

**EFFECT OF ALTERNATIVE FINANCIAL DELIVERY CHANNELS ON
PERFORMANCE OF COMMERCIAL BANKS IN KISUMU CITY, KENYA**

BY



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ABSTRACT

Though commercial banks continue to invest in rolling out branches that are complemented by various delivery channels, the challenge of access to formal financial services by customers remains a big impediment to the banks' financial performance. To address these challenges, the Central Bank of Kenya released a legislation that allows commercial banks to contract third party retail networks as alternative financial delivery channel players which were to cater for 80% of the banking population by 2013. However, to date only 38% of the set target has been realised and it is not clear whether or not the realized proportion has any significant contribution on the banks' performance. In addition, no study of a considerable depth has established effect of mobile banking, agency banking and Internet banking on the performance of commercial bank, It was on that basis that the study sought to establish the effect of financial delivery channels on performance of commercial banks in Kenya. Specifically the study sought to: establish the effect of mobile banking on the performance of commercial banks in Kenya, to establish the effect of agency banking on performance of commercial banks, and to establish the effect of internet banking on performance of commercial banks. The study adopted correlation research design and was guided by the Agency theory. Primary data were gathered using both structured and semi-structured questionnaires. These were supplemented with secondary data gathered from the banks' published reports. Out of 33 commercial banks, Data from three banks were used for pretesting where the reliability test produced an overall Cronbach Alpha correlation coefficient of 0.887, which suggested that the data collection was reliable. A total of 30 commercial banks were visited during the actual data collection where the branch managers were interviewed. The study estimated an R^2 of 0.501, implying that 50.1% of changes in the bank's performance are explained by the independent variables. It further revealed that mobile banking ($\beta = 0.402$, $p = 0.001$) and agency banking ($\beta = 0.179$, $p = 0.050$) had significant positive effects on banks performance. It is thus, recommended that use of mobile banking and agency banking be enhanced for improved performance. The study findings may help the bank managers in the financial planning and provide literature for further research in the banking sector.

Introduction

This chapter discusses the background to the study, statement of the problem, objectives of the study, research questions, significance of the study, limitations of the study, scope of the study and conceptual framework.

1.1. Background to the Study

The background to the study was divided into two: alternative financial delivery channels (conceptual background) and the banking industry in Kenya (contextual background).

1.2.0 Alternative Delivery Channels and Supply Chain Efficiency

Banks are under intense pressure from not only customers and regulators, but also from competitors. Having an effective financial delivery channels that not only provides the customers with agility, flexibility and convenience but can also give commercial banks a huge competitive advantage. Supply chains are supposed to be efficient to enable the expedition in delivery of goods and services to the customers or end users within the shortest time possible. Alternative delivery channels like mobile, online and agency banking helps by providing as well as harmonising place utility by availing banking services at the touch of a baton. Purchasing and procurement also focuses so much on cost cutting on spend budget, and banks are able to make huge financial savings by shunning the costly traditional retail banking channels like building branches to a now more convenient channels like having agents at residential areas. This allows banks to save hugely on spend. These are the factors that ties this study to management science and purchasing and supplies

1.2.1. Banking Industry in Kenya

The Banking industry in Kenya is governed by the Companies Act (1978) the Banking Act (2010) the Central Bank of Kenya Act (2012) and the various prudential guidelines issued by the Central Bank of Kenya (CBK). The banking sector was liberalized in 1995 and exchange controls lifted. The CBK is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. There are

currently forty six banking and non-bank institutions, fifteen micro finance institutions and one hundred and nine foreign exchange bureaus. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banking sector's interests. The KBA serves as a forum to address issues affecting members (Price Waterhouse Coopers, 2012). These innovations need to be appraised to ascertain their impact on performance of commercial banks in Kenya.

Over the last few years, the banking sector in Kenya has continued to grow in assets, deposits, profits and products. The growth has been mainly underpinned by an industry wide branch network expansion strategy both in Kenya and in the East African community region; and the automation of a large number of services and a move towards emphasis on the complex customer needs rather than traditional 'off-the-shelf' banking products. Players in this sector have, nevertheless, experienced increased competition over the last few years as a result of increased innovations among competitors and new platforms into the market (Njuguna, 2010). These innovation need to be appraised to ascertain their impact on performance of commercial banks in Kenya.

1.2.2. Alternative Financial Delivery Channels

During the last four decades, the worldwide financial sector has developed rapidly in terms of size, industry structure and the variety of consumer and business-to-business products and services. The sector has been transformed from a relatively closed system in the 1950s and 1960s based on traditional bank activities to a more open, effective and competitive system which is able to offer a wide range of products and services (Edey, 2009). Gardener et al. (2011) attribute these empirical shifts to technological developments and financial liberalization (deregulation). These changes have consequently motivated commercial banks

to initiate various alternative financial delivery channels in order to compete effectively and survive. Many commercial banks, according to Gyptre and Dixon (2008), face a huge challenge in reducing the number of branches they operate as down-sizing efforts bring with them complex post-merger problems such as social and political issues, organizational culture concerns, product modifications and Information Technology (IT) integration.

Banks therefore introduce alternative financial schemes to improve on their performance. These schemes, however, needs to be evaluated to ascertain whether they produce positive or negative impact on performance. Current popular alternative delivery channel technologies include services such as; the short message service (SMS) banking text alerts, bill pay, Automated Clearing House (ACH) electronic payments, mobile banking, email alerts and notifications, fax banking services, video banking, and online social media banking. These technologies are all relatively recent ICT enabled ADC strategies that banks can employ to impact on their performance(Koltveit and Owens, 2012)., however, it is not yet ascertained through empirical research on whether such alternative financial delivery channels have positive or negative effect and to what extent. (This study therefore sets out to answer these three questions).

Access to Finance is critical for sustainable economic growth and social development (Bold, 2011). 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 (Bold, 2011). 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). Agency 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). From the findings of Bean, 2009, the contribution of agency banking to customers has been established.

However no attention has been given on the effect of the same on performance of commercial banks. Previous studies mainly in developed countries like U.S.A and Britain shows the essence of agency banking to an economy, despite this, there has been no empirical study that has been undertaken in Kenya to establish the contributions of agency banking on financial performance of commercial banks in Kenya.

However, research findings on effect of channel banking on banks' financial performance have been mixed. Lozano and Mandrile (2010) through a case study of the commercial bank of Argentina aver that channel banking has helped banks enhanced value chain and performance through economies of scale and performance of the poor. Ivatury and Mas (2008) through a descriptive survey of South Africa's first tier commercial banks established that channel banking leads to cost minimization by reducing maintenance cost of banks fixed assets such as buildings and cost of service delivery. These studies are all authoritative in their own rights; however the methodologies used in them have significant weaknesses that can be challenged through a study like the one I carried out.

On the other hand, Kamau (2012) established a low and negative impact of channel banking on financial performance. Pickens stated that banking agents have not contributed much to banks' revenue growth owing to customers' scepticism about its transactional security. Further, system failure and conservatism among customers who prefer brick-and-

mortar model makes the model ineffective (Pickens, 2010). However his findings can be challenged on the ground that his variables did not incorporate all the alternative financial delivery channels since he mainly talked about agents. It is upon this weakness that I intend to build a solid case for this research. From these samples of research by various researchers it is clear to see that no researcher has carried out a study that directly ties bank performance to other banking channels. This is what this paper intended to accomplish.

1.3. Statement of the Problem

Though the banks continue to invest in rolling out brick and mortar branches that are complimented by various delivery channels, the challenge of access to formal financial services remains a big impediment to financial performance. To curb these challenges, the Central Bank of Kenya released a legislation that allows commercial banks to contract third party retail networks as alternative financial delivery channel players. According to a central bank report on adoption of channels by commercial banks in Kenya (CBK 2013), it was indicated that in spite of the alternative delivery channels employed by most banks, the set targets have, in most cases, never been met. The initial target was set at 80% by the end of 2013 but to date only a paltry 38% has been realised (CBK 2013) and it is not clear whether or not the realized proportion has any significant contribution on the banks' performance.

Previous studies like Pooja and Singh (2009), Franscesa and Claeys (2010), Batiz-Lazo and Woldeesenbet (2006) and Mwanja and Muganda (2011) have produced mixed results regarding the impact of financial innovations on bank performance. Pooja and Singh (2009) and Franscesa and Claeys (2010), in their studies concluded that financial innovations had least impact on bank performance, while Batiz-Lazo and Woldeesenbet (2006) and Mwanja and Muganda (2011) concluded that financial innovation had significant contribution to bank performance. It is at the centre of such mixed conclusions that created and necessitated the

need to carry out a study from a Kenyan context to establish the effect of bank innovations on commercial banks' performance.

Kenyan commercial banks have continued to deploy huge investments in technology based innovations and training of manpower to handle the new technologies. Data from Central Bank of Kenya (2011) indicate that, the number of automated teller machines grew from 166 in 2001 to 2091 in 2010, debit cards increased from 160,000 in 2001 to over 6 million cards by the end of 2010 while mobile banking transactions increased from 48,000 per annum in 2007 to over 250,000 transactions per annum in 2010. Performance of commercial banks in Kenya also grew impressively between years 2001 to 2010 where profit before tax grew from Kshs 2.7 billion in 2001 to Kshs 74 billion in 2010. During the same period, total income grew from Kshs 61 billion to Kshs 178 billion while total assets grew from Kshs 425 billion to Kshs 1.7 trillion (CBK, 2011). The relationship between the growing investment in technology based bank innovations and bank financial performance in Kenya needs to be studied. There is need to establish whether innovations have contributed to the financial performance of commercial banks in Kenya. Lerner and Tufano (2011) in their study on consequences of financial innovations contend that existing empirical evidence and conceptual frameworks can tell more about financial innovation, but there are substantial unanswered questions in the areas of social welfare impact of financial innovations, impact of innovations on financial institutions and a lot of financial innovations research is mainly on case studies. Rafael and Francisco (2007) studied the impact of various regional banking sector developments and innovations during 1986- 2001 in Spain.

The study found out that product and service delivery innovations contribute positively to regional Gross Domestic Product (GDP), investment and gross savings growth. These sentiments are shared by Hendrickson and Nichols (2011), while studying the performance of

small banks in the United State with regards to interstate branching and found out that banks perform better when they adopt innovations across their several branches. Based on these studies and the varying gaps in literature, there is need to conduct similar studies in Africa and more so in Kenya where bank innovations have been on the rise in the past decade by providing new financial delivery channels.

1.4. Objectives of the study

1.4.1. General Objective

The overall objective of the study was to determine the effect of alternative financial delivery channels on performance of Kenyan Commercial Banks in Kisumu city, Kenya.

1.4.2. Specific Objectives

The specific objectives of the study were:

- i. To establish the effect of mobile banking on the performance of commercial banks in Kenya.
- ii. To establish the effect of agency banking on the performance of commercial banks in Kenya.
- iii. To establish the effect of internet banking on the performance of commercial banks in Kenya.

1.6. Research Hypothesis

H1 Mobile banking does not affect the performance of commercial banks in Kisumu city.

H2 Agency banking does not affect the performance of commercial banks in Kisumu city.

H3 Internet banking does not affect the performance of commercial banks in Kisumu city.

1.7. Significance of the Study

The study determined the effect of alternative financial delivery channels on the performance of commercial banks in Kenya. Findings from this study therefore were anticipated to be invaluable to various parties both in the industry and outside. Given the relevance and significance that banks perform in inducing development, and the fact that the industry is projected as one of the key boosters to attainment of Vision 2030, Commercial Bank Regulator, Central Bank of Kenya (CBK) would access comparative strategic assessments on feasibility of financial inclusion within the Kenyan context so as to provide justification for introduction of necessary operational rules and regulations on the alternative financial delivery channels. The banks will be at the vantage of an independent audit on how their undertakings on alternative service provision options will help to sustain their market visibility and returns. From the outside, alternative service points and support providers such as Internet Service Providers (ISP), telephony providers and freelance agents would access an independent evaluation as a guide to rational decisions on entry and return projections. The academia would use the finding as reference base for their future empirical disseminations. The policy makers would use the findings for regulation and promotion. Furthermore the clients would use the findings to gain knowledge on which best alternative financial delivery channels to use.

1.8. Scope and Limitations of the Study

Alternative financial delivery channels are a product of operational policy that is initiated and supervised by the top bank executives. The study therefore focused on Kenyan Commercial Bank and its customers who employ and utilize the three main alternative financial delivery channels namely mobile banking, internet banking, and agency banking services. However, the study was limited only to Kenyan Commercial Banks in Kisumu Town as they employ

alternative financial delivery channels to their clients as from the time period when they were established.

1.9. Conceptual Framework

Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al., 2004). Such service also saves the time and money of the bank with an added benefit of minimizing the likelihood of committing errors by bank tellers (Jayawardhena & Foley, 2000). Banking agents can be pharmacies, supermarkets, convenience stores, lottery outlets, post offices, and many more. For this study, three variables are isolated as the potential variables that influence the use of alternative banking channels by the customers. The variables include; mobile banking, internet banking and agency banking. These were considered as independent variables. All these independent variables were expected to have effects on the performance of the banks which were the dependent variables. Technological advancement and regulatory framework were considered to influence the mobile, internet and agency banking services. Technology and legislation were therefore intervening variables.

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Independent Variables

Dependent Variables

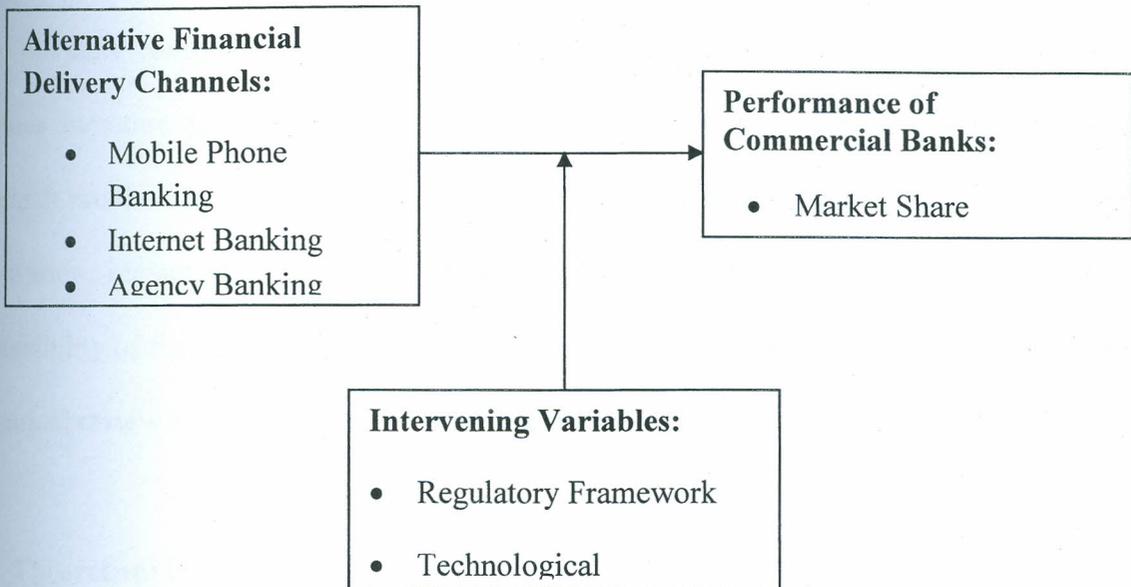


Fig. 1: Conceptual Framework (Source: Self Conceptualisation, 2015)

CHAPTER TWO

LITERATURE REVIEW

Introduction

The literature comprises both theoretical and empirical literature. The chapter presents the various literature perspectives which are relevant to the study area and whose basis the research problem is embedded. The significant areas of review included financial services innovation, impact of technology on banking, alternative financial delivery channels, and accessibility of financial services in developing economies, financial inclusion in Kenya, and empirical review and literature gaps as well as theoretical literature optimization.

2.1. Theoretical literature

Jacob (2005) posts that unlike other functions, such as risk management, branch operations, or marketing, alternative financial delivery channels are relatively a new field, even in the banking sector. There are few reference points and even fewer success stories and almost none are widely communicated across borders or regions. This means that senior executives often have an incomplete understanding of alternative delivery channels and it is scanty on how they might fit in their businesses. In addition, it is unclear of what benefits they may bring. In essence, few successful reference points discourage experimentation, leading to few or constrained innovative pilots (Jacob, 2005). It's therefore in this regard that the research was set out to bridge the gap that there existed.

2.2.1. Agency Theory

Agency theory analyses the relationships between a business firm's owners and its managers who, under law, are agents for the owners. The key issues in agency theory centre upon whether adequate market mechanisms exist that compel managers to act in ways that

whether adequate market mechanisms exist that compel managers to act in ways that maximize the utility of a firm's owners where ownership and control are separated. Under the terms of agency theory, a principal (P) passes on authority to an agent (A) to conduct transactions and make decisions on behalf of the principal in an effort to maximize P's utility preferences. Agency problems can arise if: P and A have different goals; P and A have disparate skills in evaluating A's performance; P and A possess different sets of information relevant to the managerial decisions A must make as a representative of P; or P and A have different degrees of risk aversion. At the core of agency problems is the fact that principals may not be able to monitor agents, either perfectly or costless, as to the agent's actions or the information behind those actions.

Agency problems emerge because contracts between principals and their agents are neither costless written nor costless enforced. Managers, as agents of a firm's shareholders, may not devote their best efforts toward managing the firm unless those efforts are consonant with maximizing their own welfare. In the commercial banking industry, ownership is becoming increasingly diversified among individual and institutional shareholders, and the dominance of individual stockholders in the industry appears, on the whole, to be decreasing. These trends may exacerbate "agency problems" in the banking industry if these problems truly exist.

In commercial banking, agency problems may arise from three principal sources: partial ownership of a banking firm by individuals who are both owners and managers and who, therefore, may behave differently than utility-maximizing owners alone; the presence of government-sponsored deposit insurance programs that do not differentially price insurance coverage to reflect the risk exposure of each banking firm and that can elect to delay

recognition of a bankruptcy, creating a moral hazard because management and stockholders can pursue high-risk investments in an attempt to transfer wealth from depositors to shareholders; and, the existence of informational asymmetry where owners and managers do not share the same information.

Williamson (1981) argues that a utility-maximizing manager may be prone to expense-preference behaviour that results in operating expenses and capital outlays carried beyond the profit-maximizing level. However, limits on managerial discretion exist that may force long-run conformity to owners' interests, including labour market constraints (such as the job mobility of existing management, as noted by Fama (1970) and capital market constraints (such as the threat of corporate takeovers).

Agent banks are retail establishments contracted by the banks and authorized by the central banks to render services for banks. They use technology and business arrangements with retailers, such as supermarkets, grocery stores, drugstores, gas stations, the postal company, and the lottery outlet chain. Agency banking offer services including savings deposits, credit withdrawals, bill payments, new account openings, money transfers, insurance, and government benefits including pension receipts to provide access to financial services people active in informal economy. However, the new channel represented by agency banking is expanding significantly, in their many ways of composition with the retailers, lottery outlets, post office agencies, register offices, retail store chains, etc. They are truly extensions of banking services installed in their partners' infrastructure.

2.2.2. Intermediation Theory

In the traditional Arrow Debreu model of resource allocation, and households interact through markets and financial intermediaries play no role. When markets are perfect and complete, the allocation of resources is Pareto efficient and there is no scope for intermediaries to improve welfare. Moreover, the Modigliani Miller theorem applied in this context asserts that financial structure does not matter: households can construct portfolios which offset any position taken by an intermediary and intermediation cannot create value (Fama, 1980 and McDonald, 2011).

A traditional criticism of this standard market-based theory is that a large number of securities are needed for it to hold except in special cases. However, the development of continuous time techniques for option pricing models and the extension of these ideas to general equilibrium theory have negated this. Dynamic trading strategies allow markets to be effectively complete even though a limited number of securities exist. Such an extreme view that financial markets allow an efficient allocation and intermediaries have no role to play is clearly at odds with what is observed in practice.

Historically, banks and insurance companies have played a central role. This appears to be true in virtually all economies except emerging economies which are at a very early stage. Even here, however, the development of intermediaries tends to lead the development of financial markets themselves (McKinnon, 1973). In short, banks have existed since ancient times, taking deposits from households and making loans to economic agents requiring capital. Insurance, and in particular marine insurance, also has a very long history. In contrast, financial markets have only been important recently, and then only in a few countries, primarily the UK and the US. Even there, banks and insurance companies have

played a major role in the transformation of savings from the household sector into investments in real assets.

Roles played by these intermediaries in the financial sector is found in the many and varied models in the area known as intermediation theory. These theories of intermediation have been built on the models of resource allocation based on perfect and complete markets by suggesting that it is frictions such as transaction costs and asymmetric information that are important in understanding intermediation. Gurley and Shaw (1960) and many subsequent authors have stressed the role of transaction costs. For example, fixed costs of asset evaluation mean that intermediaries have an advantage over individuals because they allow such costs to be shared. Similarly, trading costs mean that intermediaries can more easily be diversified than individuals.

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Looking for frictions that relate more to investors' information sets, numerous authors have stressed the role of asymmetric information as an alternative rationalization for the importance of intermediaries. One of the earliest and most cited papers, Leland and Pyle (1977), suggests that an intermediary can signal its informed status by investing its wealth in assets about which it has special knowledge. In another important paper, Diamond (1984) has argued that intermediaries overcome asymmetric information problems by acting as "delegated monitors." Bhattacharya and Thakor (1993) have provided an excellent survey of the current state of the literature on banking, building on an earlier review of the banking literature. The traditional view of the role and functions performed by intermediaries with the evolution of these institutions over the last few decades. It is an attempt to confront the literature with a view of the practice to see if the literature adequately addresses the reasons

that these institutions exist in the financial markets, and how they perform value added activity.

To understand how physical coverage translates into improved usage and how particular banking models can impact financial intermediation and financial performance, by extension, it is important to consider the issue of the non-exclusivity of agents.

Non-exclusivity improves outreach by allowing agents to represent more than one financial institution, in effect allowing them to serve more customers. Non-exclusivity of agents is especially important in rural areas where bank branch coverage is minimal and qualified agents are also scarce. In rural areas, an agent will often be the only banking outlet available to the local population. It is critical that these agents are allowed to serve as much of the local population as possible, which would mean representing multiple financial institutions, from mainstream commercial banks to state-run development banks that cater to the needs of low-income populations.

2.2.3. Mobile Banking Business Models

A wide spectrum of agency banking models, which operate like branchless banking, is evolving. However, no matter what business model, if agency banking is being used to attract low-income populations in often rural locations, the business model depends on banking agents, i.e. retail or postal outlets that process financial transactions on behalf banks. The banking agent is an important part of the branchless banking business model since customer care, service quality, and cash management depend on them. These models differ primarily on the question that who establishes the relationship (account opening, deposit taking, lending etc.) to the end customer, the Bank or the Non-Bank. Another difference lies in the

nature of agency agreement between bank and the Non-Bank. Models of branchless banking can be classified into three broad categories - Bank Focused, Bank-Led and Nonbank-Led.

Bank-Focused Model: The bank-focused model 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. **Bank-Led Model:** The bank-led model offers a distinct alternative to conventional branch-based banking in that customer conducts financial transactions at a whole range of retail agents (or through mobile phone) instead of at bank branches or through bank employees.

This model promises the potential to substantially increase the financial services outreach by using a different delivery channel (retailers/ mobile phones), a different trade partner (telco / chain store) having experience and target market distinct from traditional banks, and may be significantly cheaper than the bank-based alternatives. The bank-led model may be implemented by using correspondent arrangements. In this model customer account relationship rests with the bank. **Non-Bank-Led Model:** The non-bank-led model is where a bank does not come into the picture (except possibly as a safe-keeper of surplus funds) and the non-bank (e.g. telco) performs all the functions.

Branchless banking may be based on many configurations between banks and business partners. However, the most successful experiences of the last decade rely on infrastructure that connects a diverse group of actors involved in the network arrangement designed to deliver financial services outside regular bank channels. Mas (2009) note that three main

elements typically compose the network: retail stores easily accessible by low-income clients; an electronic payment infrastructure; and, an account platform. The latter is provided mostly by traditional banks. Account platforms necessarily operated internally within banks. Retail establishments, in contrast, are obviously outside agents, acting as intermediaries between the institution and its customers. The payment infrastructure may either be operated internally by the bank or supplied by third parties.

There are two main approaches for ICT-based branch less banking, one of them related to mobile phone networks and the other one to points-of-service (POS) or personal computers (PC) terminals (Prochaska & Brix, 2008). The first approach tends to be dominant where bank penetration is very low and client interaction with the network is driven by mobile phone use and so controlled by telecom firms. These experiences related to mobile phone projects tend to be more common in Africa and Asia.

Agency banking networks can be seen as technological innovation from a supply-side perspective. Each correspondent network provides a flexible and low-cost technological infrastructure to ensure access of microfinance services in a more cost-effective way than other alternatives. From a demand-side perspective, agency networks represent a social achievement, a social innovation, giving the poor easier access to essential banking services, even in remote locations where traditional banks branches usually do not reach. Finally, agency networks can also be an adaptive innovation, but here we need more knowledge about what adaptations are necessary regarding the integration microcredit-correspondents in order to increase their scale and transferability to other contexts. Agency banks networks have dramatically increased bank outreach and proved an attractive way for banks to reach the populace that was previously bank less (Soares&MeloSobrinho, 2007). This use of ICT

significantly reduces the costs and increases the reach of banking, making correspondents an attractive vehicle for the underserved low income population (Kumar, 2005).

2.3. Empirical Literature Review

Research on banking channels in Kenya remains scanty. Kamau (2012) undertook a study on the relationship between Agency banking and financial performance of banks in Kenya and established negative and weak correlation between the two.

From the above study Kamau (2012), it is evident that Kamau only used one independent variable that was agency banking and that could not give a fair representation of effect of all other financial delivery channels of Banking on the performance of commercial banks. It is because of this that the researcher wants to find out on the effects of the three main other channels of banking on the performance of commercial banks with agency banking being one of the independent variable together with internet and mobile banking.

Mwangi (2012) sought to establish role of channel banking in the performance of commercial banks in Kenya and established that cost effectiveness (infrastructure, human resource and security cost) associated with channel banks positively influence banks financial performance.

From Mwangi (2012) research, his findings majored on the cost effectiveness side of other banking channels which he found out to positively influence banks financial performance. In his research he recommended for further research on the effect of other financial delivery channels on the performance of commercial banks with the cost effectiveness element remaining constant to both the channels. It is in this recommendation that the researcher

intends to establish the effect of other financial delivery channels on the performance of commercial banks.

Kithuka (2012) studied factors influencing growth of channel banking in Kenya and established that convenience of its technology, accessibility and cost has influenced its use. However, these studies were conducted on at most 4 banks that had implemented channel banking.

From Kithuka (2012) findings, the research must have revealed the most valid findings at that particular time. On the contrary, so many changes have taken place since then and very many banks have adopted the use of alternative financial delivery channels, It is then in order to get the clear picture of the current state of effect of alternative financial delivery channels on the performance of commercial banks. This is the reason why the researcher intends to carry out a research on the effect of alternative delivery channels on the performance of commercial banks with a sample population of 30 banks.

Mwangi (2011) evaluated the role of channel banking in the performance of commercial banks in Kenya. The study was done on four banks offering channel banking services using questionnaires distributed to the banks' branch managers. The study established that infrastructure cost and security influence the performance of commercial banks attributable to channel banking to a very great extent. The study recommends that channel banking should be given more attention on security measures including risk-based approach and that the banks should find better ways of screening their agents to ensure that the large cash transactions handling is effectively carried out on their behalf; secure operating

systems capable of carrying out real time transactions, generating an audit trail, and protecting data confidentiality and integrity.

However the researcher wants to challenge Mwangi (2011) findings on the ground that his variables did not incorporate all the alternative financial delivery channels since he mainly talked about agents. It is upon this weakness that the researcher intends to build a solid case for this research.

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Kithuka (2012) sought to establish the factors influencing growth of channel banking in Kenya. The study sampled 100 Equity Bank agencies doing bank focused, bank led and non-bank led transactions in Kwale County. The study established that convenience of the money transfer technology plus its accessibility, cost, support and security influence the use of channel banking. Waithanji (2012) sought to establish effect of agent banking as a financial deepening initiative in Kenya. Descriptive statistics were used for the analysis. The findings revealed lack of connection between agent banking and financial deepening. Waithanji noted that the relationship could not be conclusively determined due to the low number of banks that have implemented it and impact may become clearer once all banks adopt channel banking. It is clear from the findings of the above researches Waithanji (2012) that none of the researchers established the association between channel banking to financial performance of a commercial bank. This is what the researcher intends to establish hence filling a gap.

In noting limitations of her study, Waithanji (2012) stated that relationship between channel banking and financial deepening could not be conclusively determined due to the low number of banks that have implemented it and impact may become clearer once all banks

adopt channel banking. This study will select all the 33 banks that have since then implemented channel banking to fill-in the inconclusiveness of the previous findings and knowledge gap, thereof.

According to Bean 2009, agency 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). From the findings of Bean, 2009, the contribution of agency banking to customers has been established.

However no attention has been given on the effect of the same on performance of commercial banks. Previous studies mainly in developed countries like U.S.A and Britain shows the essence of agency banking to an economy, despite this there has been no empirical study that has been undertaken in Kenya to establish the contributions of agency banking on financial performance of commercial banks in Kenya.

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These studies are all authoritative in their own rights; however the methodologies used like the descriptive survey in them have significant weaknesses that can be challenged through a study like the one the researcher intend to carry out. Therefore, there is a gap of information;

it is upon this basis that this study is based. The study sought to investigate the effect of channel banking on financial performance of commercial banks in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This section discusses the research methodology which was adopted during the study. It includes the research design, study area, target population; sampling techniques and size, data sources and collection instruments, validity and reliability test research ethics and data analysis and presentation.

3.2. Research Design

This was a correlation research design. According to Jackson 2009, a correlation research design allows the researcher to describe the relationships that exist between two or more variables. Also, correlation studies allow the researcher to make predictions from one variable to another. A correlation coefficient allows the researcher to assign a numerical value to the observed relationship (Jackson, 2009). Cross-sectional research design on the other hand, allows the researcher to study the possible differences in the operations across the commercial banks selected for the study (Jackson, 2009).

3.3. Study Area

The study was conducted within Commercial Banks in Kisumu town. The town is located south of the Equator, along the shores of Lake Victoria. It is bordered by Homa-Bay County to the South, Kericho County to the East and Siaya to the North. The targeted banks included Kenya Commercial Bank, Equity Bank, National Bank of Kenya, Cooperative Bank of Kenya, Diamond Trust Bank, Credit Bank of Africa, Bank of Baroda, Faulu, K-Rep, Family bank amongst others

3.4. Target Population

The study targeted a population of thirty three (33) licensed commercial banks operating in Kisumu City, whose most of their customers had adopted alternative service delivery channels. This formed a sampling frame for the study.

3.5. Sample Size and Sampling Technique

A census of thirty (30) commercial banks was taken, where a manager of every bank was interviewed.

3.6. Data Collection

3.6.1. Data Sources and Data Collection Instruments

The study used both primary and secondary data. Primary data was collected using both structured and semi - structured questionnaires which were distributed to all the banks which were involved in the study. This was supplemented by the use of secondary data obtained from the commercial banks' annual published reports and other relevant literature including journals and records available.

3.6.2. Reliability and Validity of Data Collection Instruments

Reliability is the ability of the research instrument to measure and produce the same result each time it is used under the same conditions with the same subjects. Validity is the extent to which the research instrument accurately addresses research the questions, hypotheses, and objectives of the study. Reliability was tested by use of twenty four questionnaires which were piloted with randomly selected bank employees who were not included in the final study sample. This was meant to avoid response bias in case they were to complete the same questionnaire twice. The rule of the thumb suggests that 5% to 10% of the target sample

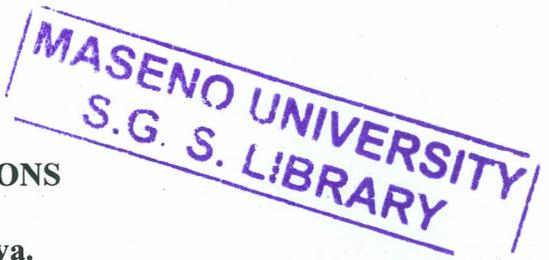
should constitute the pilot test. The pilot test sample was within the recommendation. The twenty four questionnaires were coded and input into Statistical Package for Social Sciences [SPSS] version 20 for running the Cronbach reliability test. The reliability of the questionnaire was tested using the Cronbach's alpha correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS) software.

The results of the reliability test produced an overall Cronbach Alpha correlation coefficient of 0.887. The closer Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability (Sekaran, 2003). A coefficient of 0.7 is recommended for a newly developed questionnaire and therefore 0.887 was adequate for this study. To ensure reliability and validity of the instrument, pilot study was undertaken with 10% of the targeted 33 banks (3 banks) and the bank's staff who are internal customers to detect any weaknesses in the collection instrument and determine its reliability.

3.7. Data Analysis and Presentation

Ordinarily, the amount of data collected in a study is rather extensive and research questions and hypotheses cannot be answered by a simple perusal of numeric information and therefore data need to be processed and analyzed in an orderly and coherent fashion. Quantitative information is usually analyzed through statistical procedures. Statistical analyses cover a broad range of techniques, from simple procedures that we all use regularly like computing an average to complex and sophisticated methods. Although some methods are computationally formidable, the underlying logic of statistical tests is relatively easy to grasp, and computers have eliminated the need to get bogged down with detailed mathematical operations (Polit and Beck, 2003). The analysed data were presented in frequency tables.

CHAPTER FOUR
RESULTS AND DISCUSSIONS



4.1. Banking services used in Commercial banks in Kenya.

There are three major banking services used in Commercial banks in Kenya, namely Mobile banking, Agency banking and Manual banking. The table 4.0 shows the summary of the banking services in Kenyan Commercial banks in Kenya. The findings in Table4.0 shows that mobile banking platform as a channel is used a lot in Kenya compared to other channels. The frequency Table below shows that Mobile banking is the most used service delivery in Commercial banks in Kenya which translated to 46.7%. This has opened a new frontier for growth of commercial banks since almost every person who runs a bank account owns a mobile phone (Mwangi 2011). A good number of individuals still prefer Manual banking to Internet banking translating to 33.3% and 16.7% respectively.

Table 4.0.: Frequency table showing the banking services used in Kenyan Commercial banks

Banking Channels	Frequency	Valid Percent	Cumulative Percent
Mobile banking	14	46.7	46.7
Manual banking	10	33.3	80.0
Agency banking	5	16.7	96.7
Internet banking	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

The findings in table 4.0 clearly shows that mobile banking platform as a channel is used a lot in Kenya compared to other channels. This has opened a new frontier for growth of

commercial banks since almost every person who runs a bank account owns a mobile phone (Mwangi 2011).

Table 4.1 Banking Services preferred in Commercial Banks in Kenya

Despite the use of the three banking services in Commercial banks, most individuals still prefer Mobile banking to either Agency and Internet banking mode of delivery which translates to 46.7%, 30.0% and 23.3% respectively as indicated in the frequency table 4.1 shown below

Banking Channels	Frequency	Valid Percent	Cumulative Percent
Mobile banking	14	46.7	46.7
Agency banking	9	30.0	76.7
Internet bating	7	23.3	100.0
Total	30	100.0	

Research Data (2015)

From the findings above, it is evident that banking customers are increasingly expecting more convenience, accessibility, personalization, and reliability across the distribution channel network. Banks need to deliver these features by leveraging innovative technologies and solutions for a seamless and personalized experience. This implies that there is a clear demand for banks to invest in their channel networks to make them more customer-centric and user friendly, while in the process improving the channel efficiencies for better return on investment and increased profitability.

4.2. Usage of Alternative financial delivery channels in Kenyan Commercial Banks.

4.2.1. Mobile Banking

The performance of Kenyan Commercial banks has very greatly increased due to the introduction of Mobile banking mode of service delivery. 43.3% of the total population interviewed believed that the performance is greatly increased due to the use of Mobile banking services. 30% believed the performance was great since the introduction of mobile banking. The lowest percentage (16.7%) of the respondents believed that the performance

was moderate with the introduction of mobile banking as a channel. The findings in the study indicate that mobile banking was of great importance to commercial banks.

Table 4.2: Frequency table showing Kenyan Commercial bank's performance with regards to Mobile banking service delivery

Extent of use	Frequency	Valid Percent	Cumulative Percent
Very great	13	43.3	43.3
Great	9	30.0	73.3
Moderate	5	16.7	90.0
Low	2	6.7	96.7
Not at all	1	3.3	100.0
Total	30	100.0	

Research data (2015)

The findings above indicates that mobile banking is proving to be a great channel for banks. This implies that as the demand for mobile banking services grew, banks implemented solutions that would allow their customers to perform basic financial transactions on their mobile devices. However, with the growing demand from customers and an urgent need to cut down their operating costs, banks have realized the need to provide mobile banking

services aligned with other banking channels to improve the overall customer experience. Banks have begun to recognize the value of various access modes for reaching out to their different customer segments. They are also seeing the value in performing certain kinds of secure transactions on devices ranging from the most basic mobile phones to the latest smart phones and mobile devices. As banks continue to increase their focus and investments around mobile financial services, there are contrasting differences that exist across developed and developing markets. In emerging markets, favorable demographics demonstrated through a Tech-savvy younger population and lower banking and internet penetration make mobile banking an attractive channel for retail banks. For this reason, there may be higher potential for mobile banking services in developing countries as compared to their developed counterparts. However, consumer protection and growing security concerns in developing markets may slow down the growth rate.

4.2.2. Agency Banking

Though Mobile banking is widely used by the Kenyan Commercial banks to increase their performance, Agency banking has also been embraced to improve the performance in the bank. This is observed in the frequency table 4.3 since 36.7% of the respondents interviewed believed that agency banking greatly influenced commercial banks performance, thirty percent (30%) believed agency banking greatly influenced commercial banks performance and 20%believed agency banking moderately affects banks performance.

Table 4.3: Frequency table showing Kenyan Commercial Banks performance with regards to Agency banking service delivery

Extent of Use	Frequency	Valid Percent	Cumulative Percent
Very great	11	36.7	36.7
Great	9	30.0	66.7
Moderate	6	20.0	86.7
Low	3	10.0	96.7
Not at all	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

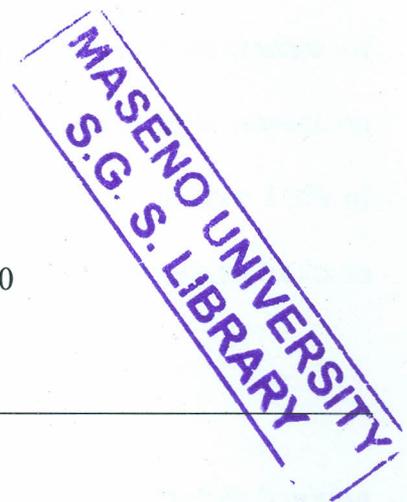
The findings in the table above implies that agency banking channel has emerged as a high-investment priority for banks due to its low cost-to-serve, higher profitability, and client adoption rate. Banks globally are looking for enhancing their agency banking channel functionalities across the board for delivering a better client experience. Banks are hunting for new revenue streams as new regulations have put a dent in the traditional sources of fee income for many financial services providers, including overdraft fees and credit card late fees. Banks are looking to recoup some of the lost income by charging for value-added services that can be provided through the agency banking channel.

4.2.3. Internet Banking

There is moderate performance by Kenyan Commercial banks in terms of Internet banking mode of service delivery. This constitutes to 36.7% of the population interviewed as summarized in the table 4.4.

Table: 4.4 Frequency table showing Kenyan Commercial Banks performance with regards to Internet banking service delivery

Extent of use	Frequency	Valid Percent	Cumulative Percent
Moderate	11	36.7	36.7
Very great	7	23.3	60.0
Great	5	16.7	76.7
Low	4	13.3	90.0
Not at all	3	10.0	100.0
Total	30	100.0	



Research Data (2015)

4.2.4. Kenyan Commercial Banks Performance with Regards to Profit Maximization

From the findings above, it is clear that online banking channel has evolved into an essential part of the banking channel mix. Banks are now focusing on achieving the optimal balance between channels with self-service capabilities (such as online and mobile) for day-to-day financial transactions, and advisory-based channels (such as the branches) for more complex client needs. Easy availability and affordability of high speed internet, personal computers, and improved online security are also contributing towards the increase in internet banking adoption. Online banking has evolved over the last decade from a source of product information to a one-stop-shop providing a complete set of banking services. As a new generation of banking clients demand more services to be delivered through the online channel, the online banking model has evolved from being purely tactical to a strategic tool through which banks can deliver better customer engagement and service.

4.3 Delivery Channels and Performance of Banks

4.3.1. Mobile Banking

When asked about the rate at which Mobile banking services has improved the performance of Kenyan Commercial Banks; 46.7 of respondents polled very much, 23% noted just much, 20% were of the view that mobile banking has done little to improve performance of commercial banks while 6.7% of respondents noted that there was very little impact on profitability since mobile banking platforms were adopted by banks and another 3.3% of respondents were of the view that mobile banking contributes to loss by commercial banks as shown in table 4.5.

Table 4.5: Frequency table showing Profit Maximization in relation to Mobile banking services

Extent in Performance	Frequency	Valid Percent	Cumulative Percent
Very much	14	46.7	46.7
Much	7	23.3	70.0
Little	6	20.0	90.0
Very little profit	2	6.7	96.7
Loss	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

4.3.2. Agency Banking

When asked about the rate at which agency banking services has improved the performance of Kenyan Commercial Banks; 46.7 of respondents polled very much, 23.3 % noted just much, 20% were of the view that agency banking has done little to improve performance of

commercial banks while 6.7% of respondents noted that there was very little impact on profitability since agency banking platforms were adopted by banks and another 3.3% of respondents were of the view that agency banking contributes to loss by commercial banks as shown in table 4.6

Table 4.6: Frequency table showing Profit Maximization in relation to Agency banking services

Extent Change	Frequency	Valid %	Cumulative %
Much	14	46.7	46.7
Very much	7	23.3	70.0
Little	6	20.0	90.0
Very little profit	2	6.7	96.7
Loss	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

The findings show that commercial banks that had rolled up agency banking were more profitable based on the number of agent signed by the commercial bank. Agents provide cash deposit and withdrawal, balance enquiry, collection of documents in relation to account opening, loan application, credit and debit card application, collection of debit and credit cards, cheque book request and collection for their customers through agency banking. However, on deposits and withdrawals, the amount transacted is restricted by the ‘float’ accorded to the agent. Thus, low volume transactions are conducted at the agency banks.

Security risky transactions like electronic fund transfer, disbursement of loans are rarely handled by agency banks. It is also evident in the summary of the volume of transactions that the growth in this sector more than doubled. This is a sign that the customers are taking this model positively and it has greater benefits to the customer in comparison to the bank. The customer has the banking services at their door step and this translates to less time spent on

the road to the banks, convenience in deposits or withdrawals, less waiting time in queues among other benefits.

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4.3.3. Internet Banking

When asked about the rate at which internet banking services has improved the performance of Kenyan Commercial Banks; 33.3 of respondents polled very much, 23.3 % noted just much, 20% were of the view that internet banking has done little to improve performance of commercial banks while 13.3% of respondents noted that there was very little impact on profitability since internet banking platforms were adopted by banks and another 10% of respondents were of the view that internet banking contributes to loss by commercial banks as shown in table 4.7

Table 4.7: Frequency table showing Profit Maximization in relation to Internet banking service

Extent use	Frequency	Valid Percent	Cumulative Percent
Very much	10	33.3	33.3
Much	7	23.3	56.7
Little	6	20.0	76.7
Very little profit	4	13.3	90.0
Loss	3	10.0	100.0
Total	30	100.0	

Research Data (2015)

The findings above indicates that benefits of E-banking are manifold and are to be seen from the point of view of the banks themselves, customers and even the regulators. E-banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater opportunities to

sell cross border. For customers, the potential benefits are: more choice; greater competition and better value for money; more information; better tools to manage and compare information and faster service. This earns the banks none funded income.

4.4. Kenyan Commercial Banks performance with regards to Cost Reduction

4.4.1. Mobile Banking Services

When asked whether Kenyan Commercial banks has improved in their performance in terms of Cost reduction due to the introduction of Mobile banking service delivery. 36.7% of the population interviewed believed that, cost reduction is very much reduced; 30% much reduced, 20% less reduced, 10% very little reduced and 3.3% were of the opinion that the use of mobile banking as an alternative channel has not reduced banking cost as shown in table 4.8 below

Table 4.8: Frequency table showing Cost Reduction in relation to Mobile banking services

Extent in Performance	Frequency	Valid Percent	Cumulative Percent
Very much reduced	11	36.7	36.7
Much reduced	9	30.0	66.7
Less reduced	6	20.0	86.7
Very little reduced	3	10.0	96.7
Not reduced	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

From the finding above its evident that as the demand for mobile banking services grew, banks implemented solutions that would allow their customers to perform basic financial transactions on their mobile devices. However, with the growing demand from customers and

an urgent need to cut down their operating costs, banks have realized the need to provide mobile banking services aligned with other banking channels to improve the overall customer experience which leads to profitability.

4.4.2. Agency Banking

When asked whether Kenyan Commercial banks has improved in their performance in terms of Cost reduction due to the introduction of agency banking service delivery. 30% of the population interviewed believed that, cost reduction is very much reduced; 26.7% much reduced, 20% less reduced, 13% very little reduced and 10% were of the opinion that the use of agency banking as an alternative channel has not reduced banking cost as shown in table 4.9

Table 4.9: Frequency table showing Cost Reduction in relation to Agency banking services

Extent in Performance	Frequency	Valid Percent	Cumulative Percent
Much reduced	9	30.0	30.0
Very much reduced	8	26.7	56.7
Less reduced	6	20.0	76.7
Very little reduced	4	13.3	90.0
Not reduced	3	10.0	100.0
Total	30	100.0	

Research Data (2015)

The findings implies that agency banking reduces the cost of doing business thus increasing greatly the profitability of the banks

4.4.3. Internet Banking

When asked whether Kenyan Commercial banks has improved in their performance in terms of Cost reduction due to the introduction of internet banking service delivery. 36.7% of the population interviewed believed that, cost reduction is very much reduced; 23.3% much reduced, 20% less reduced, 13% very little reduced and 10% were of the opinion that the use of internet banking as an alternative channel has not reduced banking cost as shown in table 4.10

Table 4.10: Frequency table showing Cost Reduction in relation to Internet banking services

Extent in Performance	Frequency	Valid Percent	Cumulative Percent
Much reduced	11	36.7	36.7
Less much reduced	7	23.3	60.0
Much reduced	5	16.7	76.7
Not reduced	4	13.3	90.0
Very little reduced	3	10.0	100.0
Total	30	100.0	

Research Data (2015)

The online channel has emerged as a high-investment priority for global banks due to its low cost-to-serve, higher profitability, and client adoption rate. In 2010, a large portion of a bank's IT budget was spent on the online channel and this trend is expected to grow in the coming years. Banks globally are looking for enhancing their online channel functionalities across the board for delivering a better client experience. Banks are hunting for new revenue streams as new regulations have put a dent in the traditional sources of fee income for many financial services providers, including overdraft fees and credit card late fees. Banks are

looking to recoup some of the lost income by charging for value-added services that can be provided through the online channel.

4.5. Kenyan Commercial Banks performance with regards to Customer Numbers

4.5.1. Mobile Banking

When asked whether Kenyan Commercial banks has improved their deposits and customer numbers due to the introduction of mobile banking service delivery. 43.3% of the population interviewed believed that, deposits and customer numbers are very much improved since the advent of mobile banking as an alternative financial service delivery channel; 30% much improved, 16.7% little increased, 6.7% very little increased and 3.3% were of the opinion that the use of mobile banking as an alternative channel has not increased deposits and customer numbers as shown in table 4.11

Table 4.11: Frequency table showing improvement in Customer numbers with regards to Mobile banking services

Extent in Performance	Frequency	Valid Percent	Cumulative Percent
Very much improved	13	43.3	43.3
Much improved	9	30.0	73.3
Little increased	5	16.7	90.0
Very little improved	2	6.7	96.7
Not all	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

4.5.2. Agency Banking.

When asked whether Kenyan Commercial banks has improved their deposits and customer numbers due to the introduction of agency banking service delivery. 36.7% of the population interviewed believed that, deposits and customer numbers are very much improved since the advent of agency banking as an alternative financial service delivery channel; 30% much improved, 20% little increased, 10 % very little increased and 3.3% were of the opinion that the use of agency banking as an alternative channel has not increased deposits and customer numbers as shown in Table 4.12

Table 4.12: Frequency table showing improvement in Customer numbers with regards to Agency banking services

Extent in Performance	Frequency	Valid Percent	Cumulative Percent
Very much improved	11	36.7	36.7
Much improved	9	30.0	66.7
Little increased	6	20.0	86.7
Very little improved	3	10.0	96.7
Not at all	1	3.3	100.0
Total	30	100.0	

Research Data (2015)

The findings above clearly indicates that the banks have grown in terms of customer numbers thanks to channel banking

4.5.3. Internet Banking.

When asked whether Kenyan Commercial banks has improved their deposits and customer numbers due to the introduction of internet banking service delivery. 36.7% of the

population interviewed believed that, deposits and customer numbers are very much improved since the advent of agency banking as an alternative financial service delivery channel; 16.7% much improved, 13.3% not at all increased, 10 % very little increased and 3.3% were of the opinion that the use of internet banking as an alternative channel has not increased deposits and customer numbers as shown in table 4.13

Table 4.13 Extent of improvement in Customer numbers with regards to Internet banking services

Frequency	Valid Percent	Cumulative Percent	
Very much improved	13	43.3	43.3
Much improved	9	30.0	73.3
Little increased	5	16.7	90.0
Very little improved	2	6.7	96.7
Not all	1	3.3	100.0
Total	30	100.0	

Research data (2015)

With the growth and popularity of the online channel, banks are now expected to deliver a personalized online customer experience through the internet and social media tools. The focus for banks is also expected to be on maximizing revenue opportunities by achieving the optimal balance between the channel usage for basic transactions and advisor-assistance for more complex transactions. U.S. retail banks have been the most active in adopting Web 2.0 technologies for marketing and communications, with European and Asian counterparts not very far behind. While the online channel is becoming important for banks globally, differences exist across mature and emerging markets. In mature markets, the key focus area for banks is to upgrade their existing online platform by supplementing them with advanced

functionalities and features. In emerging markets, the focus is on investing in online banking technologies to meet customer demand



4.6 Effect of alternative financial delivery channels on the performance of commercial banks

In conclusion, the ANOVA table below was used to test the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The Residual row displays information about the variation that is not accounted for by the model. The regression and residual sums of squares are approximately equal, which indicates that about half of the variation in extent of satisfaction with the alternative banking service is explained by the model. The significance value of the F statistic is less than 0.05, which means that the variation explained by the model is not due to chance. Though the ANOVA table below is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

Table 4.1.4 shows that the proportion of variance in bank performance explained by the independent variables is 44.3% while 50.1% variations in bank performance could be explained by the variations in the independent variables. The value of Durbin-Watson is 2.240, which is close to 2, an indication of the absence of serial correlation.

Table 4.1.4: Summary of the Regression Model

R	R Square	Adjusted Square	Std. Error of Change Statistics				df1	df2	Sig. Change	F Durbin-Watson
			R the Estimate	R Square Change	Square F	Change				
.708	.501	.443	.41104	.501	8.695	3	26	.000	2.240	

Table 4.1.5 shows that $F(3, 26) = 8.695$, which is significant at $p = 0.000$, is a likely indication that the estimated model fits the research data well and that the agency banking, mobile banking and internet banking jointly explain bank performance.

TABLE 4.1.5: ANOVA Results for the Estimated Regression Model

		Sum	of	Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	4.407	3	1.469	8.695	.000
	Residual	4.393	26	.169		
	Total	8.800	29			

a. Predictors: (Constant), agency banking, use of mobile banking, internet banking

b. Dependent Variable: bank performance

Table 4.1.6 shows that mobile banking ($\beta = 0.402, p = 0.001$) and agency banking ($\beta = 0.179, p = 0.050$), both had significant positive effects on Bank performance. However, internet banking ($\beta = 0.087, p = 0.411$) had insignificant positive effect on bank performance. It also shows that the variance of inflation factor (VIF) ranges from 1.100 and 1.124. In multiple regression, the VIF is used as an indicator of multicollinearity. According to Pan and Jackson (2008), VIF greater than 4 depicts serious multicollinearity. The estimated VIFs are less than 4 thus suggest absence of serious multicollinearity.

Table 4.1.6: Estimated regression coefficients of the independent variables

	Unstandardized		Standardized			Collinearity	
	Coefficients		Coefficients			Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	.949	.578		1.642	.113		
mobile banking	.402	.112	.524	3.576	.001	.893	1.120
internet banking	.087	.104	.123	.835	.411	.890	1.124
agency banking	.179	.089	.292	2.010	.050	.909	1.100

The established regression equation was

$$Y = 0.949 + 0.402 X_1 + 0.087X_2 + 0.179 X_3$$

$$\text{Stdv} = (0.578), (0.112), (0.104), (0.089)$$

$$t = (1.642), (3.576), (0.835), (2.010)$$

$$R^2 = 0.501$$

From the above regression model, holding mobile banking, internet banking and agency banking to a constant zero, financial performance of commercial banks would be 0.949, its established that a unit increase in internet baking would cause an increase in financial performance of commercial banks by a factor of 0.087, a unit increase in mobile banking would cause an increase financial performance of the bank by a factor of 0.402, a unit increase in agency banking would lead to an increase financial performance of the bank by a factor of 0.179. This clearly shows that there is a positive relationship between financial performance of commercial banks and internet banking, mobile banking and agency banking. The study further revealed that the P-value were less than 0.05 in all the variables, which shows that all the independent variable were statistically significant and thus in position to make conclusion for the study.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1. Introduction

This chapter summarizes the findings of the study and makes conclusions upon which recommendations are drawn.

5.2. Summary of Findings

Evidence from previous studies on whether banking channels influence bank performance showed that there were mixed results based on the operating environment and the level of adoption. The findings of the study revealed that the combined effect of bank innovations influenced bank performance positively. These findings were both supported by the frequencies of the responses from the respondents which were presented in the form of percentages and mean scores.

5.2.1. To establish the effect of mobile banking on the performance of commercial banks in Kenya.

The first objective of the study was to establish the effect of mobile banking on the performance of commercial banks in Kenya. The findings revealed that that as the demand for mobile banking services grew, banks implemented solutions that would allow their customers to perform basic financial transactions on their mobile devices. However, with the growing demand from customers and an urgent need to cut down their operating costs, banks have realized the need to provide mobile banking services aligned with other banking channels to improve the overall customer experience which leads to profitability by its influence on return on assets of commercial banks in Kenya. This means that mobile banking is good at skimming out incomes and improving return on assets for the banks.

5.2.2. To establish the effect of agency banking on the performance of commercial banks in Kenya.

The second objective of the study was to establish the effect of agency banking on the performance of commercial banks in Kenya. The results showed that commercial banks that had rolled up agency banking were more profitable based on the number of agent signed by the commercial bank. Agents provide cash deposit and withdrawal, balance enquiry, collection of documents in relation to account opening, loan application, credit and debit card application, collection of debit and credit cards, cheque book request and collection for their customers through agency banking. However, on deposits and withdrawals, the amount transacted is restricted by the 'float' accorded to the agent. Agents add value by dishing out none funded income mainly on transaction based fees.

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5.2.3 To establish the effect of internet banking on the performance of commercial banks in Kenya.

The third objective sought to establish the effect of internet banking on the performance of commercial banks in Kenya. The findings indicates that benefits of E-banking are manifold and are to be seen from the point of view of the banks themselves, customers and even the regulators. Internet banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater opportunities to sell cross border. For customers, the potential benefits are: more choice; greater competition and better value for money; more information; better tools to manage and compare information and faster service. This earns the banks none funded income

5.3. Conclusion

Based on the findings of the study, it can be concluded that alternative financial delivery channels influence financial performance of commercial banks in Kenya positively. The influence of mobile banking on income is also statistically significant and hence the alternate hypothesis was accepted. The influence of agency banking on income is also statistically significant and hence the alternate hypothesis was accepted. The influence of internet banking on income is also statistically significant and hence the alternate hypothesis was accepted. Therefore adoption of alternative financial delivery channels by commercial banks has a high potential of improving financial performance and hence better returns to the shareholders.

The versatility of alternative financial delivery channels has made their adoption rate to be high among both the banks and their customers. It could have been challenging if the adoption was only with either the banks or the customers. Banks in Kenya have continued to perform well even when other sectors of the economy show lagged performance. This can be explained by the use of innovations in the sector which have enabled banks to start making income away from traditional sources like interest, trade and asset financing. Banks have been able to make more commission income from transactions done on innovation channels like; mobile phones, internet, credit cards and point of sale terminals.

5.4. Recommendations

The recommendations are based on the findings on the objectives of the study.

5.4.1. Influence of Alternative Banking Channels on Income

Banks should continue investing in innovation delivery channels because they are able to control their costs much better as compared to investment in brick and mortar or physical

branches. The volume of transactions that can be processed on channels like the internet and mobile are high as compared to delivering such transactions using manual processes. This helps to minimize the cost per unit of service and hence better returns to the banks. Commercial banks should explore more ways of maximizing their utilization and returns from mobile banking and internet banking.

5.4.2. Influence of Alternative Banking Channels on Return on Assets.

Since technological innovation is aggressively and continuously adopted in Kenya, the government should provide incentives for research and development to research scientists who would continue to invest their time and skills in discovering more bank innovations. It is recommended that the government also pursues a strategy to provide incentives for technology transfer from more developed economies in order to promote the adoption of world class innovations.

5.4.3. Influence of Alternative Banking Channels on Profitability.

Information and communication technology (ICT) professionals should invest their time, effort and resources towards innovations. This will mean more income for the professionals if the innovations become successful. In Kenya there are some citizens who are still unbanked due to poor access to financial services. ICT professionals should explore ways of providing innovative solutions for reaching the unbanked. This can result to more financial deepening and better financial development for the country and hence better profitability for the banks.

5.4.4. Influence of Alternative Banking Channels on Bank Deposits.

Alternative banking channels has its set of challenges especially related to security threat which can lead to reputation risk among banks and loss of confidence by the customers. The main users of bank alternative banking channels are depositors. Without deposits and depositors the sustainability of banks would be at risk. This therefore calls for better management of innovations in a manner that boosts depositors' confidence. System

developers therefore need to create enhanced and effective security systems which can detect, control, prevent and manage fraud incidents on the various innovation channels. This recommendation is derived from the growing threat of system intrusion by hackers which can erode the desired gains of bank innovations

5.5. Limitations of the Study

Due to time and resource constraints the study only reviewed the effect of alternative channels in the banking industry and therefore did not include other financial sector players such as the stock exchange, insurance, micro finance institutions, Savings and Credit Cooperatives (SACCO's) and pension funds. However this provides an opportunity for further research. The study experienced an initial slow response from the respondents who complained about the length of the questionnaire. This was mitigated by having constant follow up on phone and physical visits to the respondents' offices by using research assistants.

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