria. In the same light, it is noted that some deposit money banks (DBMs) have already started experimenting with innovations in agency banking. Furthermore, some banks in the said

country have been pursuing aggressive expansion strategies. However, it is noted that according to the findings of empirical studies conducted in other countries, there is no single, perfect, regulatory model for agency banking in Nigeria; though specific aspects of the regulations in each country could be adopted (Oxford Policy Management, 2011).

4.4.2 Descriptive Findings for Cost

The study further assessed the opinions of bank agents regarding the cost involved in agency banking in Nakuru town. Their views are captured in Table 4.5.

Table 4.5: Descriptive Statistics for Cost

	SA %	A %	I %	D %	SD %	χ^2	Pr> χ^2
i. Agency banking has hugely reduced transactions costs.	20.0	15.0	5.0	27.5	32.5	9.25	0.0551
ii. Banks' operational costs have been minimized by banks that have embraced agency banking.	-	57.5	22.5	15.0	5.0	25.0	<0.0001
iii. Agency banking is more cost effective than traditional bank branches.	32.5	50	7.5	10.0	-	19.4	0.0002
iv. Commercial banks do not have to put up physical structures to offer financial services.	5.0	57.5	25	7.5	5.0	40.75	<0.001
v. Bank agents reduce set-up and delivery costs.	12.5	62.5	12.5	7.5	5.0	46	<0.0001
vi. Bank branches' operational costs outweigh commissions paid out to bank agents.	32.5	50.0	5.0	5.0	7.5	33.25	<0.0001
vii. Transactions through agency banking are cheaper than though mobile money transfers such as M-Pesa.	30.0	37.5	22.5	10.0	-	6.6	0.0858
viii. There is no direct cost on human capital incurred by commercial banks using agency banking model.	22.5	55.0	5.0	7.5	10.0	34.25	<0.0001

Source: Field Data (2015)

Table 4.5 shows the results of views on cost from the sampled bank agents. Those who strongly agreed that agency banking is more cost effective than traditional banking constituted 32.5% and the chi-square test results showed that it was statistically significant at 1%. This might have been due to the time and monetary saving. The study results were in agreement with a previous study conducted in Colombia which indicated that agency banking has the capacity to provide formal banking services at lower costs than the traditional brick and mortar banking to not only the consumers but also the financial institutions offering the services (Ivatury & Mas, 2008). This means that the customers could access financial services at minimum cost. Bean, (2009), states that agent banking has reduced cost and enhanced efficiency in the financial sector with a possibility and availing financial services at much lower cost to consumers (Bean, 2009). It has also increased the ease of banks' expansion hence outreach to far flung market pockets of bankable populations (Bold, 2011). Agent banking means commercial outlets like shops and supermarkets acting in some capacity on behalf of formal banks (Hogan, 1991).

However, most respondents agreed at 57.5% that banks' operational cost have been minimized and that commercial banks do not have to put on physical structures to offer financial services. These observations concurred with the findings of an empirical study by OPM (2011) which noted that agency banking plays a fundamental role in cutting the costs to the advantage of both commercial banks and their customers. Further, the respondents agree that the set up cost and delivery cost have been reduced. This may be due to competition from commercial banks and also building structures in branches requires capital and human capital hence accessing financial services might be expensive and this lead to commercial banks using agency banking which require commission for services offered. Therefore, it has led to commercial banks operating agency banking in offering financial services. The chi- square test results show that it was statistically significant at 1%. This implied that commercial banks save their capital and human resources by using agency banking. Agency banking represents a significant opportunity to reduce transaction costs such as travel for clients by bringing financial services to hard-to-reach and geographically dispersed areas. This is especially true in Africa where some areas are sparsely populated leaving long distances between the customer and the

bank. Moreover, in these areas overall literacy levels are fairly low. Also, banks and other financial institutions often do not have sufficient incentive or capacity to establish formal branches in these areas. Obviously, the set-up of agent banks is less costly and more flexible than for traditional bank branches since it reduces the need to invest in staff and physical infrastructure

4.4.3 Descriptive Findings for Economies of Scale

In addition, the study examined the opinions of bank agents on economies of scale as brought about by agency banking. Table 4.6 outlines the relevant findings.

Table 4.6: Descriptive Statistics for Economies of Scale

	SA	A	I	D	SD	χ^2	Pr> χ^2
	%	%	%	%	%		
i. Large commercial banks enjoy economies of scale.	47.5	50	2.5	-	-	17.15	0.0002
ii. Commercial banks strive to have as many bank agents as possible.	60.0	37.5	2.5	-	-	20.15	<.0001
iii. Banks such as Equity Bank have numerous bank agents in our Sub-County.	75.0	22.5	2.5	-	-	33.65	<0.0001
iv. Banks use various enterprises such as retail outlets, MFIs among others as their agents.	52.5	45.0	2.5	-	-	17.45	0.0002
v. Bank agents make a number of transactions daily.	47.5	50.0	2.5	-	-	17.15	0.0002
vi. The bank agents are entitled to a commission on every transaction they carry out.	45.0	50.0	-	-	5.0	14.6	0.0007
vii. The bank agents strive to maximize the number of daily transactions.	52.5	47.5	-	-	-	0.1	0.7518
viii. Banks enjoy huge financial returns from the combined transactions made bank agents every day.	22.5	72.5	5.0	-	-	29.45	<0.0001

Source: Field Data (2015)

The respondents strongly agreed that banks such as Equity bank have numerous bank agents in the Sub- County (75%) hence commercial banks strive to have as many bank agents as possible (60%). This revealed that commercial banks enjoy a small percentage of profits from a number of agents. This is true from the result of chi-square test which was statistically significant at 1%. This implied that such banks have the majority of the bank agents in Nakuru town probably due to the fact that they were the first to adopt agency banking. Another study noted that in Brazil, Caixa Economica Federal which is a commercial bank enhanced its economies of scale by partnering with more than 9,000 lottery outlets that offer agency banking. The firm had a total of 64,000 agents by the end of 2000 which implies that by then it enjoyed huge economies of scale (Oxford Policy Management, 2011).

According to Arora and Ferrand, (2007), it reveal that technology adoption especially, in banking systems has shown a great momentum and spread at an unbelievable pace across the world. Considering the importance of banking systems high presence and affordability, there is great potential of using this in agent banking for provision of banking services to unbanked community. However, technology systems have associated data and network security risks which make them susceptible for conducting financial transactions. Technology risks regarding information and data security based on applicable models of agent banking have been reported thus creating uncertainty to the clients

Most of the respondents strongly agreed (47.5%) that commercial banks enjoy economies of scale and bank agents make a number of transaction daily leading to high commission paid to bank agents. These findings concurred with earlier observations that big organizations benefit from economies of scale and scope (Li et al., 1999). The findings also tallied with a study on branchless banking in Colombia (Lozano & Mandrile, 2010) which indicated that one way of bank agents to break even and eventually be profitable is through increment of transactions volume. Increasing the number of daily transactions per agent on economies of density and economies of scope were argued to be the most promising strategies. The commission paid attracted more bank agents hence encouraging economies of scale in financial accessibility.

On the other hand some respondents agree that banks enjoy huge financial returns from combined transaction made by agents on daily basis which was shown by 72.5% and other agree at 50% that large commercial banks enjoy economics of scale by making a number of transactions which lead to high commission hence leading to economics of scale enjoyed by commercial banks. The chi-square test results show that it was statistically significant at 1% which encourages financial accessibility. Nevertheless, none of the respondents disagreed on the effect economies of scale though 5% strongly disagreed that economies of scale were enjoyed by commercial banks.

4.4.4 Descriptive Findings for Financial Accessibility

Lastly, the study examined the views of bank agents regarding financial accessibility as influenced by agency banking. A summary of their views is illustrated in Table 4.7.

Table 4.7: Descriptive Statistics for Financial Accessibility

	SA	A	I	D	SD	χ^2	Pr> χ^2
	%	%	%	%	%		
i. Agency banking has increased accessibility to financial services.	40.0	52.5	-	5.0	2.5	30.2	<0.0001
ii. Agency banking mostly targets the low income population.	12.5	27.5	12.5	40.0	7.5	14.5	0.0059
iii. Agency banking is limited to specific financial transactions.	12.5	60.0	15.0	12.5	-	26.2	<0.0001
iv. Bank agents have fewer regulations than other financial services providers.	10.0	62.5	-	25.0	2.5	34.2	<0.0001
v. The number of customers seeking services of bank agents has been consistently increasing over the years.	40.0	55.0	-	5.0	-	15.8	0.0004

Source: Field Data (2015)

40% of respondents strongly agreed that agency banking have increased accessibility to financial services and that the number of customers seeking services of bank agents has been consistently increasing over the years. This implied that most of the customers are able to use agency banking whenever transacting which led to high demand for financial accessibility. The findings concurred with Ivatury and Mas study (2008) which indicated that agency banking which is a form of branchless banking has received a lot of enthusiasm due to its potential to deliver financial services to many people at the bottom of the pyramid. Only 12.5% of respondents strongly agreed that agency banking mostly targeted the low income population. 60% of bank agents believed that agency banking was limited to specific financial transactions. This implies that some of the huge transactions could not be handled by bank agents, for example, issuing of loans or making any capital investment.

In Colombia, Lozano and Mandrile (2010) conducted the first research attempt on the relationship between branchless banking and financial inclusion. The authors looked into the current development of branchless banking in Colombia within the context of the government's strategy to promote access to financial services through non-bank correspondents (NBCs). The study noted that, as one way of enhancing financial deepening, the Colombian government decided to develop branchless banking model based on non-financial institutions providing financial services on their own behalf due to lack of regulation and supervision of such entities. This led to agency banking model. Yet, against this backdrop the study revealed that Colombia's banking sector has failed to embrace branchless banking solutions. This has in turn negated financial deepening given that the banking sector has not been keen in enhancing financial accessibility to low-income populace.

Therefore, financial accessibility was clearly enjoyed by the entire population regardless of their socio-economic standing. Most of the respondents agreed (62.5%) that bank agents had fewer regulations than other financial services providers. This might have been true because the bank agents do not carry out huge transactions in accessing financial services and fewer regulation are imposed. The chi-square test result showed that it was statistically significant at 1% which implied agency banking mostly target all cadre of

population in accessing. Central banks play a key regulatory role in any financial market. They have been at the center of the growth of Agency banking in developing countries. In Kenya, the Central Bank of Kenya has played a pivotal role in enhancing penetration of the agency banking model. In 2009 for instance, the CBK commenced measures to open up banking channels to non-bank agents. An amendment to the Banking Act allowed banks to start using agents to deliver financial services. It was then argued that using small shops, petrol stations, pharmacies and other retail outlets as agents could have a dramatic impact on improving access to financial services, especially in rural areas. This resulted into mushrooming of many agency banks in the country (Baron 2002). This decision has been widely praised as having resulted in the deepening of the financial sector and raising overall levels of financial literacy in the country.

4.4.5 Influence of Agency Banking on Financial Services Accessibility

The study examined the influence of agency banking on accessibility of financial services in Nakuru town. This was achieved through regression analysis using the following function.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Table 4.8, Table 4.9, and Table 4.10 show the relevant findings.

Table 4.8: Coefficient of Determination

Root MSE	2.14417	R-Square	0.1965
Dependent Mean	14.52500	Adj R-Sq	0.1295
CoeffVar	14.76190		

Source: Field Data (2015)

The results shown in Table 4.8 indicates that $R^2 = 0.197$. This implied that the association between agency banking as encapsulated by channel innovation, cost, and economies of scale on one hand and financial services accessibility in Nakuru town, on the other hand, was weak. This meant, that the tenets of agency banking were supposed to be emphasized in order to enhance financial services accessibility. The value of adjusted $R^2 = 0.1295$

which implied that 12.95% of the variation in financial services accessibility could jointly be explained by channel innovation, cost, and economies of scale. This showed that the model has a good fit given that the data employed in the study was cross-sectional. The results are further supported by F value which is significant at 5%. The coefficient of variation at 14.76 was relatively small which reflect a model fit which was good.

Table 4.9: Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	40.46678	13.48893	2.93	0.0464
Error	36	165.50822	4.59745		
Corrected Total	39	205.97500			

Source: Field Data (2015)

The results illustrated in Table 4.9 shows that agency banking generally had a significant effect on financial services accessibility in Nakuru town ($F = 2.93$; $Pr > F = 0.0464$). The results underscored the importance of agency banking in financial services accessibility.

Table 4.10: Regression Results of financial Services Accessibility

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variance Inflation Factor
Intercept	1	-0.25963	5.22628	-0.05	0.9607	0
Channel Innovation.	1	0.13910	0.07738	1.80	0.0806	1.05338
Cost	1	0.01683	0.09881	0.17	0.8657	1.31202
Economics of scale	1	0.27590	0.15491	1.78	0.0833	1.31416

Source: Field Data (2015)

The results of regression analysis shown in Table 4.10 indicated that financial services accessibility was not influenced to a significant extent by agency banking ($t = -0.05$; $Pr > |t| = 0.96$). The results further indicated that channel innovation returned ($t = 1.80$; $Pr > |t| = 0.08$), cost ($t = 0.17$; $Pr > |t| = 0.087$), and economies of scale ($t = 1.78$; $Pr > |t| = 0.08$) which implied that agency banking did not affect financial services accessibility significantly. For every unit change in financial accessibility, there must have been 0.14, 0.02, and 0.28 unit changes in channel innovation, cost and economies of scale. The results implied that economies of scale had a greater influence on financial services accessibility than other elements of agency banking (channel innovation and cost).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines a summary of important research findings, conclusions made and recommendations put across. Just like in other chapters, the summary, conclusions and recommendations are in line with study findings.

5.2 Summary of Study

In this section the major findings obtained from both descriptive and inferential analyses are highlighted as per the objectives. The first objective was to examine the effect of channel innovation on accessibility of financial services, secondly being to analyze the effect of cost of agency banking on accessibility of financial services and lastly to determine how economies of scale resulting from agency banking influence accessibility of financial services in Nakuru town

5.3 Conclusions

It was indicated that bank agents strongly agreed that agency banking is one of the expansionary strategies of commercial banks and that innovation has minimized the physical distance covered by customers to access bank services. These reveal that channel innovation encourages investment and customers by the use of technology hence channel innovation improves financial accessibility. The results were statistically significant at 0.01 level of significance. The respondents further agreed that the bank size is associated with the innovation since they have large capital base and therefore they are likely to have more bank agents. The chi-square test showed that there was a strong relationship between channel innovation and financial accessibility. This relationship is statistically significant at 1% and this implies that there is improvement in financial accessibility. In addition, the respondents also agree that innovation has attracted bank customers and that customers prefer bank agents than traditional banking services since it reduces queuing time associated with banks. These results were statistically at significant 1% implying that channel innovation improves financial accessibility.

It was strongly agreed that agency banking is more cost effective than traditional bank branches and therefore implying that the customers could access financial services at minimum cost. The chi-square test results showed that it was statistically significant at 1%. It was further agreed that that banks' operational cost have been minimized and that commercial banks do not have to put on physical structures to offer financial services. In addition, respondents agreed that the set up cost and delivery cost have been reduced probably due to competition from commercial banks and also building structures in branches requires capital and human capital hence accessing financial services might be expensive and this lead to commercial banks using agency banking which require commission for services offered. This has therefore necessitated commercial banks to operate agency banking in offering financial services. The chi-square test results showed that it was statistically significant at 1%. This implied that commercial banks save their capital and human resources by using agency banking.

The study found out that bank agents strongly believed that, commercial banks such as Equity Bank have numerous bank agents in Nakuru town and therefore commercial banks strive to have as many bank agents as possible. This revealed that commercial banks enjoy a small percentage of profits from a number of agents. This is true from the result of chi-square test which was statistically significant at 1%. Most of the respondents strongly admitted that commercial banks enjoy economies of scale and bank agents make a number of transaction daily leading to high commission paid to bank agents. The commission paid attracted more bank agents hence encouraging economies of scale in financial accessibility. Some respondents further agreed that banks enjoy huge financial returns from combined transaction made by agents on daily basis while others agree that large commercial banks enjoy economics of scale by making a number of transactions which lead to high commission hence leading to economics of scale enjoyed by commercial banks.. The chi-square test results showed that it was statistically significant at 1% which encourages financial accessibility

It was noted that agency banking has increased accessibility to financial services and that the number of customers seeking services of bank agents has been consistently increasing over the years. A small number of respondents strongly admitted that agency banking

mostly targeted the low income population. In addition, most bank agents believed agency banking was limited to specific financial transactions. It therefore implied that some of the huge transactions could not be handled by bank agents, such as making any capital investment. Financial accessibility therefore was clearly enjoyed by the entire population regardless of their socio-economic standing. Most of the respondents also consented that bank agents had fewer regulations than other financial services providers perhaps because the bank agents do not carry out huge transactions in accessing financial services and fewer regulation are imposed. The chi-square test result showed that it was statistically significant at 1% implying that agency banking mostly target all cadre of population in accessing financial services.

The results of the regression analysis, $R^2 = 0.197$, implied that the association between agency banking as encapsulated by channel innovation, cost, and economies of scale on one hand and financial services accessibility in Nakuru town, on the other hand, was weak. Therefore, the tenets of agency banking were supposed to be emphasized in order to enhance financial services accessibility. The coefficient of determination, $R^2 = 0.1295$ implied that 12.95% of the variation in financial services accessibility could be explained by channel innovation, cost, and economies of scale. The model therefore has a good fit given that the data employed in the study was cross-sectional. The results are further supported by F value which is significant at 5%. The coefficient of variation at 14.76 was relatively small which reflect a model fit which was good.

The ANOVA results indicated that agency banking generally had a significant effect on financial services accessibility in Nakuru town. The results further indicated that channel innovation returned ($t = 1.80$; $Pr > |t| = 0.08$), cost ($t = 0.17$; $Pr > |t| = 0.087$), and economies of scale ($t = 1.78$; $Pr > |t| = 0.08$) and therefore implying that agency banking did not affect financial services accessibility significantly.

The study concluded that agency banking was and is still one of the major expansionary strategies adopted by leading banks in Nakuru town and Kenya at large. Agency banking is a crucial innovative strategy that has minimized the physical distance covered by customers to access bank services. It was further concluded that large banks with massive

capital outlays are at more advantage position to adopt innovative channels such as agency banking.

The study also concludes that there is a substantial number of agents in the banking sector. The major purposes of establishing agent branches in banks are expanding geographic coverage of the bank and as a competitive strategy. In addition, agents promote diversification of bank market in the country. The study concludes that agent banking is an effective strategy for service delivery. The study also concludes that agent banking saves time and it is efficient. However, it does not minimize operational costs nor does it eliminate fraud. The study concludes that opening up of agent banking network is influenced by accessibility of agent channels to customers, infrastructure and the need for market segmentation. It also concludes that government policies regulatory policies does not influence opening up agent banking network.

It has been inferred that that agency banking has hugely reduced transaction costs. This was evidenced by the finding that agency banking is more cost effective than traditional bank branches. Agency banking is concluded to reduce a lot of costs involved with setting up physical branches and also running traditional banking halls.

The study concluded that large commercial banks enjoy huge financial returns from the combined transactions made by the numerous agents on daily basis. It is further inferred that large commercial banks enjoy economics of scale by making a number of transactions which lead to high commission hence leading to economics of scale enjoyed by commercial banks.

5.4 Recommendations

The study made the following recommendations which were drawn from the study findings.

The study recommends that banks should uphold agency banking as one of the innovations to reach out to more customers. The banks should however strike a balance between opening new branches and running agency banking based on certain parameters such as products to be offered and the quality of services.

It is recommended that banks especially the large banks should run their bank agency efficiently and effectively if they have to realize sustained profitability from the bank agents. Banks should also cut on operational costs and administrative costs as a whole by maintaining agencies that are more profitable and cost effective.

The study established accessibility of agency channels to the customers and infrastructure to influence opening up agent banking network. This study therefore recommends that banks should make agent channels accessible to customers and also improve infrastructure.

It is further recommended that banks should take advantage of their vast capital base to operate more agency banking outlets for not only acquiring a sizeable market share but also increasing their profitability. The study further recommends that the banks should design more packages and financial services that can be offered at their agency outlets.

Commercial banks should ride on the successes made in agency banking to scale up access to financial services hence financial inclusion by opening up more outlet networks to considerably reduce the distances covered by the rural poor. Better geographic outreach can remove distance as a barrier to financial access for both the bank and the client, thus allowing banks to be more responsive and less intimidating to their deposit customers. This should be augmented with cost adjustments of the transactional fees and allowing the agents to perform other services such as collection of cheques to enhance financial access and inclusion.

There is need for commercial banks to forge strategic alliances with key essential service providers and business entities to have most of the service payments/purchases accomplished through agency or mobile phone payment services, such as one between Post Bank and Equity Bank where the former's services are offered through the latter's agency outlets. Such customer orientation strategies, while enhancing access to financial services will also generate more revenue to the concerned banks. Riding on the positive influence of financial services awareness on access to financial services, commercial banks and other financial institutions should make judicious efforts to institutionalize customer education programmes that will raise awareness among not only existing clients

but also potential customers. This has potential to increase take up of financial services thus benefiting both the client and the financial institution. It is also recommended that banks explore other services, other than only money transfer to enhance their performance through agency banking such as: operating systems secure enough and capable of conducting real time transactions, generating an audit trail, and protecting data integrity and confidentiality, fixed costs per transaction for branches are significantly higher

5.5 Areas of Further Research

The study suggests the following areas to be further researched on in relation to agency banking in Kenya. The effects of agency banking on financial performance of banks in Nakuru town; the effectiveness of agency banking on operational performance of banks and Assessment of Factors Influencing Adoption of Agency Banking in Kenya:

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APPENDIX I
LETTER OF INTRODUCTION

Dear respondent,

I am a student at Kabarak University undertaking Masters Degree in Business Administration, Finance option. Currently am carrying out a research study on the effects of Agency Banking on accessibility of financial services in Nakuru town, Nakuru County as part of the requirement for the award of master degree in Business Administration of Kabarak University. This questionnaire is therefore intended to seek information on the above subject matter. The information is purely for academic purpose and all the answers will be treated with utmost confidentiality. I therefore humbly request that you complete this questionnaire correctly in the space provided or options given.

APPENDIX II

RESEARCH QUESTIONNAIRE FOR BANK AGENTS

Kindly answer the questions or comment on the statements in the best of your knowledge. Your participation will be treated with utmost confidentiality.

Section A: Demographic Characteristics of Respondents

1. What is your gender?
Male [] Female []
2. What is your highest level of education?
Diploma []
Bachelors Degree []
Post-Graduate []
3. How many bank agents operating under your bank are there in the town?
Less than 5 []
6 to 15 []
16 to 25 []
More than 25 []
4. How long has your bank been operating agency banking in the town?
Less than 1 year []
1 – 3 years []
4 – 5 years []
More than 5 years []

Kindly indicate the level of agreement with each of the following factors by ticking in the provided box.

SD: Strongly Disagree, **D:** Disagree, **I:** Indifferent **A:** Agree, **SA:** Strongly Agree

Section B: Channel Innovation

	SD	D	I	A	SA
5. Bank size is associated with key innovations due to their vast capital resources.					
6. Agency banking is one of key innovations in the recent times					
7. Agency banking is one of expansionary strategies of commercial banks					
8. The channel innovation enables accessibility to remote areas.					
9. The innovation has attracted many bank customers.					
10. The innovation has minimized the physical distance covered by customers to access bank services.					
11. Bank customers prefer bank agents to traditional banking services.					
12. The agency banking innovation has reduced the queuing time associated with bank branches.					

Section C: Cost

	SD	D	I	A	SA
13. Agency banking has hugely reduced transactions costs.					
14. Banks' operational costs have been minimized by banks that have embraced agency banking.					
15. Agency banking is more cost effective than traditional bank branches.					
16. Commercial banks do not have to put up physical structures to offer financial services.					
17. Bank agents reduce set-up and delivery costs.					
18. Bank branches' operational costs outweigh commissions paid out to bank agents.					

19. Transactions through agency banking are cheaper than through mobile money transfers such as M-Pesa.					
20. There is no direct cost on human capital incurred by commercial banks using agency banking model.					

Section D: Economies of Scale

	SD	D	I	A	SA
21. Large commercial banks enjoy economies of scale.					
22. Commercial banks strive to have as many bank agents as possible.					
23. Banks such as Equity Bank have numerous bank agents in our Sub-County.					
24. Banks use various enterprises such as retail outlets, MFIs among others as their agents.					
25. Bank agents make a number of transactions daily.					
26. The bank agents are entitled to a commission on every transaction they carry out.					
27. The bank agents strive to maximize the number of daily transactions.					
28. Banks enjoy huge financial returns from the combined transactions made bank agents every day.					

Section E: Financial Services Accessibility

	SD	D	I	A	SA
29. Agency banking has increased accessibility to financial services.					
30. Agency banking mostly targets the low income population.					
31. Agency banking is limited to specific financial transactions.					
32. Bank agents have fewer regulations than other financial services providers.					
33. The number of customers seeking services of bank agents has been consistently increasing over the years.					

Thank you for your cooperation.

APPENDIX III
DISTRIBUTION OF TARGET POPULATION

	Bank Name	Name of Agency	Bank agents Manager
1	Equity Bank	Equity Agent	65
2	Family Bank	Family Pesa Pap	17
3	Co-operative Bank	Co-op Jirani	15
4	Kenya Commercial Bank	KCB Mtahani	25
5	Diamond Trust	DTB Mlangoni	5
6	Post Bank	Post Bank Mashinani	5
7	National Bank	National Agent	5