

FACTORS INFLUENCING THE UPTAKE OF AGENCY BANKING SERVICES BY CUSTOMERS IN COMMERCIAL BANK IN KENYA: A CASE OF KENYA COMMERCAL BANK

HENRY THOMAS MWANGI MAINA

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FACTORS INFLUENCING THE UPTAKE OF AGENCY BANKING SERVICES BY CUSTOMERS IN COMMERCIAL BANK IN KENYA: A CASE OF KENYA COMMERCAL BANK

Maina H,T, Mwangi, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi Kenya

Dr. Willy Mwangi M., Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi Kenya

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ABSTRACT

The business environment has changed in Kenya as in other parts of the world and it has been characterized by stiff competition among the players and the banking industry. The general objective of this study was to establish the factors influencing the uptake of agency banking services by customers in commercial banks in Kenya. The study also sought to establish how security, liquidity availability, customers and awareness influence the uptake of agency banking by customers in commercial bank in Kenya.

This study used a descriptive research design. The target population of this study was 4972 customers from Kenya Commercial Bank branches in the Nairobi CBD. The target population of this study was therefore 4972 respondents. The study used stratified sampling technique to select 10% of the target population. The sample size of this study was 497 respondents. The study used primary data which was collected by use of questionnaires; the questionnaires included structured and unstructured questions. The questionnaire was administered by use of a drop off and pick up later method to the sampled respondents. Statistical Package for Social Sciences (SPPS), data analysis software, was used to analyze the quantitative data. Further, quantitative data was analyzed by use of descriptive and inferential statistics. Descriptive statistics such as mean, frequencies, standard deviation and percentages were used to profile sample characteristics and major patterns emerging from the data. The study also used probit analysis to establish the relationship between the dependent variable and independent variables. Quantitative data was presented in tables and figures. The study also used content analysis to analyze qualitative data obtained from open ended questions. The data was then presented in a prose form.

The study found out that security and liquidity availability influence the uptake of agency banking by customers in commercial bank in Kenya. In addition, most customers had experienced a transaction failure in agent banks (KCB mtaani) and lack of liquidity. The study also found that security of agent banks in Kenya was bad. It was also revealed that agency banking centers experienced equipment malfunctioning and errors during a transaction very often. This study therefore recommends that KCB as well as other commercial banks in Kenya should imprive their systems so as to minimize transactions failures and errors. The study also recommends that Kenya Commercial banks should reduce the amount of information customers give to the agent bankers. This study also recommends that commercial banks in Kenya should ensure that their banks agents have enough float and cash to serve their customers. The study also recommends that policy makers in Kenya should increase security in estates and towns so as to reduce cases of robbery.

Key Words: Agency Banking, Security, Liquidity, Customer Awareness

INTRODUCTION

According to Nasieku, Kosimbei and Obwogi (2013) an appropriate banking environment is considered a key pillar as well as an enabler of economic growth (Ongore & Kusa, 2013). In an environment with a continuously emerging wave of information driven economy, the banking industry in Kenya has inevitably found itself unable to resist technological indulgence. The need for convenient ways of accessing financial resources beyond the conventional norms has seen the recurrent expansion and modernization of banking patterns.

According to Financial Sector Deepening Kenya (2010), the most recent data available indicates that only 19% of adult Kenyans reported having access to a formal, regulated financial institution while over a third (38%) indicated no access to even the most rudimentary form of informal financial service. This leaves a percentage of more than 80% outside the bracket of the reach of mainstream banking. The pent up demand for an affordable and reliable way of holding funds while ensuring that risk levels are consigned to a minimum is consistently unfolding. A system with the potential to obliterate the historical hurdles of cost and free access which have for a long time stood in the way of willing partakers of banking services evokes immediate attention and interest. The implementation of agent banking services in Kenya is a testament to this fact (Meso & Kaino, 2008).

An agency bank is a company/organization that acts in some capacity on behalf of another bank, it, thus, cannot accept deposits or extend loans in its own name; it acts as agent for the parent bank. It is a retail outlet contracted by a financial institution or a mobile network operator to process clients' transactions. Rather than a branch teller, it is the owner or an employee of the retail outlet who conducts the transaction and lets clients deposit, withdraw, and transfer funds, pay

their bills, inquire about an account balance, or receive government benefits or a direct deposit from their employer (Ongore & Kusa, 2013).

The partnership has helped banks to take financial services closer to people, more importantly, to areas that lack them. Kenya changed its banking laws in January 2010, to allow commercial banks offer their services through third-party businesses. The agents operate as satellite branches. The banking concept that is deepening access to financial services is gaining currency in Kenya, where one-third of the population still lacks access to formal banking services (Hsieh, 2007).

Commercial Banks in Kenya

There are forty three banks as categorized by Central Bank and members of the clearing house. Thirty-five of these banks, most of which are small to medium sized, are locally owned. The industry is majorly dominated by a few large banks which are foreign-owned, though some are partially locally owned. There are ten banks listed on the Nairobi Securities Exchange. The banks came together under the Kenya Bankers Association (KBA), which serves as the lobby for banks' interests and addresses the issues affecting member institutions (Kenya Bankers Association annual Report, 2011).

Banks represent a significant and influential sector of business worldwide that plays a crucial role in the global economy. Commercial banks are financial intermediaries that serve as financial resource mobilization points in the global economy (Godana, 2012). They channel funds needed by business and household sectors from surplus spending to deficit spending units in the economy. A well developed efficient banking sector is an important prerequisite for saving and investment decisions needed for rapid economic growth.

Prior to the 2010 Guidelines on Agent Banking, the Banking Act did not address the issue of banks using agents to deliver financial services, so the CBK approved such arrangements on a case-bycase basis. Other relevant regulations which have enabled branchless banking are a 2008 regulation allowing microfinance deposit-taking institutions to use agents; a 2009 amendment to the Banking Act that allows banks to appoint agents to take deposits and perform other activities; and a 2009 AML/CFT bill which applies to both bank and nonbank institutions (Nyamongo & Temesgen, 2013). In 2009, the Central Bank of Kenya (CBK) commenced measures to open up banking channels to non-bank agents. An amendment to the Banking Act (passed as part of the Finance Act 2009) allowed banks to start using agents to deliver financial services. Using small shops, petrol stations, pharmacies and other retail outputs as agents could have a dramatic impact on improving access to financial services, especially in rural areas.

Statement of the Problem

The business environment has changed in Kenya as in other parts of the world and it has been characterized by stiff competition among the players and the banking industry. Competition amongst the commercial banks has pushed banks towards becoming more innovative. Most of the innovations were introduced in the period between 2006 and 2010. These included ATMs, credit cards, mobile banking, internet banking, youth oriented accounts, women oriented banking, Shariah compliant banking, children accounts and now most recently introduced within the Kenyan banking sector – agency banking (Gerard & Norman, 2004).

According to Siedek (2008) agency banking had a great potential to extend the distribution of financial services to poor people who are not reached by traditional bank branch networks; it lowers the cost of delivery, including costs both to banks of building and maintaining a delivery

channel and to customers of accessing services like travel or queuing times.

In spite of the success of agency banking globally and its implementation by various commercial banks in Kenya, there are a number of challenges facing the agency banking model. Firstly, its poor utilization is viewed to thwart its progressive report and burry the dream to financial inclusion for the unbanked (Onyango, 2011). In addition, many of the banks that have embarked on agency banking roll-out have found that agents lack the capacity to handle large transactions of cash and that they are not spending enough on security measures leading to poor customer uptake of agency banking (Pickens, 2009). In addition, liquidity problem lead to frustration and is one of the reasons why the uptake of these systems are slower than what is expected.

However, despite the low uptake of agency banking in Kenya, there is no study showing how security and liquidity availability influence the uptake of agency banking by customers in Kenya. This study sought to fill this gap by establishing the factors influencing the uptake of agency banking services by customers in commercial banks in Kenya.

Objectives of the Study

The key objective of this study was to establish the factors influencing the uptake of agency banking services by customers in commercial banks in Kenya. The specific objectives were, to establish how security and liquidity availability influenced the uptake of agency banking by customers in Kenya commercial bank

Research questions

This research study sought to answer the following questions;

i. How does security influence the uptake of agency banking by customers in Kenya commercial bank? ii. How does liquidity availability influence the uptake of agency banking by customers in Kenya commercial bank?

Scope of the Study

This study sought to establish the factors influencing the uptake of agency banking services by customers in commercial banks in Kenya. However, the study was limited to two factors (variables), which include security and liquidity availability. The study was also limited to Kenya commercial bank branches in the Nairobi CBD. The sample size of this study was 497 respondents.

THEORETICAL REVIEW

a) Diffusion of Innovations Theory

Rogers (2006) formulated the diffusion of innovations theory to explain the adoption rates of various types of innovations. The theory views that there are four main elements in the diffusion process of new ideas are: an innovation that is communicated through certain channels over time among the members of a social system (Rogers, 2006). Each time we have a new idea or innovation; there will be different adopter distributions tend to follow an S-shaped curve over time. Earlier adopters play a major role as change agents to support the diffusion process through their successful adoption story.

Diffusion of innovations theory determines five innovation characteristics that affect the adoption of new ideas (Rogers, 2006) like elative advantage, complexity, compatibility, trialability, observability. Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes. Relative advantage has been measured in terms of economic benefits, social prestige, status, convenience, satisfaction. On the other hand, complexity relates to the degree to which an innovation is perceived as difficult to understand and use. Perceived complexity has a negative effect on the adoption.

Compatibility indicates the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. An idea that is incompatible with the values and norms of a social system will not be adopted as rapidly as an innovation that is compatible. Trialability signifies the degree to which the innovation may be experimented with on a limited basis. A possibility to try an innovation before adoption will reduce the uncertainty and increase the likelihood of the adoption. Observability is the degree to which the results of an innovation are visible and communicable to others. The easier it is for individuals to see and discuss the results of an innovation, the more likely they are to adopt it (Omumi, 2010).

b) Theory of Security

This theory was developed by Kurtus in the year 2002 (Kurtus, 2002). Security is the protection of a person, property or organization from attack. The theory of security is to know the types of possible attacks, to be aware of the motivations for attacks and your relationship to those motives. The security or defense against such a threat is to make it difficult to attack, threaten countermeasures, or make a pre-emptive attack on a source of threat (Mas & Hannah, 2008).

People, property or organizations may be attacked by the criminally-minded. Security is necessary to protect from such attacks. Physical attacks are efforts to injury or even kill a person. Other types personal attacks can also be attempts to injure or hurt someone emotionally or financially. Sometimes there is even an attack to destroy a person's reputation. Someone may try to damage or destroy property, such as a building.

Theft is also considered a property attack (Omumi, 2010).

Reasons for such an attack may be for revenge, financial gain, political or religious motives, for thrills, or to avoid getting caught. Criminals will attack other people, break into a building, or do other damage for the sake of financial gain. Cases of mugging, and robbery for financial gain are prevalent in Kenya.

Conceptual framework

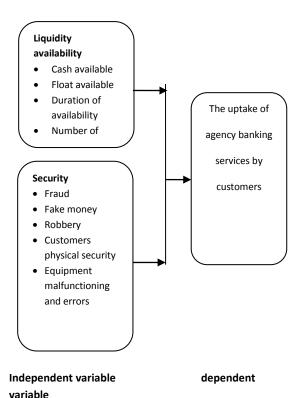


Figure 1. Conceptual framework

Liquidity

One of the biggest challenges in rolling out banking agencies is the establishment and the effectiveness of the agent network. Agents are the touch-points where the subscribers of the service can get money into and out of the system. (Agents are often also referred to as cash-in and cash-out points) (Kumar & Mohanty, 2012).

In instances where a subscriber arrives at an agent with the need to withdraw a large amount it does happen that the agent do not have enough cash to satisfy the cash-out request. This leads to frustration and is one of the reasons why take-up of these systems are slower than what is expected. This problem is referred to as the agent liquidity problem - how to ensure that the agent has sufficient cash available to satisfy the need of the system (Birch, 2008).

This problem is often approached in a way where the system keeps track of the actual cash available in the drawer of each agent in order to guide subscribers where they can withdraw big amounts. This approach is overtly complex and often fails because of the informal nature of agents businesses (Diniz, Birochi & Pozzebon, 2012).

Even if customers are willing to put up with the inconvenience of having to return to an agent to access their capital, liquidity management is currently a huge expense for the retail agent and puts a strain on the attractiveness of mobile money as a viable business for them. According to research conducted by CGAP, the primary cost of the mobile money business for retail agents is liquidity management, which consumes 20-30% of the total expenses for this business line. In the Philippines, three out of five categories of retail agents are traveling to the bank more than 3 times per week (Jayo et al., 2012).

Cutcher (2014) indicate that liquidity management actually takes two forms: management of electronic value in the mobile wallet and cash management. Management of electronic value is the mobile money transactions between a retail agent and a customer requires that the retail agent has cash value in their mobile wallet. As the agent provides financial services throughout the day, the cash amount on their phone fluctuates up

and down, depending on whether they are accepting funds or paying out. When the amount in the retail agent's mobile wallet is used up, the agent cannot perform additional services and needs to refill their account. If the agent does not have a bank account linked to their mobile wallet, this means they need to make a trip to the bank to transfer cash into electronic value. It is becoming more common for electronic liquidity to be handled not only by the retail agents, but also by the master agents (Jayo et al., 2012).

The other form of liquidity management relates to physical cash. Customers who are seeking to make cash deposits into their mobile wallets or to withdraw cash from their accounts will go to retail agents. With cash-in transactions, customers deposit their money with retail agents. While cash-out transactions result in customers seeking to withdraw funds via retail agents. Depending on the relative volumes of cash-in or cash-out transactions in any given day, the retail agent can become either cash-rich, with too much cash on hand, or cash-poor. In the latter case, the agent does not have enough cash to provide the customer with the full amount of their withdrawal request. Often customers must return the following day to obtain their money (Birch, 2008). Unlike electronic liquidity issues that can be managed remotely via bank transfer or master agent transfers, cash liquidity can only be managed physically. While mobile money customer bases remain small or primarily urban, cash liquidity issues have not been a significant problem for many mobile money providers. But if the retail agent either has too much cash on hand, increasing security risks, or not enough cash on hand to handle customers withdrawal requests, then there needs to be a movement of physical cash. This either has to take place via the agent going to the bank or having someone, such as the master agent, bring cash. As transaction volumes increase, cash liquidity is likely to be a more challenging problem than electronic liquidity (Lee & Jaramillo, 2013).

As mentioned previously, none of the mobile money providers have solved the problem of liquidity management adequately. This is true for both electronic as well as cash liquidity issues. There are no easy solutions or silver bullets. There has been progress, however, which points to some mitigation options. It is likely that multipronged strategies, including several of the following approaches – if not more - will be required (Stapleton, 2013).

In his study on challenges of agent banking experiences in Kenya, Atandi (2013) established that lack of mobile network services and float, lack of capital, issues of insecurity and fear of robbery affect agency banking growth. However, these findings only focused on Equity bank clients and hence its findings cannot be generalized to other commercial banks in Kenya.

Security

Branchless Banking is growing faster and becomes the key factor in modern technologies so it needs to be secure from each and every perspective it might be bank security or even customer security, as the technology is moving onwards everyone is concerned about security related to customer money but there is still gap to be filled is the bank secured while doing branchless transactions via retail agents (Musau, 2013).

An important shortcoming typical of informal financial services is lack of reliability and continuity in the long run. Formal providers have clearer incentives to offer more reliable and safer services. Technology-enabled mechanisms may help achieve that goal. Evidence from the four country studies suggests that technical failures (e.g., equipment malfunctioning and other errors occurring during a transaction) are a major issue in branchless banking. Similarly, research on consumer experience in Brazil shows that less

than 5 percent of users have made a mistake and paid the wrong bill at an agent, sent money to the wrong account, or noticed that a payment or a deposit was never processed or received (Mas & Hannah, 2008).

Physical security is a common concern of regulators around the globe. In Brazil, for example, agents must deposit the cash received from clients in a bank branch no more than every other business day. This is intended to limit cash accumulation that can lead to robbery by third parties or even by the agent itself (Lyman, Pickens & Porteous, 2008). The Mexican regulator, by requiring every agent transaction to be made against the agent's account at the contracting bank, does not reduce the risk of third-party robbery but eliminates the risk of agents misappropriating the accumulated cash, since the cash is in fact the agent's own. The simplest measure to reduce cash accumulation and its related risks may be requiring providers to set daily and monthly transaction limits for each agent and client (Ivatury & Timothy, 2006).

Cases of agent fraud and misbehavior were reported in all the countries. For example, "churning" was identified in Brazil (i.e., individuals subcontracted by agents offered credit to pensioners and subsequently resold the loan several times to different banks without the client's consent, to generate additional fees). Agents may steer customers toward certain products to maximize fee income, regardless of the clients' needs. Such problems can result from the provider's limited ability (or unwillingness, given the costs involved) to oversee a large number of agents adequately (Lyman, Ivatury & Staschen, 2006).

In addition, as transaction and personal data are transmitted increasingly through means such as mobile phone networks, handled more often by third parties such as agents, and accessed remotely by customers and financial institution

employees, the risk of inappropriate access and usage rises. Besides the technological aspect, consumers' lack of education and lack of experience with formal financial services and technology may raise data security risks. For example, research conducted by Collins (2010) found that some M-PESA clients were giving account passwords to agents, and while there is no evidence this has led to loss of funds or misuse of customer information, the risk could be significant (Ignacio & Hannah, 2008).

A brief examination of data privacy and bank secrecy regulations in developing countries reveals a patchwork of rules issued by a variety of agencies with overlapping jurisdiction and oversight. As an example of differences among countries, bank secrecy rules do not explicitly apply to agents in India, whereas they do in Brazil, Peru, Colombia, and Mexico. (In India, however, providers are liable for the acts of omission and commission of their agents in all respects, including bank secrecy) While Peru and India have data privacy regulation, Brazil has none. Peru, India, and the Philippines require providers to train their agents with respect to bank secrecy, anti-money laundering, and data privacy compliance, while Kenya currently has no rules for agents of mobile payments providers such as M-PESA. Mexico and Colombia have extensive and detailed data security regulations, while Brazil has very little.

Research Gap

Various research studies have been conducted internationally and locally on agency banking and how they influence performance in banks. Waithanji (2012) did a study to identify the impact of agent banking as a financial deepening initiative in Kenya and Kithuka (2012) conducted a study on factors influencing growth of agency banking in Kenya: the case of Equity bank, Kwale County. However, their study did not focus on the four

variables: ease of access, flexible hours, costeffectiveness and bank hall decongestion. Further,
Musau (2013) did an analysis of the utilization of
agency banking on performance of selected banks
in Nairobi County. His study variables included
policies and procedures, agency costs, agency
liquidity and security. However, none of these
studies focused on the factors influencing the
uptake of agency banking services by customers in
commercial banks. This study therefore sought to
fill the gap by establishing the effect of security
and liquidity availability on the uptake of agency
banking services by customers in commercial bank
in Kenya.

RESEARCH METHODOLOGY

Research Design

This study used a descriptive research design. A descriptive study attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events, through the collection of data and tabulation of the frequencies on research variables or their interaction. Descriptive research is more rigid than an exploratory research and seeks to describe uses of a product, determine the proportion of the population that uses a product, or predict future demand for a product. A descriptive research should define questions, people surveyed, and the method of analysis prior to beginning data collection.

Population of Study

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. Population studies are more representative

because everyone has equal chance to be included in the final sample that is drawn according to Bryman (2006). The target population of this study was the customers served in Kenya Commercial banks located in the Nairobi Nairobi Business Central District. There are six Kenya commercial bank branches in Nairobi Business Central District. The target population of this study was therefore 4972 respondents.

Sample Size and Sampling Technique

The study used stratified sampling technique to select 10% of the target population. According to Cooper and Schindler (2006), a sample size of between 10 and 30% is a good representation of the target population. The target population was grouped according to branches and from each branch a proportionate sample was drawn. Random sampling was used in choosing the sample within the stratum. The goal of stratified random sampling is to achieve the desired representation from various sub-groups in the population. In stratified random sampling subjects were selected in such a way that the existing subgroups in the population are more or less represented in the sample. The sample size of this study was 497 respondents. Stratified sampling technique was chosen as it exudes the advantages of focusing on all subpopulations within a heterogeneous population, allows use of different sampling techniques for different subpopulations and improves the accuracy of estimation.

Data collection Instruments

The study used primary data which was collected by use of questionnaires; the questionnaires included structured and unstructured questions. Cooper & Schindler (2006) observed that, a questionnaire defines the problem and the specific study objectives of a study. Questionnaire items may be closed ended or open ended type.

The study administered the questionnaire individually to all respondents. The questionnaire were administered by use of a drop off and pick up later method to the sampled respondents. According to Cooper and Schindler (2006) the use of the Drop-off/Pick-Up (DOPU) method results in significantly high response rates. In addition, the DOPU technique is an effective means to reduce potential non-response bias through increased response rate.

Data Analysis

This is a process used to make sense of the data. Statistical Package for Social Sciences (SPSS), data analysis software, was used to analyze the quantitative data. Further, quantitative data was analyzed by use of descriptive and inferential statistics. Descriptive statistics such as mean, frequencies, standard deviation and percentages were used to profile sample characteristics and major patterns emerging from the data. Quantitative data was presented in tables and figures. The study also used content analysis to analyze qualitative data obtained from open ended questions. The data was then presented in a prose form.

In the inferential statistics, the study used a probit regression model. Probit analysis was to determine the factors influencing the uptake of agency banking services by customers in commercial banks in Kenya. Probit Analysis is a specialized regression model of binomial response variables. Regression is a method of fitting a line to a data to compare the relationship of the response variable or dependent variable (Y) to the independent variable (X). A binomial response variable refers to a response variable with only two outcomes.

$$Y^* = \beta Xi + \mu i$$
,

Where;

Xi is the vector of explanatory (independent variables) and is assumed to influence the outcome Y.

 β is the vector of parameters μ i is the error term.

Thus what is observable is only the dummy variable defined by y=1 if y>0, y=0 otherwise, which leads to the probit equation:

$$Pr(Y=1) = F(\beta X),$$

Where:

F is the cumulative distribution function for μi .

Pr denotes probability,

The parameters β are estimated by maximum likelihood.

The independent variables (X) in this study were customers perception, liquidity, security and awareness. On the other hand, the dependent variable was the uptake of agency banking services by customers in commercial banks in Kenya.

Response Rate

The sample size of this study was 497 customers in KCB, out of which 352 responses were obtained which represents a 70.82% response rate. According to Babbie (2002) any response of 50% and above is adequate for analysis thus 70.82% is even better.

Validity and Reliability

The study sought the opinions of experts in the field of study especially the supervisors. The study also made corrections according to the supervisor's guidelines and ensured that the questions were in accordance of the objectives of the study.

A construct composite reliability co-efficient (Cronbach alpha) of 0.6 or above, for all the constructs, is considered adequate. The acceptable reliability coefficient is 0.6 and above, if the Cronbach alpha is below 0.6 the reliability of

the questionnaire is considered too low and thus the research tool should be amended.

In order to ascertain the extent to which the data collection instrument were reliable in measuring the study constructs (or factors), reliability tests were carried out on measures of security and liquidity availability. The findings of the pilot test showed that 'security' scale had a Cronbach's reliability alpha of 0.724 and 'liquidity availability' scale had an Alpha value of 0.717. This therefore indicated that the research tool was sufficiently reliable and valid and needed no amendment.

Table 1 Cronbach's Alpha Values

Construct	Cronbach's Alpha
Security	0.724
Liquidity availability	0.717

Background information

Gender of the Respondents

According to the findings, 54% of the respondents indicated that they were males while the rest (46%) of the respondents indicated that they were females. This shows that most of the respondents were males.

Age of the Respondents

The respondents were asked to indicate their age bracket. According to the findings, 39.8% of the respondents indicated that they were aged between 27 and 35 years, 34.1% indicated that they were aged between 36 and 45 years, 14.2% indicated that they were aged between 18 and 26 years and 11.9% indicated that they were 46 years and above in age. This shows that most of the bank customers were aged between 27 and 35 years.

Highest Level of Education

The respondents were further asked to indicate their highest level of education. From the findings,

42.60% of the respondents indicated that they had tertiary education as their highest level of education, 32.40% indicated that they had university education, 18.20% indicated that they had secondary education and 6.80% indicated that they had primary education. These findings clearly show that most of the respondents had tertiary education.

Respondents Occupation

The respondents were further asked to indicate their occupation. From the findings, 43.2% of the respondents indicated that they were self-employed, 36.4% indicated that they were in formal employment and 20.5% indicate that they were in informal employment. This clearly shows that most of the respondents were self-employed.

Respondents Marital Status

The respondents were asked to indicate their marital status. From the findings, 44.3% of the respondents indicated that they were married, 29.5% indicated that they were single, 14.2% indicated that they were windowed, 8.0% indicated that they were divorced and 4.0% indicated to be separated. This clearly shows that most of the respondents involved in the study were married.

Uptake of Agency Banking

In an effort to establish the uptake of agency banking in Kenya Commercial Bank, the respondents were asked to indicate whether they knew of agency banking.

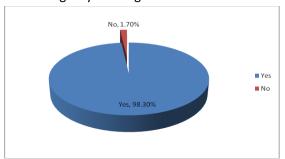


Figure 2: Knowledge on Agency Banking

From the study findings, 98.30% of the respondents indicated that they knew about agency banking while 1.70% indicated that they did not know about agency banking. From these findings we can deduce that most of the customers served in the bank branches knew of agency baking.

Source of Information on Agency Banking

From the study findings, 51.1% of the respondents indicated they had learnt about agency banking from advertisements, 28.4% indicated they had learnt about agency banking from newspapers, 14.2% indicated that they had learnt about agency banking from their respective banks and 6.3% indicated that they had learnt about agency banking from friends. From these findings we can infer that most of the customers had learnt about agency banking from advertisements followed by newspapers.

Use of Agency Banking

The respondents were also requested to indicate whether they had ever used agency banking. From the study findings, most of respondents as shown by 85.20% indicated had made use of an agency banking services while 14.80% of the respondents indicated that they had never used agency banking services. This clearly shows that most of the respondents in this study had made use of agency banking. These findings concur with Cohen, Danielle and Julie (2008) argument that low income clients often feel more comfortable banking at their local store or agents than walking into a bank branch.

Benefits of using agency banking compared to banks

The respondents were further asked to indicate the benefits of using agency banking compared to banks.

Table 3 Benefits of using agency banking compared to banks

	Frequency	Percent
It is easier	180	60
Its more convenient	194	64.7
No liquidity problem	20	6.7
It is faster	170	56.7
Its accessible in t	the202	67.3
estates		

According to the findings, 67.3% of respondents who had made use of agency banking reported that agency banking was accessible in the estates as compared to banks while 32.7% disagreed. These findings agree with Barasa and Mwirigi (2013) findings that agency banking enhances the access of the full range of banking products within a less than formal setting Further, 64.7% of the respondents reported that agency banking was more convenient than banks while 35.3 disagreed. Additionally, 60% of the respondents indicated that agency banking is easier to use as compared to banks while 40% disagreed. In addition, 56.7% of the respondents reported that agency banking is faster to use than banks while 43.3% disagreed. Lastly, 6.7% of the respondents indicated that agency banking had no liquidity problems while 93.3% disagreed. This clearly shows that the benefits of agency banking included accessibility, convenience, easy to use and fast.

Reasons for Not using Agency Banking

From the respondents who indicated that they had not used agency banking, the study also sought to establish the main reasons for not using agency banking.

Table 4 Reasons for Not using Agency Banking

	Frequency	Percent	
It is insecure	20	38.5	
It is not confidential	30	57.7	
It is costly	2	3.8	

According to the findings, 57.7% of the respondents who had not used agency banking indicated that agency banking is not confidential while 42.3% disagreed. In addition, 38.5% of the respondents reported that agency banking is insecure while 61.5% disagreed. Lastly, 3.8% of the respondents reported that agency banking was costly while 96.2% disagreed. From these findings we can infer that customers who do not use agency banking do so because it is insecure and not confidential but not because it is costly.

Effect of Liquidity availability on uptake of Agency Banking

The study also sought to find out how liquidity availability influences the uptake of agency banking by customers in Kenya commercial bank

Liquidity Availability and Agency Banking

The respondents were asked to indicate whether they thought liquidity availability affects their use of agency banking in Kenya commercial bank (KCB Mtaani).

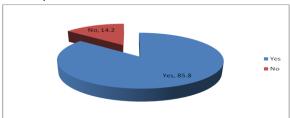


Figure 2: Liquidity Availability and Agency Banking

From the findings, 85.8% of the respondents reported that liquidity availability affects their use of agency banking in Kenya commercial bank (KCB Mtaani) while 14.2% disagreed. From these findings we can deduce that liquidity availability affects the use of agency banking in Kenya commercial bank (KCB Mtaani). These findings concur with Kumar and Mohanty (2012) argument that one of the biggest challenges in rolling out banking agencies is the establishment and the

effectiveness of the agent network and liquidity availability.

How Liquidity Availability Influences Agency Banking

The respondents were also asked to indicate how liquidity availability affects their use of agency banking in Kenya commercial bank (KCB Mtaani).

According to the findings, 96.2% the respondents indicated that liquidity availability affects the use of agency banking in Kenya commercial bank (KCB Mtaani) as agents do not have enough float. In addition, 94.2% of the respondents indicated that liquidity availability affects the use of agency banking in Kenya commercial bank (KCB Mtaani) as agents do not have enough float. Further, 14.7% of the respondents indicate that liquidity availability affects the use of agency banking in Kenya commercial bank (KCB Mtaani) as the amount to withdraw or deposit is limited. These findings concur with Kumar and Mohanty (2012) that in instances where a subscriber arrives at an agent with the need to withdraw a large amount it does happen that the agent do not have enough cash to satisfy the cash-out request.

Electronic liquidity (float) challenges

The respondents were further asked to indicate how often they find agency banks experience electronic liquidity (float) challenges.

According to the findings, 52.8% of the respondents indicated that very often agency banks experience electronic liquidity (float) challenges, 29% indicated that often agency banks experience electronic liquidity (float) challenges and 18.2% indicated that rarely agency banks experience electronic liquidity (float) challenges. From these findings we can deduce that very often agency banks experience electronic liquidity (float) challenges. According to Birch (2008), liquidity problem should be solved by ensuring

that the agent has sufficient cash available to satisfy the need of the system.

Duration of Service and Availability of cash

The respondents were requested to indicate whether they thought the duration of time spent when being served at an agency relate to availability of cash and affects the uptake of agency banking (KCB mtaani).

From the findings, 69.3% of the reported that the duration of time spent when being served at an agency relate to availability of cash and affects their uptake of agency banking (KCB mtaani) while 30.7% disagreed. From these findings we can deduce that the duration of time spent when being served at an agency relate to availability of cash and affects the uptake of agency banking (KCB mtaani). Diniz, Birochi and Pozzebon (2012) had earlier indicated that liquidity problem is often approached in a way where the system keeps track of the actual cash available in the drawer of each agent in order to guide subscribers where they can withdraw big amounts.

Whether lack of liquidity leads to frustration

The respondents were also asked to indicate whether lack of liquidity leads to frustration. According to the findings, 97.2% of the respondents indicated that lack of liquidity leads to frustration while 2.8% disagreed. From these findings we can deduce that lack of liquidity in agency banks leads to frustration. These findings agree with Birch (2008) argument that liquidity problems lead to frustration and is one of the reasons why take-up of these systems are slower than what is expected.

Lack of liquidity and Use for Agency Banking

The respondents were asked to indicate whether lack of liquidity affects the use for agency banking centers (KCB Mtaani).

According to the findings, 99.4% of the respondents indicated that lack of liquidity affects

the use for agency banking centers (KCB Mtaani) while 0.6% disagreed. These findings clearly show that lack of liquidity affects the use for agency banking centers (KCB Mtaani). These findings agree with Cutcher (2014) argument who indicate that liquidity management actually takes two forms: management of electronic value in the mobile wallet and cash management.

Lack of Liquidity and Profits and Productivity per Day

The respondents were also requested to indicate whether they thought lack of liquidity leads to reduced profits and productivity per day. According to the findings, 90.9% of the respondents reported that lack of liquidity leads to reduced profits and productivity per day while 9.1% indicated that lack of liquidity does not lead to reduced profits and productivity per day. From these findings we can deduce that lack of liquidity leads to reduced profits and productivity per day. These findings agree with Jayo et al., (2012) who argues that even if customers are willing to put up with the inconvenience of having to return to an agent to access their cash, liquidity management is currently a huge expense for the retail agent and puts a strain on the attractiveness of mobile money as a viable business for them.

Effect of Security on uptake of agency banking

The study sought to establish how security influences the uptake of agency banking by customers in Kenya commercial bank.

Security and Use of Agency Banking

The respondents were further asked to indicate whether security affect their use of agency banking in Kenya Commercial Bank. From the findings, 89.2% of the respondents indicated that security affects their use of agency banking in Kenya Commercial Bank while 10.8% disagreed. From these findings we can deduce that security affects their use of agency banking in Kenya

Commercial Bank. These findings agree with Musau (2013) argument that branchless banking is growing faster and becomes the key factor in modern technologies so it needs to be secure from each and every perspective it might be bank security or even customer security.

Security of Agent Banks in Kenya

The respondents were also asked to rate the security of agent banks in Kenya. From the findings, 54.5% of the respondents rated the security of agent banks in Kenya as bad, 28.4% rated it as moderate and 17% rated it as poor. From these findings we can deduce that security of agent banks in Kenya was bad. These findings concur with Musau (2013) as the technology is moving onwards everyone is concerned about security related to customer money but there is still gap to be filled as to how banks are secured while doing branchless transactions via retail agents.

Fraud in agency banking

The respondents were asked to indicate whether they had ever experienced a case of fraud in agency banking. According to the findings, 68.8% of the respondents indicated that they had never experienced a case of fraud in agency banking, 14.2% indicated they had experienced it rarely, 11.4% indicated that they had experienced it often and 5.7% indicated that they had experienced it very often. From these findings we can deduce that most of the customers had never experienced a case of fraud in agency banking. These findings agree Ivatury and Timothy (2006) argument that cases of agent fraud and misbehavior were reported in various countries including Brazil.

Fake Money in Agency Banking Centers

The respondents were further asked to indicate whether they had experienced a case of fake money in agency banking centers. From the findings, 75% of the respondents indicated to have experienced a case of fake money in agency banking centers while 25% of the respondents indicated that they had not experienced a case of fake money in agency banking centers. From these findings, we can deduce that most of the customers had experienced a case of fake money in agency banking centers.

Theft and Robbery Rampant in Agency Banking Centers

The respondents were asked to indicate whether cases of theft and robbery rampant in agency banking centres in Nairobi. According to the findings, 68.2% of the respondents indicated that cases of theft and robbery rampant in agency banking centres in Nairobi while 31.8% disagreed. From these findings we can deduce that cases of theft and robbery are rampant in agency banking centres in Nairobi. According to Lyman, Pickens and Porteous (2008), in Brazil agents must deposit the cash received from clients in a bank branch no more than every other business day. This is intended to limit cash accumulation that can lead to robbery by third parties or even by the agent employees.

Experience Equipment Malfunctioning and Errors

The respondents were further asked to indicate whether agency banking centers experienced equipment malfunctioning and errors during a transaction.

According to the findings, 41.5% of the respondents reported that agency banking centers experienced equipment malfunctioning and errors during a transaction very often, 40.9% indicated often, 11.4% indicated never and 6.3% indicated rarely. From these findings we can deduce that agency banking centers experienced

equipment malfunctioning and errors during a transaction very often. These findings agree with Mas and Hannah (2008) argument that about 5 percent of users have made a mistake and paid the wrong bill at an agent, sent money to the wrong account, or noticed that a payment or a deposit was never processed or received

Probit Analysis

Probit analysis was to determine the factors influencing the uptake of agency banking services by customers in commercial banks in Kenya.

$$Y^* = \beta Xi + \mu i$$

Where;

Xi is the vector of explanatory (independent variables) and is assumed to influence the outcome Y.

 β is the vector of parameters μ i is the error term.

Thus what is observable is only the dummy variable defined by y=1 if y>0, y=0 otherwise, which leads to the probit equation:

$$Pr(Y=1) = F(\beta X),$$

Where; F is the cumulative distribution function for μ i, Pr denotes probability, and the parameters β are estimated by maximum likelihood. The independent variables (X) in this study was customers perception, liquidity, security and awareness. On the other hand, the dependent variable was the uptake of agency banking services by customers in commercial banks in Kenya

Table 4 Probit regression results

Variable	Coefficient	Standard	z-	p>/z/
		error	statistic	
Security	.338946	.10434	3.25*	0.006
Availability of liquidity	.278835	.11211	2.48*	0.002

Dependent variable: Uptake of agency banking

According to the findings, liquidity availability was an important factor in influencing the uptake of agency banking. liquidity availability was coded as one and lack of liquidity availability was coded as zero. In addition, security was also found to positively influence the uptake of agency banking. Security was coded as one and lack of security was coded as zero.

SUMMARY OF THE FINDINGS

Effect of Liquidity availability on uptake of Agency Banking

The study also sought to find out how liquidity availability influences the uptake of agency banking by customers in Kenya commercial bank. The study established that liquidity availability affects their use of agency banking in Kenya commercial bank (KCB Mtaani). In addition, the study found that liquidity availability affects the use of agency banking in Kenya commercial bank (KCB Mtaani) as agents do not have enough float and the amount to withdraw or deposit is limited. In instances where a subscriber arrives at an agent with the need to withdraw a large amount it does happen that the agent do not have enough cash to satisfy the cash-out request. It was also revealed that the duration of time spent when being served at an agency relate to availability of cash and affects the uptake of agency banking (KCB mtaani). In addition, lack of liquidity in agency banks leads to frustration and is one of the reasons why take-up of these systems are slower than what is expected. The study also found that lack of liquidity leads to reduced profits and productivity per day.

Effect of Security on uptake of agency banking

The study sought to establish how security influences the uptake of agency banking by customers in Kenya commercial bank. The study revealed that security affects their use of agency banking in Kenya Commercial Bank. The study also found that security of agent banks in Kenya was bad. Technology is moving onwards everyone is

concerned about security related to customer money but there is still gap to be filled. Is the bank secured while doing branchless transactions via retail agents? The study established that most of the customers had never experienced a case of fraud in agency banking, but it found that most of the customers had experienced a case of fake money in agency banking centers. The study established cases of theft and robbery are rampant in agency banking centers in Nairobi. It was also revealed that agency banking centers experienced equipment malfunctioning and errors during a transaction very often.

Conclusion

The study concludes that liquidity availability affects their use of agency banking in Kenya commercial bank (KCB Mtaani), as agents do not have enough float and the amount to withdraw or deposit is limited. Lack of liquidity in agency banks leads to frustration and is one of the reasons why

take-up of these systems is slower than what is expected.

Further, the study concludes that security affects the use of agency banking in Kenya Commercial Bank. The study found that security of agent banks in Kenya was bad. Most of the customers had experienced a case of fake money in agency banking centers and cases of theft and robbery are rampant in agency banking centers in Nairobi. It was also revealed that agency banking centers experienced equipment malfunctioning and errors during a transaction very often.

Recommendations

The study recommends that commercial banks in Kenya should ensure that their banks agents have enough float and cash to serve their customers. This study further recommends that policy makers in Kenya should increase security in estates and towns so as to reduce cases of robbery. In addition, more policies should be formulated to reduce fraud in Kenya.

References

- Atandi, F.G. (2013). Challenges of agent banking experiences in Kenya. *International Journal of Academic Research in Business and Social Sciences, 3*(8), 34-39
- Barasa, D.A & Mwirigi, F.M. (2013). The Role of Agency Banking in Enhancing Financial Sector Deepening in Emerging Markets: Lessons from the Kenyan Experience. *European Journal of Business and Management*, 5(21), 19-21
- Birch, D. (2008). Payments and Inclusion: From Branchless Banking to Bankless Banking. *Journal Of Internet Banking & Commerce*, 13(3), 1-5.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative research*, 6(1), pp. 97 113
- CBK (2011). Annual report. Available at: from http://www.centralbank.go.ke (Accessed on 10th October 2013)
- CGAP, (2011). The lurking challenge of branchless banking: Activating the inactive customer. Available at: http://technology.cgap.org (Accessed on 24 September 2013).
- Clara, V. & Melinda, G. (2010). *How Agent Banking Changes the Economics of Small Accounts.* Available at: http://www.gatesfoundation.org (Accessed on 24 September 2013).
- Cohen, M., Danielle H. & Julie L. (2008). Financial Education: A Bridge between Branchless Banking and Low-Income Clients. Microfinance Opportunities, Working Paper No. 4. Available at: www.globalfinancialed.org (Accessed on 24 September 2013).
- Collins, D.(2010). Consumer Experience in Agency Banking. *Presentation at the III Windsor Global Leadership Seminar in Regulating Transformational Agency Banking*. Oakley Court Hotel, United Kingdom, 8-10 March.
- Cooper, D. R., & Schindler, P. S. (2006). Business Research Methods. New Delhi: Tata McGraw Hill.
- Cutcher, L. (2014). Bringing Back the Bank: Local Renewal and Agency through Community Banking. *Organization Studies (01708406), 35*(1), 103-119.
- Diniz, E., Birochi, R., & Pozzebon, M. (2012). Triggers and barriers to financial inclusion: The use of ICT-based branchless banking in an Amazon county. *Electronic Commerce Research & Applications*, 11(5), 484-494.
- Gichuki, E. M. (2013). An investigation of the factors affecting the adoption of agency banking in Kenya (A case of selected agents in Nyeri Central District). Available at: http://ir-library.ku.ac.ke. (Accessed on 24 September 2013).
- Godana, O. G. (2012). A study on the effect of agency banking on performance of banks in Kenya, Strathmore University. Available at: http://library.strathmore.edu (Accessed on 17th July 2013)
- Hsieh, C. (2007). 'Mobile Commerce: Assessing New Business Opportunities', International Information Management Association Communication Journal, 7(1): 56-67
- Ignacio M. & Hannah S. (2008). *Banking through Networks of Retail Agents*. Available at: http://www.cgap.org/p/site/c/template.rc/1.9.3922. (Accessed on 24 September 2013).
- Ivatury, G. & Ignacio, M. (2008). The Early Experience with Branchless Banking, Washington, D.C: CGAP.
- Ivatury, G. & Timothy, L. (2006) *Use of Agents in Branchless Banking for the Poor: Rewards, Risks, and Regulation.* Washington D.C: Prentice Hall.

- Jayo, M., Diniz, E. H., Zambaldi, F., & Christopoulos, T. P. (2012). Groups of services delivered by Brazilian branchless banking and respective network integration models. *Electronic Commerce Research & Applications*, 11(5), 504-517.
- Kamau, J. N. (2012). The relationship between agency banking and financial performance of commercial banks in Kenya. Retrieved from http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/12858
- Kigagah, C. W (2012). Factors influencing access to agency banking by the local community in Kitui Central district, Kenya. Retrieved from http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/6984
- Kithuka, B. K (2012). Factors influencing growth of agency banking in Kenya: the case of Equity bank, Kwale county, Kenya. Retrieved from http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/6610
- Kithuka, B. K. (2012). Factors influencing growth of agency banking in Kenya: the case of Equity bank, Kwale county, Kenya. Available at: http://erepository.uonbi.ac.ke. (Accessed on 24 September 2013)
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Delhi: New Age International (P) Limited Publishers.
- Kumar, B., & Mohanty, B. (2012). Consumer Protection in Indian Banking with Special Reference to Branchless Banking. *Vilakshan: The XIMB Journal Of Management*, *9*(1), 41-56.
- Kurtus, R. (2002). What is Security?, Ron Kurtus' School for Champions. Retrieved from http://www.school-forchampions.com/security/whatis.htm
- Lee, J., & Jaramillo, M. (2013). Driving adoption of branchless banking: insights from consumer education in India, the Philippines, and Zambia. *Enterprise Development & Microfinance*, 24(3), 218-232.
- Lupia, A. (2006). Delegation of Power: Agency Theory. Published in Neil J. Smelser and Paul B. Baltes (eds.)

 International Encyclopedia of the Social and Behavioral Sciences 5: 3375 3377. Oxford, UK: Elsevier Science Limited
- Lyman, T, Ivatury, G. & Staschen S. (2006). *Use of Agents in Branchless Banking for the Poor; Rewards, Risks, and Regulation*. Washington, D.C: CGAP.
- Lyman, T., Pickens, M. & Porteous, D. (2008). *Regulating Transformational Branchless Banking: Mobile Phones and Other Technology to Increase Access to Finance*. Washington, D.C: CGAP/DFID.
- Mas, I. & Hannah S. (2008) Banking through Networks of Retail Agents. Washington D.C: CGAP
- Mas, I. (2008). Realizing the Potential of Branchless Banking: Challenges Ahead. Washington, D.C.: CGAP.
- Meso, B. W., & Kaino, D. K. (2008). Financial Liberalization and Bank Efficiency: The Case of Commercial Banks in Kenya. *ICFAI Journal Of Applied Economics*, 7(3), 7-22.
- Musau, S. M. (2013). An analysis of the utilization of agency banking on performance of selected banks in Nairobi County, Kenya. Available at: http://ir-library.ku.ac.ke. (Accessed on 24 September 2013).
- Musau, S. M. (2013). An analysis of the utilization of agency banking on performance of selected banks in Nairobi County, Kenya. Available at: http://ir-library.ku.ac.ke. (Accessed on 24 September 2013).
- Mwangi, R. W. (2012). An evaluation of the role of agency banking in the performance of commercial banks in Kenya. Available at: ir-library.ku.ac.ke/handle/123456789/6156 (Accessed on 24 September 2013)
- Nasieku, T., Kosimbei, G., & Obwogi, J. (2013). Intermediation Efficiency And Productivity Of Commercial Banks In Kenya; A Data Envelopment and Malmquist Productivity Index Analysis. *Economics & Finance Review*, *3*(2), 1-13.
- Ngechu. M. (2004), Understanding the research process and methods. An introduction to research methods. Acts Press, Nairobi

- Njuki, M. (2012). Agencies fail to decongest Kenya's banking halls. Available at: http://www.capitalfm.co.ke/business (Accessed on 10th October 2013)
- Nyamongo, E., & Temesgen, K. (2013). The effect of governance on performance of commercial banks in Kenya: a panel study. *Corporate Governance: The International Journal Of Effective Board Performance*, 13(3), 236-248.
- Ombutora, E.K. & Mugambi, F. (2013). Role Of Agency Banking On The Performance Of Banking Agent Entrepreneurs: A Case Study Of Co-Operative Bank Co-Op Jirani In Kibera, Nairobi. *International Journal of Arts and Entrepreneurship*, 1(5), 243-256
- Omumi, K. (2010) Branchless Banking and Use of Agents including Postal Corporation of Kenya. Available at: http://aitec.usp.net. (Accessed on 24 September 2013).
- Ongore, V., & Kusa, G. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal Of Economics & Financial Issues (IJEFI)*, *3*(1), 237-252.
- Onyango, C. (2011). Agency Banking Faced With Implementation Crisis. Available at: http://conrad-biztyme.blogspot.com/2011/11/agency-banking-faced-with.html (Accessed on 14th October 2013)
- Pickens M. (2009). Window on the Unbanked: Mobile Money in the Philippines'. Brief. Washington, D.C: CGAP, December
- Powell, D. (2014). Branchless Banking: The Future Is Now. Illinois Banker, 99(1), 30-31.
- Robinson, S. (2002). Research methodology. Washington D.C.: National Academies Press.
- Rogers, E. (2006), 'Diffusion of Innovations', Simon & Schuster Inc,
- Stapleton, T. (2013). Unlocking the transformative potential of branchless banking in Indonesia. *Bulletin Of Indonesian Economic Studies*, 49(3), 355-380.
- Sunguti, J. G. (2013). An Assessment Of The Factors Influencing Growth Of Agency Banking In Commercial Banks In Kenya. Retrieved from http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/58851
- Tecla, K. (2012). Factors influencing the adoption of agency banking strategy by the Kenya Post Office savings Bank. Retrieved from http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13365
- Vutsengwa, R.M. (2013). An Assessment Of The Challenges Facing Commercial Banks In Sustainability Of Agency Banking In Kenya: A Case Of Commercial Banks. *International Journal of Economics and Finance*, 1(2), 613-620
- Waithanji, M. N. (2012). *The impact of agent banking as a financial deepening initiative in Kenya*. Available at: http://erepository.uonbi.ac.ke. (Accessed on 24 September 2013)